PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6552980

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
EMC CORPORATION	09/06/2016

RECEIVING PARTY DATA

Name:	EMC IP HOLDING COMPANY LLC
Street Address:	176 SOUTH STREET
City:	HOPKINTON
State/Country:	MASSACHUSETTS
Postal Code:	01748

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16168594

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: Holly_Vigliatura@dell.com
Correspondent Name: EMC IP HOLDING COMPANY LLC
Address Line 1: 176 SOUTH STREET
Address Line 4: HOPKINTON, MASSACHUSETTS 01748

ATTORNEY DOCKET NUMBER:	EMC-15-0049.02
NAME OF SUBMITTER:	HOLLY VIGLIATURA
SIGNATURE:	/Holly Vigliatura/
DATE SIGNED:	02/16/2021

Total Attachments: 326
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page1.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page2.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page3.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page4.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page5.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page6.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page7.tif

source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page8.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page9.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page10.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page11.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page12.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page13.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page14.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page15.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page16.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page17.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page18.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page19.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page20.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page21.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page22.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page23.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page24.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page25.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page26.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page27.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page28.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page29.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page30.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page31.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page32.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page33.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page34.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page35.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page36.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page37.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page38.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page39.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page40.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page41.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page42.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page43.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page44.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page45.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page46.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page47.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page48.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page49.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page50.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page51.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page52.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page53.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page54.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page55.tif

source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page56.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page57.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page58.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page59.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page60.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page61.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page62.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page63.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page64.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page65.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page66.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page67.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page68.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page69.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page70.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page71.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page72.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page73.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page74.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page75.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page76.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page77.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page78.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page79.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page80.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page81.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page82.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page83.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page84.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page85.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page86.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page87.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page88.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page89.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page90.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page91.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page92.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page93.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page94.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page95.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page96.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page97.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page98.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page99.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page100.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page101.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page102.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page103.tif

source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page104.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page105.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page106.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page107.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page108.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page109.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page110.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page111.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page112.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page113.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page114.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page115.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page116.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page117.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page118.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page119.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page120.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page121.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page122.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page123.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page124.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page125.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page126.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page127.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page128.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page129.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page130.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page131.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page132.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page133.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page134.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page135.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page136.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page137.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page138.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page139.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page140.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page141.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page142.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page143.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page144.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page145.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page146.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page147.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page148.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page149.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page150.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page151.tif

source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page152.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page153.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page154.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page155.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page156.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page157.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page158.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page159.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page160.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page161.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page162.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page163.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page164.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page165.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page166.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page167.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page168.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page169.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page170.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page171.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page172.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page173.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page174.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page175.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page176.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page177.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page178.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page179.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page180.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page181.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page182.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page183.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page184.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page185.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page186.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page187.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page188.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page189.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page190.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page191.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page192.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page193.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page194.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page195.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page196.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page197.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page198.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page199.tif

source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page200.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page201.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page202.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page203.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page204.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page205.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page206.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page207.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page208.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page209.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page210.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page211.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page212.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page213.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page214.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page215.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page216.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page217.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page218.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page219.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page220.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page221.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page222.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page223.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page224.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page225.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page226.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page227.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page228.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page229.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page230.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page231.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page232.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page233.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page234.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page235.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page236.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page237.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page238.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page239.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page240.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page241.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page242.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page243.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page244.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page245.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page246.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page247.tif

source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page248.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page249.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page250.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page251.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page252.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page253.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page254.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page255.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page256.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page257.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page258.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page259.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page260.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page261.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page262.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page263.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page264.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page265.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page266.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page267.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page268.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page269.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page270.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page271.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page272.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page273.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page274.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page275.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page276.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page277.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page278.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page279.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page280.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page281.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page282.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page283.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page284.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page285.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page286.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page287.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page288.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page289.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page290.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page291.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page292.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page293.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page294.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page295.tif

source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page296.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page297.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page298.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page299.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page300.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page301.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page302.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page303.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page304.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page305.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page306.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page307.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page308.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page309.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page310.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page311.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page312.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page313.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page314.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page315.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page316.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page317.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page318.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page319.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page320.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page321.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page322.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page323.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page324.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page325.tif
source=EMC_IP_Holdco_-_Patent_Assignment_Agreement_(fully_executed_and_notarized)#page326.tif

PATENT ASSIGNMENT AGREEMENT

THIS PATENT ASSIGNMENT AGREEMENT ("Assignment") is made as of September 6, 2016 by and between EMC Corporation, a Massachusetts corporation, with its principal place of business at 176 South Street, Hopkinton, Massachusetts 01748 ("Assignor") and EMC IP Holding Company LLC, a Delaware limited liability company, with its principal place of business at 176 South Street, Hopkinton, Massachusetts 01748 ("Assignee"), each individually referred to as a "Party" and collectively referred to as "Parties."

WHEREAS, Assignor and Assignee are parties to the License Agreement effective as of the Effective Date between Assignor and Assignee ("Patent License");

WHEREAS, Assignor owns certain United States and foreign patents and patent applications, including which are listed on attached Schedule 1; and

WHEREAS, Assignee desires to receive from Assignor assignments to the Assigned Patents;

NOW THEREFORE, for good and valuable consideration, Assignor hereby assigns to Assignee, all of Assignor's entire right, title and interest, including the right to sue for and collect past damages and any other remedies, in and to all United States and foreign patents and patent applications owned by Assignor, including but not limited to those listed on attached Schedule 1 (the "Assigned Patents"), provided that, notwithstanding anything to the contrary herein, the Assigned Patents shall exclude all United States and foreign patents and patent applications listed on Schedule 2 (the "Excluded Patents"), and any and all reissue, substitutions, division, continuation patents and re-examination certificates based on any of the foregoing patents or patent applications, and all pending applications therefor, which claim priority from any application from which Assigned Patents are derived, as well as, all foreign counterparts of Assigned Patents. Notwithstanding anything to the contrary herein, (i) the Excluded Patents are not being assigned to Assignee under any circumstances, including without limitation if such Excluded Patents are included on Schedule 1, and (ii) if and to the extent there are any immaterial transcription, typographical or other similar errors in the information provided on Schedule 1 or Schedule 2, any such errors shall not affect the assignment of the Assigned Patents and exclusion of the Excluded Patents hereunder (as applicable).

Assignor hereby authorizes the Commissioner of Patents and Trademarks of the United States Patent and Trademark Office, and the empowered officials of any other applicable offices, authorities, authorized agents, and governments to issue or transfer all said Assigned Patents to Assignee, as assignee thereof, or otherwise as Assignee may direct.

Assignor hereby agrees to execute all documents and take all other actions as may be necessary to effect the assignments and transfers set forth in this Assignment.

Without limiting the foregoing, during the term of the License Agreement, the Parties hereby agree that Assignee shall be the beneficial and record owner of any and all patents and patent applications claiming inventions made by or on behalf of Assignor, and Assignor shall and hereby does assign and transfer to Assignee all of its rights, title and interest in and to such inventions, and the Parties shall reasonably cooperate with respect to Assignee filing for patent applications claiming such inventions in its own name, in each case notwithstanding anything to the contrary in employee invention assignment agreements or similar agreements entered into by Assignor, it being understood and agreed that any such applications, and any patents issuing therefrom, shall be subject to the terms and conditions of the License Agreement.

[Signature Page Follows]

Signed by Assignor and Assignee on the date first written above:

EMC CORPORATION

As Assignor

By: _____

Name: Paul T. Dacier
Title: Executive Vice President and General Counsel

EMC IP HOLDING COMPANY LLC
By its sole member, EMC Corporation

As Assignee

By: _____

Name: Paul T. Dacier
Title: Executive Vice President and General Counsel

COMMONWEALTH OF MASSACHUSETTS)
) ss.
COUNTY OF [Middlesex])

Subscribed and sworn to before me on this 1 day of September 2016

_____
Notary Public
Commission Expires: August 28, 2020

HOLLY E GIVNER
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
August 28, 2020

SCHEDULE 1 TO PATENT ASSIGNMENT AGREEMENT

ASSIGNED PATENTS

Application Number	Registration Number	Title	Owner
13/428631	8301832	STORAGE SYSTEM WITH GUARANTEED READ LATENCY	DSSD, Inc.
13/555859	8316260	METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
13/658437	8448021	METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
13/677623	8464095	METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID RECONSTRUCTION AND DEFECT AVOIDANCE	DSSD, Inc.
13/745246	8554997	METHOD AND SYSTEM FOR MIRRORED MULTI-DIMENSIONAL RAID	DSSD, Inc.
13428536	8327185	METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
13428705	8554963	STORAGE SYSTEM WITH MULTICAST DMA AND UNIFIED ADDRESS SPACE	DSSD, Inc.
13428771	8370567	STORAGE SYSTEM WITH SELF DESCRIBING DATA	DSSD, Inc.
13428817	8341342	STORAGE SYSTEM WITH INCREMENTAL MULTI-DIMENSIONAL RAID	DSSD, Inc.
13555791	8407377	STORAGE SYSTEM WITH MULTICAST DMA AND UNIFIED ADDRESS SPACE	DSSD, Inc.
13611797	8392428	METHOD AND SYSTEM FOR HASH FRAGMENT REPRESENTATION	DSSD, Inc.
13671996	8589659	METHOD AND SYSTEM FOR GLOBAL NAMESPACE WITH CONSISTENT HASHING	DSSD, Inc.
13673348	8578106	METHOD AND SYSTEM FOR QUEUE DEMULTIPLEXOR WITH SIZE GROUPING	DSSD, Inc.
13826792	8601206	METHOD AND SYSTEM FOR OBJECT-BASED TRANSACTIONS IN A STORAGE SYSTEM	DSSD, Inc.
13827086	9015353	METHOD AND SYSTEM FOR HYBRID DIRECT INPUT/OUTPUT (I/O) WITH A STORAGE DEVICE	DSSD, Inc.
13903125	8595385	METHOD AND SYSTEM FOR SUBMISSION QUEUE ACCELERATION	DSSD, Inc.
14/162250	8949692	METHOD AND SYSTEM FOR SERVICE-AWARE PARITY PLACEMENT IN A STORAGE SYSTEM	DSSD, Inc.
14/510795	9152499	METHOD AND SYSTEM FOR CALCULATING PARITY VALUES FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
14/982557		PCI EXPRESS FABRIC ROUTING FOR A FULLY-CONNECTED MESH TOPOLOGY	DSSD, Inc.
14041882	8819304	STORAGE SYSTEM WITH MULTICAST DMA AND UNIFIED ADDRESS SPACE	DSSD, Inc.
14096708	8924776	METHOD AND SYSTEM FOR CALCULATING PARITY VALUES FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
14162310		METHOD AND SYSTEM FOR SERVICE-AWARE DATA PLACEMENT IN A STORAGE SYSTEM	DSSD, Inc.
14224846	9003090	PCI EXPRESS FABRIC ROUTING FOR A FULLY-CONNECTED MECH TOPOLOGY	DSSD, Inc.

Application Number	Registration Number	Title	Owner
14387326		METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
14439310	9363317	METHOD AND SYSTEM FOR GLOBAL NAMESPACE WITH CONSISTENT HASHING	DSSD, Inc.
14577862	9367396	METHOD AND SYSTEM FOR SERVICE-AWARE PARITY PLACEMENT IN A STORAGE SYSTEM	DSSD, Inc.
14639823		PCI EXPRESS FABRIC ROUTING FOR A FULLY-CONNECTED MESH TOPOLOGY	DSSD, Inc.
14771650		METHOD AND SYSTEM FOR OBJECT-BASED TRANSACTIONS IN A STORAGE SYSTEM	DSSD, Inc.
14927186		[REDACTED]	DSSD, Inc.
14982557		PCI EXPRESS FABRIC ROUTING FOR A FULLY-CONNECTED MESH TOPOLOGY	DSSD, Inc.
15/087445		METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
15/087598		METHOD AND SYSTEM FOR SERVICE-AWARE PARITY PLACEMENT IN A STORAGE SYSTEM	DSSD, Inc.
14663109		[REDACTED]	DSSD, Inc.
15151219		[REDACTED]	DSSD, Inc.
13/730080	9183211	COOPERATIVE STORAGE OF SHARED FILES IN A PARALLEL COMPUTING SYSTEM WITH DYNAMIC BLOCK SIZE	EMC Corporation / US Department of Energy
08/344423	8344423	INLINE EXPANSION METHOD FOR PROGRAMMING LANGUAGES HAVING ARRAY FUNCTIONS	EMC Corporation
08/996809	6145042	TIMING PROTOCOL FOR A DATA STORAGE SYSTEM	EMC Corporation
08300703	6130621	METHOD AND APPARATUS FOR INHIBITING UNAUTHORIZED ACCESS TO OR UTILIZATION OF A PROTECTED DEVICE	EMC Corporation
08423881	6032262	DISK DRIVE RELIABILITY DETERMINATION SYSTEM AND METHOD	EMC Corporation
08431307	6097384	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
08445235	6101525	METHOD AND APPARATUS FOR SHARED MEMORY CLEANUP	EMC Corporation
08474235	6111528	COMMUNICATIONS ARRANGEMENTS FOR NETWORK DIGITAL DATA PROCESSING SYSTEM	EMC Corporation
08491467	6532547	REDUNDANT PERIPHERAL DEVICE SUBSYSTEM	EMC Corporation
08666968	5901227	OBJECT SYSTEM CAPABLE OF USING DIFFERENT OBJECT AUTHORIZATION SYSTEMS	EMC Corporation
08667337	6000030	SOFTWARE FINGERPRINTING AND BRANDING	EMC Corporation
08669592	5819104	DISK ARRAY MEMORY SYSTEM HAVING BUS REPEATER AT DISK BACKPLANE	EMC Corporation
08670858	5886557	REDUNDANT CLOCK SIGNAL GENERATING CIRCUITRY	EMC Corporation
08690142	5933602	SYSTEM FOR SELECTING COMMAND PACKET AND CORRESPONDING RESPONSE PACKET FROM COMMUNICATION STREAM OF PACKETS BY MONITORING PACKETS SENT BETWEEN NODES ON NETWORK	EMC Corporation
08697305	5734815	METHOD AND APPARATUS FOR EFFICIENT CYCLICAL REDUNDANCY CHECK (CRC) MAINTENANCE FOR SUBSECTOR WRITES	EMC Corporation

Application Number	Registration Number	Title	Owner
08699503	5822777	DUAL BUS DATA STORAGE SYSTEM HAVING AN ADDRESSABLE MEMORY WITH TIMER CONTROLLER FAULT DETECTION OF DATA TRANSFER BETWEEN THE MEMORY AND THE BUSES	EMC Corporation
08701862	5850528	BUS TIMING PROTOCOL FOR A DATA STORAGE SYSTEM	EMC Corporation
08701868	5954838	DATA STORAGE SYSTEM HAVING ROW/COLUMN ADDRESS PARITY CHECKING	EMC Corporation
08701917	6567903	DATA STORAGE SYSTEM HAVING MASTER/SLAVE ADDRESSABLE MEMORIES	EMC Corporation
08701981	6347365	DATA STORAGE SYSTEM HAVING A MEMORY RESPONSIVE TO CLOCK PULSES AND PRODUCED ON A BUS AND CLOCK PULSES PRODUCED BY AN INTERNAL CLOCK (AS AMENDED)	EMC Corporation
08710745	5892955	CONTROL OF A MULTI-USER DISK STORAGE SYSTEM	EMC Corporation
08717161	6189080	MINIMUM READ RATE THROUGHPUT IN A DISK CACHE SYSTEM	EMC Corporation
08720542	6009481	MASS STORAGE SYSTEM USING INTERNAL SYSTEM-LEVEL MIRRORING	EMC Corporation
08723137	6438586	FILE TRANSFER UTILITY WHICH EMPLOYS AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
08723971	5822513	METHOD AND APPARATUS FOR DETECTING STALE WRITE DATA	EMC Corporation
08735677	5892828	USER PRESENCE VERIFICATION WITH SINGLE PASSWORD ACROSS APPLICATIONS	EMC Corporation
08738766	5991852	CACHE RAM USING A SECONDARY CONTROLLER AND SWITCHING CIRCUIT AND IMPROVED CHASSIS ARRANGEMENT	EMC Corporation
08740105	5828243	METHOD FOR DETECTING CLOCK FAILURE AND SWITCHING TO BACKUP CLOCK	EMC Corporation
08741620	5966730	BACKUP SYSTEM FOR COMPUTER NETWORK INCORPORATING OPPORTUNISTIC BACKUP BY PRIORITIZING LEAST RECENTLY BACKED UP COMPUTER OR COMPUTER STORAGE MEDIUM	EMC Corporation
08742506	5781724	METHOD AND SYSTEM FOR INTEGRATING ADDITIONAL FUNCTIONALITY INTO A LOGIN SYSTEM	EMC Corporation
08747631	5893140	FILE SERVER HAVING A FILE SYSTEM CACHE AND PROTOCOL FOR TRULY SAFE ASYNCHRONOUS WRITES	EMC Corporation
08747769	6298386	NETWORK FILE SERVER HAVING A MESSAGE COLLECTOR QUEUE FOR CONNECTIONLESS ORIENTED PROTOCOLS	EMC Corporation
08748363	5944789	NETWORK FILE SERVER MAINTAINING LOCAL CACHES OF FILE DIRECTORY INFORMATION IN DATA MOVER COMPUTERS	EMC Corporation
08748889	5913025	METHOD AND APPARATUS FOR PROXY AUTHENTICATION	EMC Corporation
08749311	5922077	FAIL-OVER SWITCHING SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
08753673	5884055	METHOD AND APPARATUS INCLUDING A SHARED RESOURCE AND MULTIPLE PROCESSORS RUNNING A COMMON CONTROL PROGRAM ACCESSING THE SHARED RESOURCE	EMC Corporation
08753952	5926836	COMPUTER AND ASSOCIATED METHOD FOR RESTORING DATA BACKED UP ON ARCHIVE MEDIA	EMC Corporation
08757122	6029231	RETRIEVAL OF DATA STORED ON REDUNDANT DISKS ACROSS A NETWORK USING REMOTE PROCEDURE CALLS	EMC Corporation
08757123	6460123	MIRRORING COMPUTER DATA	EMC Corporation
08757124	6032224	HIERARCHICAL PERFORMANCE SYSTEM FOR MANAGING A PLURALITY OF STORAGE UNITS WITH DIFFERENT ACCESS SPEEDS	EMC Corporation
08757125	5875478	COMPUTER BACKUP USING A FILE SYSTEM, NETWORK, DISK, TAPE AND REMOTE ARCHIVING REPOSITORY MEDIA SYSTEM	EMC Corporation
08757214	5890219	REDUNDANT WRITING OF DATA TO CACHED STORAGE SYSTEM	EMC Corporation
08757226	5890207	HIGH PERFORMANCE INTEGRATED CACHED STORAGE DEVICE	EMC Corporation
08766525	5832483	DISTRIBUTED CONTROL INTERFACE FOR MANAGING THE INTEROPERABILITY AND CONCURRENCY OF AGENTS AND RESOURCES IN A REAL-TIME ENVIRONMENT	EMC Corporation
08766686	5903720	METHOD AND APPARATUS FOR STORAGE SYSTEM MANAGEMENT IN A MULTI-HOST ENVIRONMENT	EMC Corporation
08771818	5778394	SPACE RECLAMATION SYSTEM AND METHOD FOR USE IN CONNECTION WITH TAPE LOGGING SYSTEM	EMC Corporation
08774121	5909700	BACKUP DATA STORAGE FACILITY INCORPORATING FILTERING TO SELECT DATA ITEMS TO BE BACKED UP	EMC Corporation
08774122	5809435	EFFICIENT INDEX ARRANGEMENT AND METHOD FOR IDENTIFYING VALID RECORDS STORED ON LOGGING DIGITAL DATA STORAGE SUBSYSTEM	EMC Corporation
08774124	6202135	SYSTEM AND METHOD FOR RECONSTRUCTING DATA ASSOCIATED WITH PROTECTED STORAGE VOLUME STORED IN MULTIPLE MODULES OF BACK-UP MASS DATA STORAGE FACILITY	EMC Corporation
08775034	6003047	NON HIERARCHICAL INTERFACE FOR APPLICATION PROGRAMS	EMC Corporation
08775575	5996030	SYSTEM FOR PROVIDING AN INTERROGATING HOST COMPUTER WITH GROUP STATUS INFORMATION ABOUT DISK DEVICES INCLUDING STATUS INFORMATION REGARDING DISK DEVICES NOT ACCESSIBLE TO SAID HOST	EMC Corporation
08775828	5822780	METHOD AND APPARATUS FOR HIERARCHICAL STORAGE MANAGEMENT FOR DATA BASE MANAGEMENT SYSTEMS	EMC Corporation
08786918	5893118	METHOD FOR MANAGING GLOBALLY DISTRIBUTED SOFTWARE COMPONENTS	EMC Corporation

Application Number	Registration Number	Title	Owner
08790642	6029229	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STORED RECORDS	EMC Corporation
08802764	6105132	COMPUTER NETWORK GRADED AUTHENTICATION SYSTEM AND METHOD	EMC Corporation
08806390	6002869	SYSTEM AND METHOD FOR AUTOMATICALLY TESTING SOFTWARE PROGRAMS	EMC Corporation
08806505	6263376	GENERIC RUN-TIME BINDING INTERPRETER	EMC Corporation
08807452	5896548	DATA TRANSFERRING SYSTEM HAVING FOREGROUND AND BACKGROUND MODES AND UPON DETECTING SIGNIFICANT MODES AND UPON DETECTING SIGNIFICANT PATTERN OF ACCESS IN FOREGROUND MODE TO CHANGE BACKGROUND MODE CONTROL PARAMETERS	EMC Corporation
08808723	5860003	I/O CONTROLLER SOFTWARE WITH EACH I/O COMMAND HAVING A PLURALITY OF NETS, EACH WITH A GROUP OF THREADS	EMC Corporation
08808846	5922074	METHOD OF AND APPARATUS FOR PROVIDING SECURE DISTRIBUTED DIRECTORY SERVICES AND PUBLIC KEY INFRASTRUCTURE	EMC Corporation
08815193	6161165	HIGH PERFORMANCE DATA PATH WITH XOR ON THE FLY	EMC Corporation
08819578	6115039	PROCESSES AND APPARATUSES FOR CREATING NON-NATIVE DISPLAYS ON A COMPUTER	EMC Corporation
08821496	5900009	RECORD LEVEL CACHING SYSTEM AND METHOD FOR DIGITAL DATA STORAGE SUBSYSTEM	EMC Corporation
08822388	6047353	METHOD AND APPARATUS FOR MONITORING OF HOST ACTIVITIES RELATING TO AN ATTACHED STORAGE DEVICE	EMC Corporation
08822680	5913227	AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
08822971	6321308	METHOD AND APPARATUS FOR MANAGING ACCESS REQUESTS FROM A PLURALITY OF DEVICES USING DUAL LEVEL QUEUE LOCKING SCHEME AND A DOUBLY-LINKED CIRCULAR QUEUE	EMC Corporation
08824081	5864865	MANAGEMENT INFORMATION BASE LISTING VIEWER	EMC Corporation
08825164	6154853	METHOD AND APPARATUS FOR DYNAMIC SPARING IN A RAID STORAGE SYSTEM	EMC Corporation
08829559	6018809	APPARATUS AND METHOD FOR CAPTURING INFORMATION OFF A PLURALITY OF BI-DIRECTIONAL COMMUNICATION BUSES	EMC Corporation
08831393	5940083	MULTI-CURVE RENDERING MODIFICATION APPARATUS AND METHOD	EMC Corporation
08831481	5894485	DISK ARRAY WRITE PROTECTION AT THE SUB-UNIT LEVEL	EMC Corporation
08831503	5943689	ON-DEMAND INITIALIZATION OF MEMORY LOCATIONS AS THEY ARE REQUESTED COMMAND	EMC Corporation
08835772	5974515	SYSTEM FOR DISTRIBUTING VOLUMES TO AN HSM SYSTEM FRONT END	EMC Corporation
08842064	5956745	SYSTEM AND METHOD FOR AUTOMATICALLY RESIZING A DISK DRIVE VOLUME	EMC Corporation

Application Number	Registration Number	Title	Owner
08850878	5935260	METHOD AND APPARATUS FOR PROVIDING SYSTEM LEVEL ERRORS IN A LARGE DISK ARRAY STORAGE SYSTEM	EMC Corporation
08851045	5854759	METHODS AND APPARATUS FOR EFFICIENT FINITE FIELD BASIS CONVERSION	EMC Corporation
08851560	5892915	SYSTEM HAVING CLIENT SENDING EDIT COMMANDS TO SERVER DURING TRANSMISSION OF CONTINUOUS MEDIA FROM ONE CLIPIN PLAY LIST FOR EDITING THE PLAY LIST	EMC Corporation
08853964	6021436	AUTOMATIC METHOD FOR POLLING A PLURALITY OF HETEROGENEOUS COMPUTER SYSTEMS	EMC Corporation
08868005	5958066	ON-LINE SCANNING AND MAINTENANCE OF A DISK DRIVE ARRAY	EMC Corporation
08868305	5968184	IMPROVED MAINTENANCE COMMAND STRUCTURE AND EXECUTION	EMC Corporation
08868309	5898863	METHOD AND APPARATUS FOR DETERMINING I/O SIZE DISTRIBUTION OF AN INPUT/OUTPUT SYSTEM AND ITS USE FOR LOAD SIMULATION	EMC Corporation
08874696	6098149	METHOD AND APPARATUS FOR EXTENDING COMMANDS IN A CACHED DISK ARRAY	EMC Corporation
08877092	6275897	REMOTE CACHE UTILIZATION FOR MIRRORED MASS STORAGE SUBSYSTEM	EMC Corporation
08877631	6118633	PLASTIC DISK WITH HUB AND DISK DRIVE FOR USING SAME	EMC Corporation
08877700	6003114	CACHING SYSTEM AND METHOD PROVIDING AGGRESSIVE PREFETCH	EMC Corporation
08882182	6145006	METHOD AND APPARATUS FOR COORDINATING LOCKING OPERATIONS OF HETEROGENEOUS HOST COMPUTERS ACCESSING A STORAGE SUBSYSTEM	EMC Corporation
08884739	6350140	I/O ADAPTER CARD MOUNTING PLATE	EMC Corporation
08884740	6742068	DATA SERVER WITH HOT REPLACEABLE PROCESSING UNIT MODULES	EMC Corporation
08884890	6076126	SOFTWARE LOCKING MECHANISM FOR LOCKING SHARED RESOURCES IN A DATA PROCESSING SYSTEM	EMC Corporation
08885263	6311252	METHOD AND APPARATUS FOR MOVING DATA BETWEEN STORAGE LEVELS OF A HIERARCHICALLY ARRANGED DATA STORAGE SYSTEM	EMC Corporation
08885379	6523112	OPERATING SYSTEM SOFTWARE BOOT PROGRAM EXECUTION METHOD	EMC Corporation
08885380	6311256	COMMAND INSERTION AND REORDERING AT THE STORAGE CONTROLLER	EMC Corporation
08885381	5971804	BACKPLANE HAVING STRIP TRANSMISSION LINE ETHERNET BUS	EMC Corporation
08885383	6078503	PARTITIONABLE CABINET	EMC Corporation
08885386	6016252	CABLE MANAGEMENT SYSTEM	EMC Corporation
08885630	6023148	POWER MANAGEMENT SYSTEM WITH REDUNDANT, INDEPENDENTLY REPLACEABLE BATTERY CHARGERS	EMC Corporation
08885639	6067199	METHOD AND APPARATUS FOR INCREASING DISC DRIVE PERFORMANCE	EMC Corporation

Application Number	Registration Number	Title	Owner
08885697	6009535	SCSI ADAPTOR FAILOVER FOR A DISK DRIVE SYSTEM	EMC Corporation
08885698	6891824	AUDIBLE COMMUNICATION WITH A MODEM OVER A WIDE AREA NETWORK	EMC Corporation
08889905	5887151	METHOD AND APPARATUS FOR PERFORMING A MODIFIED PREFETCH WHICH SENDS A LIST IDENTIFYING A PLURALITY OF DATA BLOCKS	EMC Corporation
08893263	6249755	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
08917324	6044468	SECURE TRANSMISSION USING AN ORDINARILY INSECURE NETWORK COMMUNICATION PROTOCOL SUCH AS SNMP	EMC Corporation
08918238	6182166	METHOD/APPARATUS FOR INTERFACING TWO REMOTELY DISPOSED DEVICES COUPLED VIA TRANSMISSION MEDIUM WITH FIRST AND SECOND COMMANDS TRANSMITTED WITHOUT FIRST CHECKING RECEIVING DEVICE FOR READINESS	EMC Corporation
08920848	6185069	MAGNETIC DISK CARTRIDGE HAVING A FLEXIBLE DISK ANTI-DRIFT MECHANISM	EMC Corporation
08920932	6134081	MEDIA HUB MOUNTING SYSTEM FOR MINIMIZING Z-AXIS TRANSLATION DURING CARTRIDGE INSERTION AND EJECTION TRANSLATION	EMC Corporation
08922227	6076143	METHOD AND APPARATUS FOR MANAGING THE PHYSICAL STORAGE LOCATIONS FOR BLOCKS OF INFORMATION IN A STORAGE SYSTEM TO INCREASE SYSTEM PERFORMANCE	EMC Corporation
08924013	6172849	APPARATUS FOR RETAINING A DISK CARTRIDGE SHUTTER IN A CLOSED POSITION	EMC Corporation
08925026	6230200	DYNAMIC MODELING FOR RESOURCE ALLOCATION IN A FILE SERVER	EMC Corporation
08931272	6097562	DISK DRIVE FOR DETECTING A RETROREFLECTIVE MARKER ON A DATA STORAGE CARTRIDGE	EMC Corporation
08932660	6055603	METHOD AND APPARATUS FOR PERFORMING PRE-REQUEST OPERATIONS IN A CACHED DISK ARRAY STORAGE SYSTEM	EMC Corporation
08935458	6041394	DISK ARRAY WRITE PROTECTION AT THE SUB-UNIT LEVEL	EMC Corporation
08936122	6112257	DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
08936672	5886930	BIT INTERLEAVING IN A MEMORY WHICH USES MULTI-BIT DRAMS	EMC Corporation
08936695	5878059	METHOD AND APPARATUS FOR PIPELINING AN ERROR DETECTION ALGORITHM ON AN N-BIT WORD STORED IN MEMORY	EMC Corporation
08936970	6091563	LATENT ILLUMINANCE DISCRIMINATION MARKER SYSTEM FOR DATA STORAGE CARTRIDGES	EMC Corporation
08936973	6205529	METHOD AND APPARATUS FOR DEFRAGMENTING A STORAGE DEVICE USING A COPY FUNCTION IN THE DEVICE CONTROL LOGIC	EMC Corporation

Application Number	Registration Number	Title	Owner
08937467	6209059	METHOD & APPARATUS FOR THE ON-LINE RECONFIGURATION OF THE LOGICAL VOLUMES OF A DATA STORAGE SYSTEM	EMC Corporation
08937897	6101588	DEVICE LEVEL BUSY ARRANGEMENT FOR MASS STORAGE SUBSYSTEM INCLUDING A PLURALITY OF DEVICES	EMC Corporation
08937920	6223269	STACKED MAPPED STORAGE SYSTEM	EMC Corporation
08938723	6192408	NETWORK FILE SERVER SHARING LOCAL CACHES OF FILE ACCESS INFORMATION IN DATA PROCESSORS ASSIGNED TO RESPECTIVE FILE SYSTEMS	EMC Corporation
08938859	6275953	RECOVERY FROM FAILURE OF A DATA PROCESSOR IN A NETWORK SERVER	EMC Corporation
08941439	6148369	METHOD AND APPARATUS FOR PROVIDING LOGICAL DEVICES SPANNING SEVERAL PHYSICAL VOLUMES	EMC Corporation
08941506	5951693	DATA STORAGE SYSTEM HAVING DATA RECONSTRUCTION	EMC Corporation
08941509	5953265	MEMORY HAVING ERROR DETECTION AND CORRECTION	EMC Corporation
08942165	6014667	SYSTEM AND METHOD FOR CACHING IDENTIFICATION AND LOCATION INFORMATION IN A COMPUTER NETWORK	EMC Corporation
08944606	6061761	METHOD FOR EXCHANGING LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE IN RESPONSE TO STATISTICAL ANALYSES AND PRELIMINARY TESTING	EMC Corporation
08948752	5913073	INPUT/OUTPUT DRIVER FOR BENCHMARK TESTING	EMC Corporation
08954712	6076163	SECURE USER IDENTIFICATION BASED ON CONSTRAINED POLYNOMIALS	EMC Corporation / NTRU Cryptosystems, Inc.
08961292	6104608	NOISE REDUCTION HOOD FOR AN ELECTRONIC SYSTEM ENCLOSURE	EMC Corporation
08962637	6170055	SYSTEM FOR COMPUTER RECOVERY USING REMOVABLE HIGH CAPACITY MEDIA	EMC Corporation
08964442	6028725	METHOD AND APPARATUS FOR INCREASING DISK DRIVE PERFORMANCE	EMC Corporation
08966345	5973690	FRONT END/BACK END DEVICE VISUALIZATION AND MANIPULATION	EMC Corporation
08966633	6145089	SERVER FAIL-OVER SYSTEM	EMC Corporation
08968561	6157514	METHOD AND APPARATUS FOR READ-WRITE PROTECTION	EMC Corporation
08970069	6105069	LICENSING CONTROLLER USING NETWORK DIRECTORY SERVICES	EMC Corporation
08975892	6179631	ELECTRICAL CONTACT FOR A PRINTED CIRCUIT BOARD	EMC Corporation
08977268	6035306	METHOD FOR IMPROVING PERFORMANCE OF LARGE DATABASES	EMC Corporation
08980633	6317759	METHOD AND APPARATUS FOR PROVIDING AN APPLICATIONS DEVELOPMENT SYSTEM FOR INTERNET BASED APPLICATIONS	EMC Corporation

Application Number	Registration Number	Title	Owner
08984342	6088224	CABINET FOR STORING A PLURALITY OF PROCESSING UNIT MODULES	EMC Corporation
08984343	5984634	FAN ASSEMBLY FOR A PROCESSING UNIT CASE	EMC Corporation
08988732	6138249	METHOD AND APPARATUS FOR MONITORING COMPUTER SYSTEMS DURING MANUFACTURING, TESTING AND IN THE FIELD	EMC Corporation
08990556	6018779	SYSTEM FOR ENCAPSULATING A PLURALITY OF SELECTED COMMANDS WITHIN A SINGLE COMMAND AND TRANSMITTING THE SINGLE COMMAND TO A REMOTE DEVICE OVER A COMMUNICATION LINK THEREWITH	EMC Corporation
08995188	5956288	MODULAR MEMORY SYSTEM WITH SHARED MEMORY ACCESS	EMC Corporation
08995452	6058451	METHOD AND APPARATUS FOR REFRESHING A NON-CLOCKED MEMORY	EMC Corporation
08995675	6084397	VERIFICATION GAUGE FOR AN ELECTRONIC PACKAGE LEAD INSPECTION APPARATUS	EMC Corporation
08996444	6151659	DISTRIBUTED RAID STORAGE SYSTEM	EMC Corporation
08996807	6397281	BUS ARBITRATION SYSTEM	EMC Corporation
08997215	6502149	PLURAL BUS DATA STORAGE SYSTEM	EMC Corporation
08998314	6341309	FIREWALL SYSTEM FOR QUALITY OF SERVICE MANAGEMENT	EMC Corporation
08998332	6119235	METHOD AND APPARATUS FOR QUALITY OF SERVICE MANAGEMENT	EMC Corporation
08998463	6076148	MASS STORAGE SUBSYSTEM AND BACKUP ARRANGEMENT FOR DIGITAL DATA PROCESSING SYSTEM WHICH PERMITS INFORMATION TO BE BACKED UP WHILE HOST COMPUTER(S) CONTINUE(S) OPERATING IN CONNECTION WITH INFORMATION STORED ON MASS STORAGE SUBSYSTEM	EMC Corporation
08998538	6105085	LOCK MECHANISM FOR SHARED RESOURCES HAVING ASSOCIATED DATA STRUCTURE STORED IN COMMON MEMORY INCLUDE A LOCK PORTION AND A RESERVE PORTION	EMC Corporation
08999044	6078953	SYSTEM AND METHOD FOR MONITORING QUALITY OF SERVICE OVER NETWORK	EMC Corporation
08999516	6292465	LINEAR RULE BASED METHOD FOR BANDWIDTH MANAGEMENT	EMC Corporation
08999519	6137777	CONTROL TOOL FOR BANDWIDTH MANAGEMENT	EMC Corporation
09/096777	6118636	INTERTIAL LATCH MECHANISM WITH OPPOSING LATCH MEMBERS	EMC Corporation
09001046	6317815	METHOD AND APPARATUS FOR FORMATTING DATA IN A STORAGE DEVICE	EMC Corporation
09001047	6088814	METHOD AND APPARATUS FOR READING A NON-CONFIGURED DISK DRIVE IN AN AS/400 SYSTEM	EMC Corporation
09001298	6233696	DATA VERIFICATION AND REPAIR IN REDUNDANT STORAGE SYSTEMS	EMC Corporation
09001327	6158042	METHOD OF COUNTING BITS	EMC Corporation
09001684	6195761	METHOD AND APPARATUS FOR IDENTIFYING AND REPAIRING MISMATCHED DATA	EMC Corporation
09001857	6167485	ON-LINE DATA VERIFICATION AND REPAIR IN REDUNDANT STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
09002428	6088766	METHOD FOR EXCHANGING DATA BLOCKS ON DISK STORAGE DEVICES UTILIZING DISK ACCESS STATISTICS AND TESTING FOR THE EFFECT OF A CHANGE	EMC Corporation
09002712	6185661	WORM MAGNETIC STORAGE DEVICE	EMC Corporation
09003579	6014517	AUTOMATIC CREATION OF C TO ASSEMBLER INTERFACE	EMC Corporation
09004105	6725331	METHOD AND APPARATUS FOR MANAGING THE DYNAMIC ASSIGNMENT OF RESOURCES IN A DATA STORAGE SYSTEM	EMC Corporation
09006576	5996024	METHOD AND APPARATUS FOR A SCSI APPLICATIONS SERVER WHICH EXTRACTS SCSI COMMANDS AND DATA FROM MESSAGE AND ENCAPSULATES SCSI RESPONSES TO PROVIDE TRANSPARENT OPERATION	EMC Corporation
09009214	6188131	CLIP RETAINING A HEATSINK ONTO A ELECTRONIC COMPONENT	EMC Corporation
09011721	6122756	HIGH AVAILABILITY COMPUTER SYSTEM AND METHODS RELATED THERETO	EMC Corporation
09012849	6411924	SYSTEM AND METHOD FOR LINGUISTIC FILTER AND INTERACTIVE DISPLAY	EMC Corporation
09017175	6115211	DATA STORAGE SYSTEM HAVING A CARTRIDGE HUB LOCKING MECHANISM	EMC Corporation
09020048	6253273	LOCK MECHANISM	EMC Corporation
09024177	6442659	A RAID-TYPE STORAGE SYSTEM AND TECHNIQUE	EMC Corporation
09039020	6631477	HOST SYSTEM FOR MASS STORAGE BUSINESS CONTINUANCE VOLUMES	EMC Corporation
09041398	5953689	BENCHMARK TOOL FOR A MASS STORAGE SYSTEM	EMC Corporation
09041401	6408369	INTERNAL COPY FOR A STORAGE CONTROLLER	EMC Corporation
09045037	6138195	METHOD AND APPARATUS FOR HOT-PLUGGING CIRCUIT BOARDS HAVING LOW VOLTAGE LOGIC PARTS INTO A HIGHER VOLTAGE BACKPLANE	EMC Corporation
09050676	6324654	COMPUTER NETWORK REMOTE DATA MIRRORING SYSTEM	EMC Corporation
09052113	6249878	DATA STORAGE SYSTEM	EMC Corporation
09052209	6029166	SYSTEM AND METHOD FOR GENERATING AN OPERATING SYSTEM-INDEPENDENT FILE MAP	EMC Corporation
09052263	5936844	MEMORY SYSTEM PRINTED CIRCUIT BOARD	EMC Corporation
09052266	6195770	DATA STORAGE SYSTEM	EMC Corporation
09052267	6327676	TEST EQUIPMENT	EMC Corporation
09052268	5943287	FAULT TOLERANT MEMORY SYSTEM	EMC Corporation
09052318	6360330	SYSTEM AND METHOD FOR BACKING UP DATA STORED IN MILTIPLE MIRRORS ON A MASS STORAGE SUBSYSTEM UNDER CONTROL OF A BACKUP SERVER	EMC Corporation
09052325	7398286	METHOD AND SYSTEM FOR ASSISTING IN BACKUPS AND RESTORE OPERATIONS OVER DIFFERENT CHANNELS	EMC Corporation

Application Number	Registration Number	Title	Owner
09052356	6161111	SYSTEM AND METHOD FOR PERFORMING FILE HANDLING OPERATIONS IN A DIGITAL DATA PROCESSING SYSTEM USING AN OPERATING SYSTEM-INDEPENDENT FILE MAP	EMC Corporation
09052579	6047294	LOGICAL RESTORE FROM A PHYSICAL BACKUP IN A COMPUTER SYSTEM	EMC Corporation
09053420	6157991	METHOD AND APPARATUS FOR ASYNCHRONOUSLY UPDATING A MIRROR OF A SOURCE DEVICE	EMC Corporation
09053964	6070224	VIRTUAL TAPE SYSTEM	EMC Corporation
09057906	6359900	METHOD AND SYSTEM FOR CONTROLLING ACCESS TO A RESOURCE	EMC Corporation
09058590	6775739	MIRRORED DRIVE PERFORMANCE USING MATCHING ALGORITHMS	EMC Corporation
09069608	6161216	SOURCE CODE DEBUGGING TOOL	EMC Corporation
09073714	6122685	SYSTEM FOR IMPROVING THE PERFORMANCE OF A DISK STORAGE DEVICE BY RECONFIGURING A LOGICAL VOLUME OF DATA IN RESPONSE TO THE TYPE OF OPERATIONS BEING PERFORMED	EMC Corporation
09085592	6882620	TOKEN EXCHANGE SYSTEM WITH FAULT PROTECTION	EMC Corporation
09085719	6141707	INPUT/OUTPUT REQUEST ALLOCATION BY ESTABLISHING MASTER COMMAND QUEUE AMONG PLURALITY OF COMMAND QUEUES TO RECEIVE AND STORE COMMANDS, DETERMINE LOGICAL VOLUME, AND FORWARDING COMMAND TO DETERMINED LOGICAL VOLUME	EMC Corporation
09094649	6269163	ENHANCED BLOCK CIPHERS WITH DATA-DEPENDENT ROTATIONS	EMC Corporation
09096781	6204982	METHOD AND APPARATUS FOR CARTRIDGE EJECTION AND OVERWRITE PROTECTION	EMC Corporation
09096954	6178067	SIDE EDGE ACCESSIBLE DISK CARTRIDGE SHUTTER LATCH ASSEMBLY	EMC Corporation
09103996	6195703	DYNAMIC ROUTING FOR PERFORMANCE PARTITIONING IN A DATA PROCESSING NETWORK	EMC Corporation
09104597	6438595	LOAD BALANCING USING DIRECTORY SERVICES IN A DATA PROCESSING SYSTEM	EMC Corporation
09105064	6128750	FAIL-OVER SWITCHING SYSTEM	EMC Corporation
09106025	6260120	STORAGE MAPPING AND PARTITIONING AMONG MULTIPLE HOST PROCESSORS	EMC Corporation
09106293	6295575	CONFIGURING VECTORS OF LOGICAL STORAGE UNITS FOR DATA STORAGE PARTITIONING AND SHARING	EMC Corporation
09106299	6421711	VIRTUAL PORTS FOR PARTITIONING OF DATA STORAGE	EMC Corporation
09107055	6061966	ELECTRICAL CABINET HAVING A DOOR STOP	EMC Corporation
09107056	6386120	ELECTRICAL CABINET HAVING A PIVOTING PLATFORM	EMC Corporation
09107057	6520608	ELECTRICAL CABINET HAVING PRINTED CIRCUIT BOARD RECEIVING GUIDE SLOTS	EMC Corporation
09107067	6262894	ELECTRICAL CABINET HAVING AN EXTENDABLE BRACKET SUPPORTING A BATTERY	EMC Corporation

Application Number	Registration Number	Title	Owner
09107202	6493825	AUTHENTICATION OF A HOST PROCESSOR REQUESTING SERVICE IN A DATA PROCESSING NETWORK	EMC Corporation
09107537	5987550	LOCK MECHANISM FOR SHARED RESOURCES IN A DATA PROCESSING SYSTEM	EMC Corporation
09107538	6329985	METHOD AND APPARATUS FOR GRAPHICALLY DISPLAYING MAPPING OF A LOGICAL OBJECT	EMC Corporation
09107613	6282602	METHOD AND APPARATUS FOR MANIPULATING LOGICAL OBJECTS IN A DATA STORAGE SYSTEM	EMC Corporation
09107617	6216202	METHOD AND APPARATUS FOR MANAGING VIRTUAL STORAGE DEVICES IN A STORAGE SYSTEM	EMC Corporation
09107618	7756986	METHOD AND APPARATUS FOR PROVIDING DATA MANAGEMENT FOR A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
09107679	6366986	METHOD AND APPARATUS FOR DIFFERENTIAL BACKUP IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09107684	6883063	METHOD AND APPARATUS FOR INITIALIZING LOGICAL OBJECTS IN A DATA STORAGE SYSTEM	EMC Corporation
09107741	6396256	POWER SUPPLY SLEW TIME TESTING OF ELECTRONIC CIRCUITS	EMC Corporation
09107742	6269381	METHOD AND APPARATUS FOR BACKING UP DATA BEFORE UPDATING THE DATA AND FOR RESTORING FROM THE BACKUPS	EMC Corporation
09107792	6484234	METHOD AND APPARATUS FOR EFFICIENTLY DESTAGING DATA FROM A CACHE TO TWO OR MORE NON-CONTIGUOUS STORAGE LOCATIONS	EMC Corporation
09107869	6169249	ELECTRICAL CABINET HAVING A BULKHEAD WITH ELECTRICAL CONNECTORS	EMC Corporation
09107884	6353837	METHOD & APPARATUS PROVIDING MASS STORAGE ACCESS FROM SYSTEMS USING DIFFERENT META-DEVICE FORMATS	EMC Corporation
09107891	6141773	METHOD AND APPARATUS FOR UNDOING CHANGES TO COMPUTER MEMORY	EMC Corporation
09107923	6393540	MOVING A LOGICAL OBJECT FROM A SET OF SOURCE LOCATIONS TO A SET OF DESTINATION LOCATIONS USING A SINGLE COMMAND	EMC Corporation
09108038	6542909	SYSTEM FOR DETERMINING MAPPING OF LOGICAL OBJECTS IN A COMPUTER SYSTEM	EMC Corporation
09108075	6263445	METHOD AND APPARATUS FOR AUTHENTICATING CONNECTIONS TO A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
09111211	6324604	MAGNETIC DISK STORAGE FOR STORING DATA IN DISK BLOCK SIZE FROM FIXED LENGTH OF HOST BLOCK IN NON-INTEGER MULTIPLE OF THE DISK BLOCK SIZE	EMC Corporation
09127523	6233589	METHOD AND SYSTEM FOR REFLECTING DIFFERENCES BETWEEN TWO FILES	EMC Corporation
09127999	6266740	DEVICE SEQUENCING AND PLACEMENT PROTECTION USING A DIGITAL SIGNATURE	EMC Corporation
09133564	6269431	VIRTUAL STORAGE AND BLOCK LEVEL DIRECT ACCESS OF SECONDARY STORAGE RECOVERY OF BACKUP DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
09133701	6366987	COMPUTER DATA STORAGE PHYSICAL BACKUP AND LOGICAL RESTORE	EMC Corporation
09133885	6353878	REMOTE CONTROL OF BACKUP MEDIA IN A SECONDARY STORAGE SUBSYSTEM THROUGH ACCESS TO A PRIMARY STORAGE SUBSYSTEM	EMC Corporation
09134012	6157920	EXECUTABLE DIGITAL CASH FOR ELECTRONIC COMMERCE	EMC Corporation
09135290	5959932	METHOD & APPARATUS FOR DETECTING ERRORS IN THE WRITING OF DATA TO A MEMORY	EMC Corporation
09137852	6141188	SECONDARY ACTUATOR	EMC Corporation
09143683	6189071	METHOD FOR MAXIMIZING SEQUENTIAL OUTPUT IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09143684	6237063	LOAD BALANCING METHOD FOR EXCHANGING DATA IN DIFFERENT PHYSICAL DISK STORAGE DEVICES IN A DISK ARRAY STORAGE DEVICE INDEPENDENTLY OF DATA PROCESSING SYSTEM OPERATION	EMC Corporation
09143698	6308284	METHOD AND APPARATUS FOR MAINTAINING DATA COHERENCY	EMC Corporation
09144741	6201690	RACK CONSOLE ASSEMBLY	EMC Corporation
09156747	6107855	APPARATUS AND METHOD FOR MECHANICAL HARVESTING OF FRUIT	EMC Corporation
09160727	6359745	LATENT ILLUMINANCE DISCRIMINATION MARKER SYSTEM FOR DATA STORAGE CARTRIDGES	EMC Corporation
09160811	6181662	LATENT IRRADIANCE DISCRIMINATION METHOD AND MARKER SYSTEM FOR CARTRIDGELESS DATA STORAGE DISKS	EMC Corporation
09177013	6393447	METHOD AND APPARATUS FOR EXTRACTING UNBIASED RANDOM BITS FROM A POTENTIALLY BIASED SOURCE OF RANDOMNESS	EMC Corporation
09182265	6460141	SECURITY AND ACCESS MANAGEMENT SYSTEM FOR WEB-ENABLED AND NON-WEB-ENABLED APPLICATIONS AND CONTENT ON A COMPUTER NETWORK	EMC Corporation
09182930	6166884	APPARATUS AND SYSTEM FOR STABILIZING A DISK MEDIA SURFACE FOR ENGAGEMENT WITH A DRIVE HEAD	EMC Corporation
09183873	6160680	TWO-PIECE MEDIA HUB AND METHODS OF ATTACHING SAME TO A MEDIUM	EMC Corporation
09183874	6583945	METHOD FOR IRREVERSIBLY WRITE-SECURING A MAGNETIC STORAGE CARTRIDGE	EMC Corporation
09183903	6320717	VELOCITY LIMITED LOADING OF READ HEADS ONTO DISK DRIVE MEDIA	EMC Corporation
09191876	6115219	A READ WRITE HEAD ASSEMBLY THAT HAS A PAIR OF OPPOSED SLIDERS THAT EACH HAVE A TRANSVERSE SLOTTED RAIL ALIGNED WITH A RAIL IN THE OPPOSING SLIDER THAT DOES NOT HAVE A TRANSVERSE SLOTTED RAIL	EMC Corporation
09191903	6129440	SWITCH-OPERATED MEMBER WITH STATUS LIGHT PIPE INCORPORATED THEREIN	EMC Corporation
09195346	6286022	EFFICIENT FINITE FIELD BASIS CONVERSION INVOLVING A DUAL BASIS	EMC Corporation

Application Number	Registration Number	Title	Owner
09195527	6446052	DIGITAL COIN TRACING USING TRUSTEE TOKENS	EMC Corporation
09196384	6564219	METHOD AND APPARATUS FOR OBTAINING AN IDENTIFIER FOR A LOGICAL UNIT OF DATA IN A DATABASE	EMC Corporation
09196651	6385626	METHOD AND APPARATUS FOR IDENTIFYING CHANGES TO A LOGICAL OBJECT BASED ON CHANGES TO THE LOGICAL OBJECT AT PHYSICAL LEVEL	EMC Corporation
09205063	6502131	DIRECTORY ENABLED POLICY MANAGEMENT TOOL FOR INTELLIGENT TRAFFIC MANAGEMENT	EMC Corporation
09209867	6178058	OFF-TRACK WRITE PROTECTION METHOD AND SYSTEM FOR INDUCED MECHANICAL DISTURBANCE ON A DISK DRIVE	EMC Corporation
09211026	6356943	DISTANCE LEARNING IMPLEMENTATION	EMC Corporation
09211131	6240511	METHOD AND APPARATUS FOR DETECTING SYSTEM CONFIGURATION CHANGES	EMC Corporation
09211961	6199839	VIBRATION DAMPING MECHANISM	EMC Corporation
09213073	6233730	REVISION COMPATIBILITY BETWEEN PROGRAMS	EMC Corporation
09213139	6397273	SYSTEM HAVING AN ENHANCED PARITY MECHANISM IN A DATA ASSEMBLER/DISASSEMBLER FOR USE IN A PIPELINE OF A HOST-STORAGE SYSTEM INTERFACE TO GLOBAL MEMORY	EMC Corporation
09213613	7233977	MESSAGING MECHANISM EMPLOYING MAILBOXES FOR INTER PROCESSOR COMMUNICATIONS	EMC Corporation
09215840	6317805	DATA TRANSFER INTERFACE HAVING PROTOCOL CONVERSION DEVICE AND UPPER, LOWER, MIDDLE MACHINES: WITH MIDDLE MACHINE ARBITRATING AMONG LOWER MACHINE SIDE REQUESTERS INCLUDING SELECTIVE ASSEMBLY/DISASSEMBLY REQUESTS	EMC Corporation
09216174	6711612	A SYSTEM FOR FACILITATING THE TRANSFER OF MANAGEMENT INFORMATION FROM A REMOTE MASS STORAGE SUBSYSTEM OVER A SWITCHING FABRIC OR SELECTIVELY OVER A PRIVATE LINK TO A CENTRAL LOCATION FOR SERVICING	EMC Corporation
09216254	6308181	ACCESS CONTROL WITH DELAYED BINDING OF OBJECT IDENTIFIERS	EMC Corporation
09216329	6279050	DATA TRANSFER APPARATUS HAVING UPPER, LOWER, MIDDLE STATE MACHINES, WITH MIDDLE STATE MACHINE ARBITRATING AMONG LOW STATE MACHINE SIDE REQUESTERS INCLUDING SELECTIVE ASSEMBLY/DISASSEMBLY REQUESTS	EMC Corporation
09219026	6487049	DRIVE HEADS FOR STORAGE MEDIA DRIVE	EMC Corporation
09221556	6389442	EFFICIENT FINITE FIELD MULTIPLICATION IN NORMAL BASIS	EMC Corporation
09222645	6418511	LARGE CAPACITY DATA STORAGE SYSTEMS USING REDUNDANT BUSES	EMC Corporation

Application Number	Registration Number	Title	Owner
09222646	6230221	DATA STORAGE SYSTEM HAVING A HOST COMPUTER COUPLED TO BANK OF DISK DRIVES THROUGH INTERFACE COMPRISING PLURALITY OF DIRECTORS, BUSSES, AND REFERENCE VOLTAGE GENERATORS	EMC Corporation
09223092	6314503	METHOD AND APPARATUS FOR MANAGING DATA PLACED ON A STORAGE SUBSYSTEM USING A LAYERED DEVICE DRIVER	EMC Corporation
09223110	6230217	DATA STORAGE SYSTEM HAVING A HOST COMPUTER COUPLED TO BANK OF DISK DRIVES THROUGH INTERFACE COMPRISING PLURALITY OF DIRECTORS, BUSES, AND PCB CONNECTORS	EMC Corporation
09223115	6289401	DATA STORAGE SYSTEM HAVING A HOST COMPUTER COUPLED TO BANK OF DISK DRIVES THROUGH INTERFACE COMPRISING PLURALITY OF DIRECTORS, TWO PAIRS OF BUSES, AND MEMORY SECTIONS	EMC Corporation
09223126	6457139	METHOD AND APPARATUS FOR OPTIMIZING A LOGICAL VOLUME MANAGER OR DEVICE DRIVER	EMC Corporation
09223417	6493795	DATA STORAGE SYSTEM	EMC Corporation
09223519	6389494	SYSTEM FOR INTERFACING A DATA STORAGE SYSTEM TO A HOST UTILIZING A PLURALITY OF BUSSES FOR CARRYING END-USER DATA AND A SEPARATE BUS FOR CARRYING INTERFACE STATE DATA	EMC Corporation
09223596	6341317	METHOD AND APPARATUS FOR MANAGING A LOG OF INFORMATION IN A COMPUTER SYSTEM INCLUDING AN INTELLIGENT STORAGE SYSTEM	EMC Corporation
09223896	6385706	APPARATUS AND METHODS FOR COPYING A LOGICAL OBJECT TO A PRIMARY STORAGE DEVICE USING A MAP OF A STORAGE LOCATION	EMC Corporation
09223998	6434637	METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM BASED ON THE STATE OF PREVIOUS I/O OPERATIONS (AS AMENDED)	EMC Corporation
09224194	6539451	DATA STORAGE SYSTEM HAVING MASTER-SLAVE ARBITERS	EMC Corporation
09224637	7107395	APPARATUS AND METHODS FOR OPERATING A COMPUTER STORAGE SYSTEM	EMC Corporation
09224701	6061274	METHODS AND APPARATUS FOR MESSAGE TRANSFER IN COMPUTER STORAGE SYSTEM	EMC Corporation
09224789	6449652	METHOD AND APPARATUS FOR PROVIDING SECURE ACCESS TO A COMPUTER SYSTEM RESOURCE	EMC Corporation
09224830	6407671	DETECTION SYSTEM FOR AN ELECTRONIC ENCLOSURE	EMC Corporation
09224896	6487561	APPARATUS AND METHODS FOR COPYING, BACKING UP, AND RESTORING DATA USING A BACKUP SEGMENT SIZE LARGER THAN THE STORAGE BLOCK SIZE	EMC Corporation
09224897	6397308	APPARATUS AND METHOD FOR DIFFERENTIAL BACKUP AND RESTORATION OF DATA IN A COMPUTER STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
09224921	6311326	ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
09224968	6262668	DETECTION SYSTEM FOR AN ELECTRONIC ENCLOSURE	EMC Corporation
09224969	6369594	TEST CLIP FOR ELECTRICAL TESTING OF AN ELECTRICAL COMPONENT	EMC Corporation
09224973	6360319	METHOD AND APPARATUS FOR STORING AND RETRIEVING SYSTEM REVISION INFORMATION	EMC Corporation
09225033	6397295	CACHE MECHANISM FOR SHARED RESOURCES IN A MULTIBUS DATA PROCESSING SYSTEM	EMC Corporation
09225461	6529944	HOST SYSTEM FOR REMOTE CONTROL OF MASS STORAGE VOLUMES USING CASCADING COMMANDS	EMC Corporation
09225577	6718347	METHOD AND APPARATUS FOR MAINTAINING COHERENCE AMONG COPIES OF A DATABASE SHARED BY MULTIPLE COMPUTERS	EMC Corporation
09236366	6807632	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
09247902	6104561	READ/WRITE PROTECT SCHEME FOR A DISK CARTRIDGE AND DRIVE	EMC Corporation
09251812	6209002	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
09255486	6397307	METHOD AND SYSTEM FOR MIRRORING AND ARCHIVING MASS STORAGE	EMC Corporation
09255614	6286010	METHODS AND APPARATUSES FOR INTERACTION BETWEEN SCHEMATA	EMC Corporation
09261542	6324581	FILE SERVER SYSTEM USING FILE SYSTEM STORAGE, DATA MOVERS, AND AN EXCHANGE OF META DATA AMONG DATA MOVERS FOR FILE LOCKING AND DIRECT ACCESS TO SHARED FILE SYSTEMS	EMC Corporation
09261621	6973455	FILE SERVER SYSTEM PROVIDING DIRECT DATA SHARING BETWEEN CLIENTS WITH A SERVER ACTING AS AN ARBITER AND COORDINATOR	EMC Corporation
09261626	6453354	FILE SERVER SYSTEM USING CONNECTION-ORIENTED PROTOCOL AND SHARING DATA SETS AMONG DATA MOVERS	EMC Corporation
09268142	6304986	METHOD AND APPARATUS FOR INSPECTING RECORDING MEDIUM FOR DEFECTS	EMC Corporation
09268416	6392872	COMPUTER SYSTEM	EMC Corporation
09268494	6424999	SYSTEM AND METHOD FOR RESTORING PREVIOUSLY BACKED-UP DATA IN A MASS STORAGE SUBSYSTEM	EMC Corporation
09271585	6560617	OPERATION OF A STANDBY SERVER TO PRESERVE DATA STORED BY A NETWORK SERVER	EMC Corporation
09272522	6446253	MECHANISM FOR ACHIEVING TRANSPARENT NETWORK COMPUTING	EMC Corporation
09274532	6532451	NESTED STRONG LOADER APPARATUS AND METHOD	EMC Corporation

Application Number	Registration Number	Title	Owner
09274696	6701433	METHOD AND APPARATUS FOR ESCROWING PROPERTIES USED FOR ACCESSING EXECUTABLE MODULES	EMC Corporation
09274971	6615350	MODULE AUTHENTICATION AND BINDING LIBRARY EXTENSIONS	EMC Corporation
09281846	6324065	STIFFENER FOR A PRINTED CIRCUIT BOARD	EMC Corporation
09282482	6323423	HOUSING FOR INTERCONNECTED PRINTED CIRCUIT BOARDS	EMC Corporation
09282673	6285563	SUPPORT BRACKET FOR A PRINTED CIRCUIT BOARD CONNECTABLE TO DAUGHTER BOARDS	EMC Corporation
09283029	6325472	FASTENING DEVICE FOR A PRINTED CIRCUIT BOARD	EMC Corporation
09289290	6163422	METHOD AND APPARATUS FOR INCREASING DISC DRIVE PERFORMANCE	EMC Corporation
09290844	6311257	METHOD AND APPARATUS FOR ALLOCATING MEMORY FOR A COMMAND QUEUE	EMC Corporation
09295718	6931440	METHOD AND APPARATUS FOR DYNAMICALLY DETERMINING WHETHER ACCESS TO A RESOURCE CONNECTED TO A COMPUTER HAS CHANGED AND DETERMINING HOW TO ACCESS THE RESOURCE WITH A NEW IDENTIFIER	EMC Corporation
09301057	6895418	VERSATILE INDIRECTION IN AN EXTENT BASED FILE SYSTEM	EMC Corporation
09301177	6654772	MULTI-VOLUME EXTENT BASED FILE SYSTEM	EMC Corporation
09303242	6370626	METHOD AND APPARATUS FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SHEET	EMC Corporation
09304775	6985583	SYSTEM AND METHOD FOR AUTHENTICATION SEED DISTRIBUTION	EMC Corporation
09306526	6574732	SOFTWARE FINGERPRINTING AND BRANDING	EMC Corporation
09312146	6353869	ADAPTIVE DELAY OF POLLING FREQUENCIES IN A DISTRIBUTED SYSTEM WITH A QUEUED LOCK	EMC Corporation
09315437	6505321	FAULT TOLERANT PARITY GENERATION	EMC Corporation
09316251	6516348	COLLECTING AND PREDICTING CAPACITY INFORMATION FOR COMPOSITE NETWORK RESOURCE FORMED BY COMBINING PORTS OF AN ACCESS SERVER AND/OR LINKS OF WIDE AREA NETWORK	EMC Corporation
09320423	6751735	APPARATUS FOR CONTROL OF CRYPTOGRAPHY IMPLEMENTATIONS IN THIRD PARTY APPLICATIONS	EMC Corporation
09325207	6133544	LASER WELD DISK CARTRIDGE	EMC Corporation
09336461	6526521	METHODS AND APPARATUS FOR PROVIDING DATA STORAGE ACCESS	EMC Corporation
09337059	6201662	LATENT ILLUMINANCE DISCRIMINATION MARKER WITH REFLECTIVE LAYER FOR DATA STORAGE CARTRIDGES	EMC Corporation
09337361	6385762	DATA REDUCTION USING RANK-OF-RANKS METHODOLOGY	EMC Corporation
09338097	6147837	DATA CARTRIDGE HAVING ARCUATE SHUTTER SPRING	EMC Corporation

Application Number	Registration Number	Title	Owner
09338098	6327105	APPARATUS AND METHODS FOR LOW OVERHEAD, HIGHLY RELIABLE DETERMINATION OF POSITION OF A MAGNETIC STORAGE MEDIUM	EMC Corporation
09338810	6222277	NON-COLLAPSING INTERCONNECTION FOR SEMICONDUCTOR DEVICES	EMC Corporation
09340261	6186890	ELECTRICAL CABINET DOOR AIR MIXING DAM	EMC Corporation
09342277	6220678	ELECTRICAL CABINET	EMC Corporation
09342453	6959368	METHOD AND APPARATUS FOR DUPLICATING COMPUTER BACKUP DATA	EMC Corporation
09342474	6631442	METHOD AND APPARATUS FOR INTERFACING TO A DATA STORAGE SYSTEM	EMC Corporation
09342608	6363385	METHOD AND APPARATUS FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
09343000	6135875	ELECTRICAL CABINET	EMC Corporation
09343282	6219249	ELECTRICAL CABINET	EMC Corporation
09343344	6629216	FIBRE CHANNEL BY-PASS	EMC Corporation
09343969	6839747	USER INTERFACE FOR MANAGING STORAGE IN A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
09344999	6662197	METHOD AND APPARATUS FOR MONITORING UPDATE ACTIVITY IN A DATA STORAGE FACILITY	EMC Corporation
09345038	6104048	ELECTROSTATIC DISCHARGE PROTECTION FOR MAGNETO-RESISTIVE HEADS	EMC Corporation
09345048	6581136	FIBRE CHANNEL DATA STORAGE SYSTEM HAVING EXPANSION/CONTRACTION	EMC Corporation
09345053	6636934	FIBRE CHANNEL PORT BY-PASS SELECTOR SECTION FOR DUAL PORTED DISK DRIVES	EMC Corporation
09345216	6845395	METHOD AND APPARATUS FOR IDENTIFYING NETWORK DEVICES ON A STORAGE NETWORK	EMC Corporation
09345254	6665714	METHOD AND APPARATUS FOR DETERMINING AN IDENTITY OF A NETWORK DEVICE	EMC Corporation
09347592	6304946	SYSTEM AND METHOD FOR OPTIMIZING CACHE WRITE BACKS TO DISKS	EMC Corporation
09352353	6249873	METHOD OF AND APPARATUS FOR PROVIDING SECURE DISTRIBUTED DIRECTORY SERVICES AND PUBLIC KEY INFRASTRUCTURE	EMC Corporation
09352651	6567890	FIBRE CHANNEL PORT BY-PASS SELECTOR SECTION FOR DUAL PORTED DISK DRIVES	EMC Corporation
09356600	7111172	SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
09359205	7461250	SYSTEM AND METHOD FOR CERTIFICATE EXCHANGE	EMC Corporation
09360337	6529992	SELF-CONTAINED APPLICATION DISK FOR AUTOMATICALLY LAUNCHING APPLICATION SOFTWARE OR STARTING DEVICES AND PERIPHERALS	EMC Corporation
09362270	6587959	SYSTEM AND METHOD FOR ADDRESSING SCHEME FOR USE ON CLUSTERS	EMC Corporation
09362400	6324692	UPGRADE OF A PROGRAM	EMC Corporation
09364727	6839782	COMPUTER STORAGE SYSTEM INCORPORATING ON-BOARD EEPROMS CONTAINING PRODUCT DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
09364931	6467047	COMPUTER STORAGE SYSTEM CONTROLLER INCORPORATING CONTROL STORE MEMORY WITH PRIMARY AND SECONDARY DATA AND PARITY AREAS	EMC Corporation
09365359	6218821	COMPUTER STORAGE SYSTEM INCORPORATING MARGINABLE POWER SUPPLY AND POWER-UP BYPASS CIRCUIT	EMC Corporation
09365360	6560573	STORAGE CONTROLLER WITH HARDWARE EMULATION CONTROLLER FOR EMULATION BETWEEN CONTROL PROCESSOR AND TRANSFER CIRCUITRY COMPATIBLE TO DIFFERENT PROCESSOR	EMC Corporation
09365375	6539492	SYSTEM AND METHOD FOR MAINTAINING SYNCHRONIZATION IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09369712	6430714	FAILURE DETECTION AND ISOLATION	EMC Corporation
09372354	6320712	APPARATUS AND METHODS FOR LOW OVERHEAD, HIGHLY RELIABLE DETERMINATION OF POSITION OF A MAGNETIC STORAGE MEDIUM	EMC Corporation
09375331	6832379	COMPUTER ARCHITECTURE UTILIZING LAYERED DEVICE DRIVERS	EMC Corporation
09375860	6671705	REMOTE MIRRORING SYSTEM, DEVICE, AND METHOD	EMC Corporation
09376173	7013465	SYSTEM, DEVICE AND METHOD FOR INTERPROCESSOR COMMUNICATION IN A COMPUTER SYSTEM	EMC Corporation
09377581	6397292	ASYMMETRICAL STRIPING OF MIRRORED STORAGE DEVICE ARRAYS AND CONCURRENT ACCESS TO EVEN TRACKS ON THE FIRST ARRAY AND ODD TRACKS IN THE SECOND ARRAY TO IMPROVE DATA ACCESS PERFORMANCE	EMC Corporation
09378643	6629199	DIGITAL DATA STORAGE SYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STORED RECORDS AND UTILIZATION OF A CHECK VALUE FOR VERIFYING THAT A RECORD IS FROM A PARTICULAR STORAGE LOCATION	EMC Corporation
09378644	6330655	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STORED RECORDS	EMC Corporation
09379947	6157925	SYSTEM AND METHOD FOR CACHING IDENTIFICATION AND LOCATION INFORMATION IN A COMPUTER NETWORK	EMC Corporation
09382752	6611896	DYNAMIC MIRROR SERVICE POLICY WITH SEEK ADJUSTMENT IN A NON-PHYSICAL MIRRORED STG ENVIRONMENT	EMC Corporation
09383821	6243834	APPARATUS AND METHOD FOR CAPTURING INFORMATION OFF A PLURALITY OF BI-DIRECTIONAL COMMUNICATION BUSES	EMC Corporation
09388328	6493796	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation

Application Number	Registration Number	Title	Owner
09390012	6295587	METHOD AND APPARATUS FOR MULTIPLE DISK DRIVE ACCESS IN A MULTI-PROCESSOR/MULTI-DISK DRIVE SYSTEM	EMC Corporation
09390728	6162490	METHOD FOR APPLYING AN EMISSIVE MATERIAL TO A SUBSTRATE	EMC Corporation
09391360	6976165	SYSTEM AND METHOD FOR SECURE STORAGE, TRANSFER AND RETRIEVAL OF CONTENT ADDRESSABLE INFORMATION	EMC Corporation
09392192	6275860	METHOD AND APPARATUS FOR SYNCHRONIZING FUNCTION VALUES INA MULTIPLE PROTOCOL SYSTEM	EMC Corporation
09396146	6480930	MAILBOX FOR CONTROLLING STORAGE SUBSYSTEM RECONFIGURATIONS	EMC Corporation
09396217	6405282	METHOD FOR ANALYZING DISK SEEK TIMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09396218	6341333	METHOD FOR TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09396253	6711649	LOAD BALANCING ON DISK ARRAY STORAGE DEVICE	EMC Corporation
09396275	6442650	MAXIMIZING SEQUENTIAL OUTPUT IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09398269	6662241	APPARATUS AND METHOD FOR CONTROLLING A PERIPHERAL DEVICE	EMC Corporation
09404016	6499039	REORGANIZATION OF STRIPED DATA DURING FILE SYSTEM EXPANSION IN A DATA STORAGE SYSTEM	EMC Corporation
09408058	6581137	DATA STORAGE SYSTEM	EMC Corporation
09408234	6519739	FAULT DETECTOR	EMC Corporation
09408429	6915394	MICROPROCESSOR INTERFACE	EMC Corporation
09408430	6735655	INTERRUPT REQUEST CONTROLLER	EMC Corporation
09408807	6836818	CENTRAL PROCESSING UNIT	EMC Corporation
09408811	6543029	ERROR CORRECTOR	EMC Corporation
09410385	6144527	A METHOD FOR ACCESSING A MEDIUM WITHIN A SHUTTER SHELL THAT ENCAPSULATES THE MEDIUM	EMC Corporation
09410514	6389420	FILE MANAGER PROVIDING DISTRIBUTED LOCKING AND METADATA MANAGEMENT FOR SHARED DATA ACCESS BY CLIENTS RELINQUISHING LOCKS AFTER TIME PERIOD EXPIRATION	EMC Corporation
09411612	6505216	METHODS AND APPARATUS FOR BACKING-UP AND RESTORING FILES USING MULTIPLE TRAILS	EMC Corporation
09415144	6550029	TESTING SYSTEM AND METHODS WITH PROTOCOL PATTERN INJECTION AND EXTERNAL VERIFICATION	EMC Corporation
09424180	6816337	MAGNETIC RECORDING UNIT	EMC Corporation
09427451	6557113	SYNCHRONIZATION RECOVERY TECHNIQUE FOR STORAGE MEDIA	EMC Corporation
09431758	6944654	MULTIPLE STORAGE ARRAY CONTROL	EMC Corporation
09434611	6457102	CACHE USING MULTIPLE LRU'S	EMC Corporation
09438137	6714952	METHOD FOR BACKUP AND RESTORE OF MULTI-LINGUAL NETWORK FILE SERVER	EMC Corporation

Application Number	Registration Number	Title	Owner
09438245	6483041	MICRO SOLDERED CONNECTION	EMC Corporation
09438913	6754897	OPERATION PRIORITIZATION AND SELECTION IN PROBABILITY-BASED JOB SCHEDULER	EMC Corporation
09439903	6665740	LOGICAL VOLUME SELECTION IN A PROBABILITY-BASED JOB SCHEDULER	EMC Corporation
09440756	6625750	HARDWARE AND SOFTWARE FAILOVER SERVICES FOR A FILE SERVER	EMC Corporation
09442884	6415372	ROLLING BACK STORAGE SUBSYSTEM RECONFIGURATIONS	EMC Corporation
09444949	6590731	SYSTEM AND METHOD FOR ADAPTIVE SOFT HEAD LOADING OF DISK DRIVE HEAD ONTO DISK MEDIUM	EMC Corporation
09452605	6557058	METHOD AND APPARATUS OF SUSTAINED SEQUENTIAL DATA TRANSFER IN A MEDIA DRIVE	EMC Corporation
09452964	6434681	SNAPSHOT COPY FACILITY FOR A DATA STORAGE SYSTEM PERMITTING CONTINUED HOST READ/WRITE ACCESS	EMC Corporation
09453241	6549992	COMPUTER DATA STORAGE BACKUP WITH TAPE OVERFLOW CONTROL OF DISK CACHING OF BACKUP DATA STREAM	EMC Corporation
09453990	6466944	METHOD FOR CREATION, MANAGEMENT, AND USE OF FILES CONTAINING MULTIPLE VIRTUAL DATA STREAMS USING STANDARD FILE SYSTEM APIS	EMC Corporation
09455072	6338126	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
09466286	6134062	METHOD AND APPARATUS FOR INCREASING DISC DRIVE PERFORMANCE	EMC Corporation
09466976	6490598	SYSTEM AND METHOD FOR EXTERNAL BACKUP AND RESTORE FOR A COMPUTER DATA STORAGE SYSTEM	EMC Corporation
09467354	6487562	DYNAMICALLY MODIFYING SYSTEM PARAMETERS IN A DATA STORAGE SYSTEM	EMC Corporation
09467355	6651074	METHOD AND APPARATUS FOR STORAGE AND RETRIEVAL OF VERY LARGE DATABASES USING A DIRECT PIPE	EMC Corporation
09467358	6658589	SYSTEM AND METHOD FOR BACKUP A PARALLEL SERVER DATA STORAGE SYSTEM	EMC Corporation
09468270	6557079	REMOTE DATA FACILITY PREFETCH	EMC Corporation
09470645	7146614	COMPUTER DIRECTORY SYSTEM HAVING AN APPLICATION INTEGRATION DRIVER INFRASTRUCTURE	EMC Corporation
09471848	6401178	DATA PROCESSING METHOD AND APPARATUS FOR ENABLING INDEPENDENT ACCESS TO REPLICATED DATA	EMC Corporation
09471869	7054892	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
09472583	6529521	DATA STORAGE SYSTEM	EMC Corporation
09473668	6574687	FIBRE CHANNEL DATA STORAGE SYSTEM	EMC Corporation
09474112	6571355	FIBRE CHANNEL DATA STORAGE SYSTEM FAIL-OVER MECHANISM	EMC Corporation
09474284	6516370	DATA STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
09474384	6615315	FIBRE CHANNEL DATA STORAGE SYSTEM HAVING IMPROVED FRONT-END I/O ADAPTED HUB	EMC Corporation
09474385	6283429	MOUNTING ASSEMBLY	EMC Corporation
09474476	6766359	METHOD AND APPARATUS FOR UTILIZING MULTIPLE PATHS IN A FILE TRANSFER UTILITY EMPLOYING AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
09474500	6560683	FIBRE CHANNEL DATA STORAGE SYSTEM HAVING IMPROVED REAR-END I/O ADAPTED HUB	EMC Corporation
09474607	6983330	METHOD AND APPARATUS FOR USING MULTIPLE PATHS FOR PROCESSING OUT OF BAND COMMANDS	EMC Corporation
09474633	6496951	METHOD FOR TESTING SIGNAL INTEGRITY IN A DATA STORAGE SYSTEM	EMC Corporation
09474886	6466718	METHOD AND APPARATUS FOR TRANSMITTING FIBRE-CHANNEL AND NON-FIBRE CHANNEL SIGNALS THROUGH A COMMON CABLE	EMC Corporation
09475462	6587957	DISK DRIVE CONTROLLER FOR CONTROLLING DATA FLOW THERETHROUGH BY SWITCHING TO SECONDARY BUS TO RECEIVE CLOCK PULSES WHEN A FAILURE ON MASTER BUS IS DETECTED	EMC Corporation
09479488	6574753	PEER LINK FAULT ISOLATION	EMC Corporation
09479512	6718372	METHODS AND APPARATUS FOR PROVIDING ACCESS BY A FIRST COMPUTING SYSTEM TO DATA STORED IN A SHARED STORAGE DEVICE MANAGED BY A SECOND COMPUTING SYSTEM	EMC Corporation
09479778	6317845	SYSTEM FOR COMPUTER RECOVERY USING REMOVABLE HIGH CAPACITY MEDIA (ZIP SNIPER/RESCUE)	EMC Corporation
09480390	6829609	SYSTEM, DEVICE, AND METHOD FOR PROVIDING MUTUAL EXCLUSION FOR COMPUTER SYSTEM RESOURCES	EMC Corporation
09483405	6654784	COMPUTING ARCHITECTURE	EMC Corporation
09489526	6260109	METHOD & APPARATUS FOR PROVIDING LOGICAL DEVICES SPANNING SEVERAL PHYSICAL VOLUMES	EMC Corporation
09496308	6711574	RETRIEVAL OF MANAGEMENT INFORMATION	EMC Corporation
09496824	7197639	CRYPTOGRAPHIC COUNTERMEASURES AGAINST CONNECTION DEPLETION ATTACKS	EMC Corporation
09498287	6742059	PRIMARY AND SECONDARY MANAGEMENT COMMANDS FOR A PERIPHERAL CONNECTED TO MULTIPLE AGENTS	EMC Corporation
09506637	6587297	SYSTEM AND METHOD FOR DETECTING THE PRESENCE OF A DATA-STORAGE CARTRIDGE USING PHASE-ROTATED POLARIZED LIGHT	EMC Corporation
09515773	6748581	APPARATUS AND METHOD FOR IMPLEMENTING AN EXISTING OBJECT-ORIENTED CLASS IN AN OBJECT MANAGEMENT SYSTEM	EMC Corporation
09516271	6567873	SPINLOCK WITH ADAPTIVE DELAY	EMC Corporation
09517063	6665703	STORAGE SYSTEM WITH INTERNAL LAN	EMC Corporation
09521681	6813354	MIXING IN SMALL BATCHES	EMC Corporation

Application Number	Registration Number	Title	Owner
09521902	6810396	MANAGED ACCESS OF A BACKUP STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
09521930	6629189	METHOD AND APPARATUS FOR MANAGING TARGET DEVICES IN A MULTI-PATH COMPUTER SYSTEM	EMC Corporation
09524147	6459545	USE OF MATTE MATERIALS TO REDUCE SIGNAL POLLUTION IN CARTRIDGE DETECTION CIRCUITRY	EMC Corporation
09524337	6772339	MIX AND MATCH: A NEW APPROACH TO SECURE MULTIPARTY COMPUTATION	EMC Corporation
09525648	6571367	METHOD AND APPARATUS CONNECTING BETWEEN A FIBER CHANNEL AND A CACHE MEMORY	EMC Corporation
09527156	6466406	DATA STORAGE CARTRIDGE HAVING ONE OR MORE SURFACE RECESSES FOR IMPROVED INTERNAL AIR CIRCULATION	EMC Corporation
09528011	6398324	SYSTEM AND METHOD FOR RECONSTRUCTING DATA ASSOCIATED WITH PROTECTED STORAGE VOLUME STORED IN MULTIPLE MODULES OF BACK-UP MASS DATA STORAGE FACILITY	EMC Corporation
09533009	6553471	CONTROLLING ACCESS TO A STORAGE DEVICE BY CONTROLLING PORTS THERETO	EMC Corporation
09533025	6898727	METHOD AND APPARATUS FOR PROVIDING HOST RESOURCES FOR AN ELECTRONIC COMMERCE SITE	EMC Corporation
09533154	6365904	SYSTEM AND METHOD OF HEAT SIGNATURE VERIFICATION/AUTHENTICATION OF AN OBJECT	EMC Corporation
09533395	6587970	METHOD AND APPARATUS FOR PERFORMING SITE FAILOVER	EMC Corporation
09533409	7281031	METHOD AND APPARATUS FOR PROVIDING ADDITIONAL RESOURCES FOR A HOST COMPUTER	EMC Corporation
09535134	6728836	SEGMENTING CACHE TO PROVIDE VARYING SERVICE LEVELS	EMC Corporation
09536194	6347734	METHODS AND APPARATUS FOR INSTALLING A MODULE ON A CIRCUIT BOARD USING HEATING AND COOLING TECHNIQUES	EMC Corporation
09536195	6398935	METHOD FOR MANUFACTURING PCB'S	EMC Corporation
09539747	6792047	REAL TIME PROCESSING AND STREAMING OF SPLICED ENCODED MPEG VIDEO AND ASSOCIATED AUDIO	EMC Corporation
09539966	7003601	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH PLURAL DIRECTORS ON A COMMON PRINTED CIRCUIT BOARD	EMC Corporation
09539967	6557074	QUALITY OF SWAPS OF DATA STORAGE VOLUMES	EMC Corporation
09539968	6851019	SWAPPING DATA STORAGE VOLUMES	EMC Corporation
09540306	7096481	PREPARATION OF METADATA FOR SPLICING OF ENCODED MPEG VIDEO AND AUDIO	EMC Corporation
09540347	6678332	SEAMLESS SPLICING OF ENCODED MPEG VIDEO AND AUDIO	EMC Corporation
09540671	6614616	DETERMINING SEEK TIMES	EMC Corporation
09540675	6581112	DIRECT MEMORY ACCESS (DMA) RECEIVER	EMC Corporation

Application Number	Registration Number	Title	Owner
09540825	6993621	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH PLURAL DIRECTORS ON A COMMON PRINTED CIRCUIT BOARD AND REDUNDANT SWITCHING NETWORKS	EMC Corporation
09540826	6665771	INTRA-DISK SWAPPING OF DATA STORAGE VOLUMES	EMC Corporation
09540827	6584513	DIRECT MEMORY ACCESS (DMA) TRANSMITTER	EMC Corporation
09540828	7117275	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK	EMC Corporation
09541158	6633954	A METHOD FOR ENHANCING HOST APPLICATION PERFORMANCE WITH A DASD USING TASK PRIORITIES	EMC Corporation
09541159	6917569	METHOD FOR DETERMINING SEEK TIMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09542171	6775720	METHOD AND SYSTEM FOR CONFIGURING A MASS STORAGE SYSTEM FOR MEASURING SYSTEM PERFORMANCE	EMC Corporation
09542463	6647458	BENCHMARK TOOL WRITE ANALYSIS FOR A MASS STORAGE SYSTEM	EMC Corporation
09547510	6636250	METHOD AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation
09547533	6691165	DISTRIBUTED SERVER CLUSTER FOR CONTROLLING NETWORK TRAFFIC	EMC Corporation
09548188	7299294	DISTRIBUTED TRAFFIC CONTROLLER FOR NETWORK DATA	EMC Corporation
09550825	6424502	ROLL-STABILIZED HEAD LIFTING APPARATUS AND METHOD FOR A DATA STORAGE DEVICE	EMC Corporation
09551720	6356441	DISK DRIVE ASSEMBLY WITH IMPROVED SECURING AND RELEASING MECHANISM	EMC Corporation
09552878	7016951	SYSTEM AND METHOD FOR NETWORK SECURITY	EMC Corporation
09556534	6424492	FREQUENCY BASED CARTRIDGE DETECTION SCHEME	EMC Corporation
09558638	6535005	SYSTEMS AND METHODS FOR OBTAINING AN ELECTRICAL CHARACTERISTIC OF A CIRCUIT BOARD ASSEMBLY PROCESS	EMC Corporation
09561161	6611879	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH TRACE BUFFER	EMC Corporation
09561531	6779071	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH STATUS REGISTER	EMC Corporation
09561532	6651130	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH BUS ARBITRATION	EMC Corporation
09564103	6432346	PROCESS OF MAKING MAGNETIC RECORDING DISK	EMC Corporation
09566592	6801949	DISTRIBUTED SERVER CLUSTER WITH GRAPHICAL USER INTERFACE	EMC Corporation
09568386	6754718	PUSHING ATTRIBUTE INFORMATION TO STORAGE DEVICES FOR NETWORK TOPOLOGY ACCESS	EMC Corporation

Application Number	Registration Number	Title	Owner
09578121	6260110	VIRTUAL TAPE SYSTEM WITH VARIABLE SIZE	EMC Corporation
09579427	6691209	TOPOLOGICAL DATA CATEGORIZATION AND FORMATTING FOR A MASS STORAGE SYSTEM	EMC Corporation
09579670	7219260	FAULT TOLERANT SYSTEM SHARED SYSTEM RESOURCE WITH STATE MACHINE LOGGING	EMC Corporation
09579671	6678788	DATA TYPE AND TOPOLOGICAL DATA CATEGORIZATION AND ORDERING FOR A MASS STORAGE SYSTEM	EMC Corporation
09580186	6594775	FAULT HANDLING MONITOR TRANSPARENTLY USING MULTIPLE TECHNOLOGIES FOR FAULT HANDLING IN A MULTIPLE HIERARCHAL/PEER DOMAIN FILE SERVER WITH DOMAIN CENTERED, CROSS DOMAIN COOPERATIVE FAULT HANDLING MECHANISMS	EMC Corporation
09580187	6718481	MULTIPLE HIERARCHAL/PEER DOMAIN FILE SERVER WITH DOMAIN BASED, CROSS DOMAIN COOPERATIVE FAULT HANDLING MECHANISMS	EMC Corporation
09580539	6578160	FAULT TOLERANT, LOW LATENCY SYSTEM RESOURCE WITH HIGH LEVEL LOGGING OF SYSTEM RESOURCE TRANSACTIONS AND CROSS-SERVER MIRRORED HIGH LEVEL LOGGING OF SYSTEM RESOURCE TRANSACTIONS	EMC Corporation
09587783	7043715	METHOD AND APPARATUS FOR CUSTOMIZING SOFTWARE	EMC Corporation
09589247	6724554	READ/WRITE PROTECT SCHEME FOR A DISK CARTRIDGE AND DRIVE	EMC Corporation
09590508	6633445	METHOD AND APPARATUS FOR ELECTRICALLY COUPLING COMPONENTS IN A REMOVABLE CARTRIDGE	EMC Corporation
09590509	6628474	METHOD AND APPARATUS FOR ELECTROSTATIC DISCHARGE PROTECTION IN A REMOVABLE CARTRIDGE	EMC Corporation
09590511	6717762	METHOD AND APPARATUS FOR MAKING A DRIVE COMPATIBLE WITH A REMOVABLE CARTRIDGE	EMC Corporation
09590747	6360276	METHODS AND APPARATUS FOR DETERMINING, VERIFYING, AND REDISCOVERING NETWORK IP ADDRESSES	EMC Corporation
09591540	6624979	METHOD AND APPARATUS FOR PARKING AND RELEASING A MAGNETIC HEAD	EMC Corporation
09591827	6697367	MULTIHOP SYSTEM CALLS	EMC Corporation
09596295	6658522	METHOD TO REDUCE OVERHEAD ASSOCIATED WITH SYSTEM I/0 IN A MULTIPROCESSOR COMPUTER SYSTEM	EMC Corporation
09599229	7953834	SYSTEM AND METHOD FOR REDUCING BANDWIDTH CONSUMED BY LOOPING MESSAGE PACKETS IN LOCAL AREA NETWORK	EMC Corporation
09604592	6484173	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
09604853	6813686	METHOD AND APPARATUS FOR IDENTIFYING LOGICAL VOLUMES IN MULTIPLE ELEMENT COMPUTER STORAGE DOMAINS	EMC Corporation

Application Number	Registration Number	Title	Owner
09605040	6842784	USE OF GLOBAL LOGICAL VOLUME IDENTIFIERS TO ACCESS LOGICAL VOLUMES STORED AMONG A PLURALITY OF STORAGE ELEMENTS IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09605043	6760828	METHOD AND APPARATUS FOR USING LOGICAL VOLUME IDENTIFIERS FOR TRACKING OR IDENTIFYING LOGICAL VOLUME STORED IN THE STORAGE SYSTEM	EMC Corporation
09605044	7065610	METHOD AND APPARATUS FOR MAINTAINING INVENTORY OF LOGICAL VOLUMES STORED ON STORAGE ELEMENTS	EMC Corporation
09605172	6728962	CONTEXT SWAPPING IN MULTITASKING KERNEL	EMC Corporation
09605201	6978324	METHOD AND APPARATUS FOR MOVING LOGICAL ENTITIES AMONG STORAGE ELEMENTS IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09605378	6708265	METHOD AND APPARATUS FOR MOVING ACCESSES TO LOGICAL ENTITIES FROM ONE STORAGE ELEMENT TO ANOTHER STORAGE ELEMENT IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09605553	7225191	METHOD AND APPARATUS FOR VERIFYING STORAGE ACCESS REQUESTS IN A COMPUTER STORAGE SYSTEM WITH MULTIPLE STORAGE ELEMENTS	EMC Corporation
09605554	6912548	LOGICAL VOLUME IDENTIFIER DATABASE FOR LOGICAL VOLUMES IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09605626	6687903	INHIBITING STARVATION IN A MULTITASKING OPERATING SYSTEM	EMC Corporation
09605812	7296271	REPLACEABLE SCHEDULING ALGORITHM IN A MULTITASKING KERNEL	EMC Corporation
09606496	6742017	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH POINTER OR COUNTERS	EMC Corporation
09606505	6816916	DATA STORAGE SYSTEM HAVING MULTI-CAST/UNICAST	EMC Corporation
09606730	7007194	DATA STORAGE SYSTEM HAVING POINT-TO-POINT CONFIGURATION	EMC Corporation
09606734	7073020	METHOD FOR MESSAGE TRANSFER IN COMPUTER STORAGE SYSTEM	EMC Corporation
09608050	6771703	EFFICIENT SCALING OF NONSCALABLE MPEG-2 VIDEO	EMC Corporation
09608469	6938039	CONCURRENT FILE ACCESS AT A TARGET FILE SERVER DURING MIGRATION OF FILE SYSTEMS BETWEEN FILE SERVERS USING A NETWORK FILE SYSTEM ACCESS PROTOCOL	EMC Corporation
09608521	8281022	METHOD AND APPARATUS FOR IMPLEMENTING HIGH-PERFORMANCE, SCALEABLE DATA PROCESSING AND STORAGE SYSTEMS	EMC Corporation
09608919	6871006	PROCESSING OF MPEG ENCODED VIDEO FOR TRICK MODE OPERATION	EMC Corporation
09609966	6385551	METHODS AND APPARATUS FOR OBTAINING A CONNECTION CHARACTERISTIC OF A CONNECTION ASSEMBLY	EMC Corporation

Application Number	Registration Number	Title	Owner
09609967	6681353	METHODS AND APPARATUS FOR OBTAINING A TRACE OF A DIGITAL SIGNAL WITHIN A FIELD PROGRAMMABLE GATE ARRAY DEVICE	EMC Corporation
09610405	6535994	METHOD AND APPARATUS FOR IDENTIFYING AND REPAIRING MISMATCHED DATA	EMC Corporation
09611913	7185192	METHOD AND APPARATUS FOR CONTROLLING ACCESS TO A RESOURCE	EMC Corporation
09613118	6754682	METHOD AND APPARATUS FOR ENABLING CONSISTENT ANCILLARY DISK ARRAY STORAGE DEVICE OPERATIONS WITH RESPECT TO A MAIN APPLICATION	EMC Corporation
09614820	6584544	METHOD AND APPARATUS FOR PREPARING A DISK FOR USE IN A DISK ARRAY	EMC Corporation
09614859	6578164	METHOD FOR DETECTING TRANSIENT WRITE ERRORS IN A DISK DRIVE HAVING A DUAL TRANSDUCER SLIDER	EMC Corporation
09618488	6480380	METHODS AND APPARATUS FOR COOLING A DISK DRIVE	EMC Corporation
09620013	6658592	ERROR DETECTION IN A DISK STORAGE SYSTEM	EMC Corporation
09620176	7502922	COMPUTER NETWORK HAVING A SECURITY LAYER INTERFACE INDEPENDENT OF THE APPLICATION TRANSPORT MECHANISM	EMC Corporation
09620491	6328590	METHODS AND APPARATUS FOR CONTROLLING ATTACHMENT OF AN ELECTRONIC MODULE WITH A CIRCUIT BOARD CONNECTOR	EMC Corporation
09628967	6487071	METHODS AND APPARATUS FOR DAMPENING VIBRATION OF A DISK DRIVE	EMC Corporation
09628968	6515854	DISK DRIVE ASSEMBLY WITH PRESS FIT LEVER	EMC Corporation
09629652	6523036	INTERNET DATABASE SYSTEM	EMC Corporation
09630711	7356696	PROOFS OF WORK AND BREAD PUDDING PROTOCOLS	EMC Corporation
09634967	6389511	ON-LINE DATA VERIFICATION AND REPAIR IN REDUNDANT STORAGE SYSTEMS	EMC Corporation
09636293	6898650	QUEUEING METHOD SUPPORTING MULTIPLE CLIENT ACCESSES SIMULTANEOUSLY	EMC Corporation
09636360	6386435	SYSTEMS AND METHODS FOR DISTRIBUTING SOLDER PASTE USING A TOOL HAVING A SOLDER PASTE APPERTURE WITH A NON-CIRCULAR CROSS-SECTIONAL SHAPE	EMC Corporation
09637615	6701451	SELECTIVE CORRECTION OF DATA ERRORS	EMC Corporation
09641224	7082441	METHOD FOR STORAGE AND MANIPULATION OF STORAGE SYSTEM METRICS	EMC Corporation
09641227	6886020	METHOD AND APPARATUS FOR MANAGING AND ARCHIVING PERFORMANCE INFORMATION RELATING TO STORAGE SYSTEM	EMC Corporation
09641773	6865514	POST TEST DATA PROCESSING OF A MASS STORAGE SYSTEM	EMC Corporation
09642267	7171338	OUTPUT PERFORMANCE TRENDS OF A MASS STORAGE SYSTEM	EMC Corporation
09642268	6845344	GRAPHICAL USER INPUT INTERFACE FOR TESTING PERFORMANCE OF A MASS STORAGE SYSTEM	EMC Corporation
09644472	6278566	METHOD AND APPARATUS FOR INCREASING DISC DRIVE PERFORMANCE	EMC Corporation

Application Number	Registration Number	Title	Owner
09654440	6519610	DISTRIBUTED REFERENCE LINKS FOR A DISTRIBUTED DIRECTORY SERVER SYSTEM	EMC Corporation
09658764	6552277	TECHNIQUES FOR FORMING A CONNECTION BETWEEN A PIN AND A CIRCUIT BOARD	EMC Corporation
09661103	7051101	METHODS AND APPARATUS FOR CONTROLLING DEVICES WITHIN STORAGE NETWORKS	EMC Corporation
09662306	6356057	METHODS AND APPARATUS FOR TESTING A POWERABILITY CHARACTERISTIC OF A BACKUP POWER SUPPLY	EMC Corporation
09663540	6622221	WORKLOAD ANALYZER AND OPTIMIZER INTEGRATION	EMC Corporation
09665039	6583959	READ WRITE HEAD ASSEMBLY HAVING AIR BEARING FEATURES FOR CONTAMINANT CONTROL IN FLEXIBLE MEDIA HEAD-DISK INTERFACE	EMC Corporation
09669347	6571259	PREALLOCATION OF FILE SYSTEM CACHE BLOCKS IN A DATA STORAGE SYSTEM	EMC Corporation
09669939	6823336	DATA STORAGE SYSTEM AND METHOD FOR UNINTERRUPTED READ-ONLY ACCESS TO A CONSISTENT DATASET BY ONE HOST PROCESSOR CONCURRENT WITH READ-WRITE ACCESS BY ANOTHER HOST PROCESSOR	EMC Corporation
09670137	6535891	METHOD AND APPARATUS FOR IDENTIFYING ACCESSES TO A REPOSITORY OF LOGICAL OBJECTS STORED ON A STORAGE SYSTEM BASED UPON INFORMATION IDENTIFYING ACCESSES TO PHYSICAL STORAGE LOCATIONS	EMC Corporation
09670429	6618649	METHODS AND APPARATUS FOR CHARACTERIZING A CIRCUIT BREAKER DEVICE	EMC Corporation
09670454	6816891	NETWORK FILE SERVER SHARING LOCAL CACHES OF FILE ACCESS INFORMATION IN DATA PROCESSORS ASSIGNED TO RESPECTIVE FILE SYSTEMS	EMC Corporation
09670707	6684268	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK HAVING CPU BUS SELECTOR	EMC Corporation
09670709	6631433	BUS ARBITER FOR A DATA STORAGE SYSTEM	EMC Corporation
09670783	7680819	MANAGING DIGITAL IDENTITY INFORMATION	EMC Corporation
09670933	6801960	SWITCH-BASED ACCELERATION OF COMPUTER DATA STORAGE EMPLOYING AGGREGATIONS OF DISK ARRAYS	EMC Corporation
09671038	6901468	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK HAVING BUS ARBITRATION	EMC Corporation
09672421	6928466	METHOD AND SYSTEM FOR IDENTIFYING MEMORY COMPONENT IDENTIFIERS ASSOCIATED WITH DATA	EMC Corporation
09672739	6769115	ADAPTIVE INTERFACE FOR A SOFTWARE DEVELOPMENT ENVIRONMENT	EMC Corporation
09675396	7065763	METHOD OF REDUCING CONTENTION OF A HIGHLY CONTENTED LOCK PROTECTING MULTIPLE DATA ITEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
09675420	6611852	SYSTEM AND METHOD FOR CLEANING A LOG STRUCTURE	EMC Corporation
09675423	6865650	SYSTEM AND METHOD FOR HIERARCHICAL DATA STORAGE	EMC Corporation
09675485	6625591	VERY EFFICIENT IN-MEMORY REPRESENTATION OF LARGE FILE SYSTEM DIRECTORIES	EMC Corporation
09676222	6507890	SYSTEM AND METHOD FOR EXPANDING A LOG STRUCTURE IN A DISK ARRAY	EMC Corporation
09676449	6604171	MANAGING A CACHE MEMORY	EMC Corporation
09676686	6591335	FAULT TOLERANT DUAL CACHE SYSTEM	EMC Corporation
09676709	6546457	METHOD AND APPARATUS FOR RECONFIGURING STRIPED LOGICAL DEVICES IN A DISK ARRAY STORAGE	EMC Corporation
09676732	6789206	COMPUTER ELEMENT	EMC Corporation
09677120	6915516	APPARATUS AND METHOD FOR PROCESS DISPATCHING BETWEEN INDIVIDUAL PROCESSORS OF A MULTI-PROCESSOR SYSTEM	EMC Corporation
09679456	7167867	SELF-DESCRIBING FILE SYSTEM	EMC Corporation
09680156	7010575	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK HAVING BUS ARBITRATION	EMC Corporation
09680157	6609164	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH DATA PIPE DMA	EMC Corporation
09688593	6282041	METHOD AND APPARATUS FOR INCREASING DISC DRIVE PERFORMANCE	EMC Corporation
09691490	6912686	APPARATUS AND METHODS FOR DETECTING ERRORS IN DATA	EMC Corporation
09692974	6728840	METHODS AND APPARATUS FOR PROVIDING HOST-CONTROLLED CACHING OF DATA IN A STORAGE SYSTEM	EMC Corporation
09694071	7475199	SCALABLE NETWORK FILE SYSTEM	EMC Corporation
09697454	6516390	METHODS AND APPARATUS FOR ACCESSING DATA WITHIN A DATA STORAGE SYSTEM	EMC Corporation
09697765	6640285	METHOD AND APPARATUS FOR IMPROVING THE EFFICIENCY OF CACHE MEMORIES USING STORED ACTIVITY MEASURES	EMC Corporation
09702187	6442706	RESOURCE ALLOCATION THROTTLE FOR REMOTE DATA MIRRORING SYSTEM	EMC Corporation
09705991	6529998	ADAPTIVE PREFETCHING OF DATA FROM A DISK	EMC Corporation
09709077	6664964	CORRELATION CRITERIA FOR LOGICAL VOLUMES	EMC Corporation
09715643	7216366	STORAGE BASED APPARATUS FOR ANTI-VIRUS	EMC Corporation
09715681	7861302	PHYSICAL SCANNING OF STORAGE BASED APPARATUS FOR ANTIVIRUS	EMC Corporation
09723606	6609178	SELECTIVE VALIDATION FOR QUEUED MULTIMODAL LOCKING SERVICES	EMC Corporation
09724014	6757769	COOPERATIVE LOCK OVERRIDE PROCEDURE	EMC Corporation
09724043	6718448	QUEUED LOCKING OF A SHARED RESOURCE USING MULTIMODAL LOCK TYPES	EMC Corporation
09724044	6691194	SELECTIVE ASSOCIATION OF LOCK OVERRIDE PROCEDURES WITH QUEUED MULTIMODAL LOCK	EMC Corporation
09725407	6487635	MANAGEMENT OF ORPHAN TRACKS	EMC Corporation

Application Number	Registration Number	Title	Owner
09726498	6772285	SYSTEM AND METHOD FOR IDENTIFYING BUSY DISK STORAGE UNITS	EMC Corporation
09731244	6633925	OPERATING SYSTEM FOR GENERATING OVERLAPPED INPUT-OUTPUT REQUESTS TO A DEVICE IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09731245	6665739	DATA PROCESSING SYSTEM WITH PARALLEL ACCESS TO A LOGICAL VOLUME ON A DISK ARRAY STORAGE DEVICE	EMC Corporation
09731513	6665738	DISK ARRAY STORAGE DEVICE CAPABLE OF HANDLING OVERLAPPED INPUT-OUTPUT REQUESTS	EMC Corporation
09731930	6678748	METHOD FOR OPTIMIZING MULTIPLE INPUT/OUTPUT REQUESTS TO A SINGLE LOGICAL DEVICE	EMC Corporation
09740281	6687718	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
09741494	6948031	METHODS AND APPARATUS FOR TRANSFERRING A DATA ELEMENT WITHIN A DATA STORAGE SYSTEM	EMC Corporation
09742720	7051108	METHOD AND SYSTEM OF INTERPROCESS COMMUNICATIONS	EMC Corporation
09745573	6779150	CRC ERROR DETECTION SYSTEM AND METHOD	EMC Corporation
09745814	6636933	DATA STORAGE SYSTEM HAVING CROSSBAR SWITCH WITH MULTI-STAGED ROUTING	EMC Corporation
09745859	6604176	DATA STORAGE SYSTEM HAVING PLURAL FAULT DOMAINS	EMC Corporation
09746090	7103652	AMBIGUITY-PURGING AND TEMPLATE-CONFLICT-RESOLUTION IN COMPUTER NETWORK EVENTS-NOTIFICATION	EMC Corporation
09746166	6665812	STORAGE ARRAY NETWORK BACKUP CONFIGURATION	EMC Corporation
09746174	6993705	CYCLIC REDUNDANCY CHECK (CRC) PARITY CHECK SYSTEM AND METHOD	EMC Corporation
09746304	6781782	METHOD AND APPARATUS FOR SAVING CALIBRATION PARAMETERS FOR A REMOVABLE CARTRIDGE	EMC Corporation
09746496	6868516	METHOD FOR VALIDATING WRITE DATA TO A MEMORY	EMC Corporation
09747054	6990493	FILE ACCESS SYSTEM	EMC Corporation
09747179	6934724	METHODS AND APPARATUS FOR REDUCING RESOURCE CONTENTION IN PARALLEL DATA BACKUP PROCESSES	EMC Corporation
09747376	6583989	COMPUTER SYSTEM	EMC Corporation
09747737	7266817	METHOD AND SYSTEM FOR CREATING PACKAGES FOR MULTIPLE PLATFORMS	EMC Corporation
09748053	7260636	METHOD AND APPARATUS FOR PREVENTING UNAUTHORIZED ACCESS BY A NETWORK DEVICE	EMC Corporation
09749160	6751703	DATA STORAGE SYSTEMS AND METHODS WHICH UTILIZE AN ON-BOARD CACHE	EMC Corporation
09749333	6804690	METHOD FOR PHYSICAL BACKUP IN DATA LOGICAL ORDER	EMC Corporation

Application Number	Registration Number	Title	Owner
09750554	7023924	METHOD OF PAUSING AN MPEG CODED VIDEO STREAM	EMC Corporation
09750565	6937770	ADAPTIVE BIT RATE CONTROL FOR RATE REDUCTION OF MPEG CODED VIDEO	EMC Corporation
09751494	6477618	DATA STORAGE SYSTEM CLUSTER ARCHITECTURE	EMC Corporation
09751659	7080375	PARALLEL DISPATCH WAIT SIGNALING METHOD, METHOD FOR REDUCING CONTENTION OF HIGHLY CONTENDED DISPATCHER LOCK, AND RELATED OPERATING SYSTEMS, MULTIPROCESSOR COMPUTER SYSTEMS AND PRODUCTS	EMC Corporation
09751684	7165152	METHOD AND APPARATUS FOR MANAGING ACCESS TO STORAGE DEVICES IN A STORAGE SYSTEM WITH ACCESS CONTROL	EMC Corporation
09752176	6813522	METHOD OF SHARING MEMORY IN A MULTI-PROCESSOR SYSTEM INCLUDING A CLONING OF CODE AND DATA	EMC Corporation
09752193	6708297	METHOD AND SYSTEM FOR MONITORING ERRORS ON FIELD REPLACEABLE UNITS	EMC Corporation
09752199	7200641	METHOD AND SYSTEM FOR ENCODING SCSI REQUESTS FOR TRANSMISSION USING TCP/IP	EMC Corporation
09753373	6574667	DYNAMIC ROUTING FOR PERFORMANCE PARTITIONING IN A DATA PROCESSING NETWORK	EMC Corporation
09754860	6862659	UTILIZING DISK CACHE AS PART OF DISTRIBUTED CACHE	EMC Corporation
09760176	6763521	LOW COST STORAGE DEVICE AND METHOD OF USING THE SAME	EMC Corporation
09766526	6826580	DISTRIBUTED STORAGE RESOURCE MANAGEMENT IN A STORAGE AREA NETWORK	EMC Corporation
09767773	6938122	REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation
09768323	7870195	INTER-PROCESSOR MESSAGING	EMC Corporation
09768994	6883018	SCANNING A MESSAGE-LIST	EMC Corporation
09769581	6721766	RESTORING MULTIPLE WORK ITEMS SIMULTANEOUSLY FROM BACKUP AND DATA RESTORE	EMC Corporation
09769600	6704886	DATA BACKUP SYSTEM HAVING INDEPENDENT DATA RESTORE EXECUTION	EMC Corporation
09769604	7558840	DATA BACKUP SYSTEM HAVING A FLEXIBLE RESTORE ARCHITECTURE	EMC Corporation
09774532	6766397	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
09776327	6799255	STORAGE MAPPING AND PARTITIONING AMONG MULTIPLE HOST PROCESSORS	EMC Corporation
09777002	7509420	SYSTEM AND METHOD FOR INTELLIGENT, GLOBALLY DISTRIBUTED NETWORK STORAGE	EMC Corporation
09777486	6631043	ELIMINATION OF 3-PASS WRITE	EMC Corporation
09777977	6578121	FILE MAPPING SYSTEM AND RELATED TECHNIQUES	EMC Corporation
09778449	6629105	FACILITATING USER ADMINISTRATION OF DIRECTORY TREES	EMC Corporation
09783162	6742146	TECHNIQUES FOR PROVIDING DATA WITHIN A DATA STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
09784381	7134138	METHODS AND APPARATUS FOR PROVIDING SECURITY FOR A DATA STORAGE SYSTEM	EMC Corporation
09794656	6732231	SYSTEM AND METHOD FOR MANAGEMENT OF MIRRORED STORAGE DEVICES STORING DEVICE SERIAL NUMBERS	EMC Corporation
09794696	6813731	METHODS AND APPARATUS FOR ACCESSING TRACE DATA	EMC Corporation
09794862	6732117	TECHNIQUES FOR HANDLING CLIENT-ORIENTED REQUESTS WITHIN A DATA STORAGE SYSTEM	EMC Corporation
09796078	6968347	DATA RECOVERY METHOD AND APPARATUS	EMC Corporation
09796168	7082100	STORAGE SYSTEM ADAPTER AND METHOD OF USING SAME	EMC Corporation
09796259	6804794	ERROR CONDITION HANDLING	EMC Corporation
09797347	7032228	COMMON DEVICE INTERFACE	EMC Corporation
09798571	6839750	SINGLE MANAGEMENT POINT FOR A STORAGE SYSTEM OR STORAGE AREA NETWORK	EMC Corporation
09798580	6516394	SYSTEM AND METHOD FOR MANAGEMENT OF STORAGE DEVICES USING LABELS	EMC Corporation
09800091	6687787	CONFIGURATION OF A DATA STORAGE SYSTEM	EMC Corporation
09800392	6509752	TESTING APPARATUS WITH MECHANISM FOR PREVENTING DAMAGE TO UNIT UNDER TEST	EMC Corporation
09801252	6553464	OBTAINING DATA FROM A REMOTE STORAGE DEVICE	EMC Corporation
09802278	7472093	TARGETED DELIVERY OF INFORMATIONAL CONTENT WITH PRIVACY PROTECTION	EMC Corporation
09802485	7716484	SYSTEM AND METHOD FOR INCREASING THE SECURITY OF ENCRYPTED SECRETS AND AUTHENTICATION	EMC Corporation
09804320	7363657	USING A VIRUS CHECKER IN ONE FILE SERVER TO CHECK FOR VIRUSES IN ANOTHER FILE SERVER	EMC Corporation
09804372	6654855	METHOD AND APPARATUS FOR IMPROVING THE EFFICIENCY OF CACHE MEMORIES USING CHAINED METRICS	EMC Corporation
09804460	7359507	SERVER-ASSISTED REGENERATION OF A STRONG SECRET FROM A WEAK SECRET	EMC Corporation
09804479	6839763	SYSTEM AND METHOD FOR EXPEDITING TRANSFER OF DATA FROM A LOCAL STORAGE FACILITY TO A REMOTE STORAGE FACILITY	EMC Corporation
09808248	6481527	METHODS AND APPARATUS FOR ATTENUATING NOISE FROM A CABINET THAT HOUSES COMPUTER EQUIPMENT	EMC Corporation
09808351	6985849	SYSTEM AND METHOD FOR PORTABLE EMULATION OF OPERATING ENVIRONMENT	EMC Corporation
09809001	6675274	METHOD AND APPARATUS FOR DETERMINING VOLUME SWAPS	EMC Corporation
09812740	6775679	BUILDING A META FILE SYSTEM FROM FILE SYSTEM FROM FILE SYSTEM CELLS	EMC Corporation
09812911	6718352	METHODS AND APPARATUS FOR MANAGING A DATA SET STORED ON A DATA STORAGE DEVICE	EMC Corporation
09814642	7088703	MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
09814662	6496914	METHOD AND SYSTEM FOR ADMINISTERING STORAGE DEVICES ON A NETWORK	EMC Corporation

Application Number	Registration Number	Title	Owner
09814994	7152178	METHOD AND SYSTEM FOR DETECTING PATH FAILURE AND PERFORMING INPUT/OUTPUT RECOVERY IN A MULTI-PATH INPUT/OUTPUT SYSTEM	EMC Corporation
09815128	6721812	METHOD AND SYSTEM FOR ADAPTIVE RESOURCE MANAGEMENT	EMC Corporation
09815454	7370351	CROSS DOMAIN AUTHENTICATION AND SECURITY SERVICES USING PROXIES FOR HTTP ACCESS	EMC Corporation
09815560	7219368	ROBUST VISUAL PASSWORDS	EMC Corporation
09817328	6671774	METHOD AND APPARATUS FOR PERFORMING SWAP ANALYSIS	EMC Corporation
09817437	7406682	TRANSLATOR-COMPILER FOR CONVERTING LEGACY MANAGEMENT SOFTWARE	EMC Corporation
09819012	6710979	METHOD AND SYSTEM FOR HEAD RETRACTION IN A DATA STORAGE DEVICE	EMC Corporation
09821045	6721758	SYSTEM AND METHOD FOR USING SCHEMA ATTRIBUTES AS META-DATA IN A DIRECTORY SERVICE	EMC Corporation
09821102	6643722	DATA STORAGE SYSTEM HAVING DIRECTOR BOARDS WITH PLURAL PROCESSORS	EMC Corporation
09821484	6738842	SYSTEM HAVING PLURAL PROCESSORS AND A UNI-CAST/BROADCAST COMMUNICATION ARRANGEMENT	EMC Corporation
09821485	6880032	DATA STORAGE SYSTEM HAVING CONCURRENT ESCON CHANNELS	EMC Corporation
09821493	6578128	ADDRESS MANAGEMENT FOR A SHARED MEMORY REGION ON A MULTI-PROCESSOR CONTROLLER BOARD	EMC Corporation
09822709	6912630	METHOD AND APPARATUS FOR COMPUTING FILE STORAGE ELEMENTS FOR BACKUP AND RESTORE	EMC Corporation
09822742	6411535	POWER FACTOR CORRECTION CIRCUIT WITH INTEGRAL BRIDGE FUNCTION	EMC Corporation
09823024	6907081	MPEG ENCODER CONTROL PROTOCOL FOR ON-LINE ENCODING AND MPEG DATA STORAGE	EMC Corporation
09824083	6961818	METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR MANAGING DATA IN A MIRRORED CACHE USING AN ACCESS BALANCING TECHNIQUE	EMC Corporation
09829452	6762912	HEAD CLEANER FOR A DISK DRIVE INTO WHICH A DISK MEDIA CARTRIDGE IS INSERTED	EMC Corporation
09830747	6762906	LOW PROFILE DISK DRIVE DEVICE	EMC Corporation
09833906	6963905	SYSTEM AND METHOD INCLUDING A COMMUNICATION INTERFACE FOR TRANSFERRING INFORMATION BETWEEN AT LEAST TWO PROCESSES	EMC Corporation
09834427	7174561	MPEG DUAL-CHANNEL DECODER DATA AND CONTROL PROTOCOLS FOR REAL-TIME VIDEO STREAMING	EMC Corporation
09840422	6418488	DATA TRANSFER STATE MACHINES	EMC Corporation
09841717	6580584	HEAD ASSEMBLY HAVING LEADING EDGE STEP SCHEME FOR TUNED AIR ENTRAINMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
09845385	6766418	METHOD AND APPARATUS FOR ACCESSING DATA USING A CACHE	EMC Corporation
09850551	6594742	CACHE MANAGEMENT VIA STATISTICALLY ADJUSTED SLOT AGING	EMC Corporation
09851039	6886164	SELECTION OF A RESOURCE IN A DISTRIBUTED COMPUTER SYSTEM	EMC Corporation
09852580	7027439	DATA STORAGE SYSTEM WITH IMPROVED NETWORK INTERFACE	EMC Corporation
09854719	6717758	DISK PARTITIONING TO CREATE A USABLE, LOWER CAPACITY DISK CARTRIDGE	EMC Corporation
09855592	6785678	METHOD OF IMPROVING THE AVAILABILITY OF A COMPUTER CLUSTERING SYSTEM THROUGH THE USE OF A NETWORK MEDIUM LINK STATE FUNCTION	EMC Corporation
09855993	6779067	METHOD AND APPARATUS FOR PROVIDING EXTENDED FUNCTIONALITY FOR A BUS	EMC Corporation
09858032	6721814	SYSTEM AND METHOD OF IMPROVING HOST PERFORMANCE CHARACTERISTICS BY INTELLIGENT SHIFT OF DATA CACHING FROM HOST TO CACHE-ENABLED MASS STORAGE SUBSYSTEM	EMC Corporation
09858073	6496362	METHOD AND APPARATUS FOR PROTECTING A HARD DISK DRIVE FROM SHOCK	EMC Corporation
09859547	6687797	ARBITRATION SYSTEM AND METHOD	EMC Corporation
09859605	6609185	DATA STORAGE SYSTEM HAVING MAJORITY GATE FILTER	EMC Corporation
09859659	7010740	DATA STORAGE SYSTEM HAVING NO-OPERATION COMMAND	EMC Corporation
09860924	6496908	REMOTE MIRRORING	EMC Corporation
09862813	6760862	METHODS AND APPARATUS FOR PERFORMING A MAINTENANCE PROCEDURE ON A DATA STORAGE SYSTEM	EMC Corporation
09862828	7526811	METHODS FOR DETECTING EXECUTABLE CODE WHICH HAS BEEN ALTERED	EMC Corporation
09864481	6762362	METHODS AND APPARATUS FOR CONNECTING A POWER SUPPLY TO MULTIPLE BACKPLANES WITHIN AN ELECTRONIC EQUIPMENT CABINET	EMC Corporation
09865072	6611923	SYSTEM AND METHOD FOR BACKING UP DATA STORED IN MULTIPLE MIRRORS ON A MASS STORAGE SUBSYSTEM UNDER CONTROL OF A BACKUP SERVER	EMC Corporation
09866284	6445523	READABLE INDELIBLE MARK ON STORAGE MEDIA	EMC Corporation
09867136	6970959	MULTI-EXECUTE SYSTEM CALLS	EMC Corporation
09871196	6684397	AUTO-INSTALL APPARATUS AND METHOD	EMC Corporation
09872596	7145866	VIRTUAL NETWORK DEVICES	EMC Corporation
09876492	7149787	APPARATUS AND METHOD FOR MIRRORING AND RESTORING DATA	EMC Corporation
09877287	6971090	COMMON INFORMATION MODEL (CIM) TRANSLATION TO AND FROM WINDOWS MANAGEMENT INTERFACE (WMI) IN CLIENT SERVER ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
09877454	6778811	OFFLINE COMPUTER PRODUCT PROMOTION METHOD AND SYSTEM	EMC Corporation
09877808	6628513	MASS STORAGE DEVICE MOUNTING SYSTEM	EMC Corporation
09877810	7107337	DATA STORAGE SYSTEM WITH INTEGRATED SWITCHING	EMC Corporation
09877848	7346674	CONFIGURABLE FIBRE CHANNEL LOOP SYSTEM	EMC Corporation
09877862	7010622	SCALABLE COMMUNICATION WITHIN A DISTRIBUTED SYSTEM USING DYNAMIC COMMUNICATION TREES	EMC Corporation
09877869	6549979	ADDRESS MAPPING IN MASS STORAGE DEVICE MOUNTING SYSTEM (AS AMENDED)	EMC Corporation
09879269	6478604	METHODS AND APPARATUS FOR FORMING AN INSULATION DISPLACEMENT CONNECTION	EMC Corporation
09879347	6742138	DATA RECOVERY METHOD AND APPARATUS	EMC Corporation
09879431	6721870	PREFETCH ALGORITHM FOR SHORT SEQUENCES	EMC Corporation
09879554	7222257	METHOD AND SYSTEM FOR REPAIRING A REDUNDANT ARRAY OF DISK DRIVES	EMC Corporation
09879583	6965936	METHOD FOR DETECTING AND RESOLVING A PARTITION CONDITION IN A CLUSTER	EMC Corporation
09882167	6504717	FAILURE-TOLERANT HIGH-DENSITY CARD RACK COOLING SYSTEM AND METHOD	EMC Corporation
09882707	6862690	HIERARCHICAL RECOVERY METHOD FOR FIBRE-CHANNEL DEVICES	EMC Corporation
09885310	6751758	METHOD AND SYSTEM FOR HANDLING ERRORS IN A DATA STORAGE ENVIRONMENT	EMC Corporation
09887498	6697207	METHOD AND CIRCUIT FOR PROVIDING VELOCITY-CONTROLLED HEAD LOADING OR UNLOADING	EMC Corporation
09887590	6717765	METHOD AND CIRCUIT FOR SENSING BACK EMF	EMC Corporation
09891020	7403974	TRUE ZERO-COPY SYSTEM AND METHOD	EMC Corporation
09891110	6640280	OBTAINING DATA FROM A REMOTE STORAGE DEVICE USING MULTIPLE JOBS PER DEVICE ON RA	EMC Corporation
09891143	7577957	MULTIPLE JOBS PER DEVICE THAT ARE LINKED VIA A DEVICE RECORD FOR SERVICING BY DIFFERENT ADAPTERS	EMC Corporation
09891695	6697813	DATA STRUCTURES AND METHODS FOR IMAGING COMPUTER READABLE MEDIA	EMC Corporation
09892161	7389312	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
09893295	6732194	METHOD AND APPARATUS FOR MULTI-SEQUENTIAL DATA OPERATIONS	EMC Corporation
09893825	7444662	VIDEO FILE SERVER CACHE MANAGEMENT USING MOVIE RATINGS FOR RESERVATION OF MEMORY AND BANDWIDTH RESOURCES	EMC Corporation
09894422	7613806	SYSTEM AND METHOD FOR MANAGING REPLICATION SETS OF DATA DISTRIBUTED OVER ONE OR MORE COMPUTER SYSTEMS	EMC Corporation
09894804	6560098	DISK DRIVE MODULE	EMC Corporation
09895466	7581048	METHOD AND APPARATUS FOR PROVIDING CONTINUOUS COMMUNICATION BETWEEN COMPUTERS	EMC Corporation
09895941	6954833	EXPEDITED DYNAMIC MIRROR SERVICE POLICY	EMC Corporation

Application Number	Registration Number	Title	Owner
09896860	7178145	QUEUES FOR SOFT AFFINITY CODE THREADS AND HARD AFFINITY CODE THREADS FOR ALLOCATION OF PROCESSORS TO EXECUTE THE THREADS IN A MULTI-PROCESSOR SYSTEM	EMC Corporation
09900295	6502162	CONFIGURING VECTORS OF LOGICAL STORAGE UNITS FOR DATA STORAGE PARTITIONING AND SHARING	EMC Corporation
09901534	6623177	SYSTEMS AND METHODS FOR PROVIDING FIBER OPTIC COMMUNICATIONS BETWEEN CIRCUIT BOARDS	EMC Corporation
09903113	6947257	SYSTEM AND METHOD OF INTRODUCING A PREFERENTIAL CURVATURE TO A FLEXIBLE MEDIUM FOR REDUCED MEDIUM VIBRATION AND SENSOR TO MEDIUM SPACING WITH A DISK DRIVE HEAD STACK ASSEMBLY HAVING A NON-ZERO STATIC ROLL ATTITUDE	EMC Corporation
09909025	7200609	ATTRIBUTE BASED RESOURCE ALLOCATION	EMC Corporation
09915854	6886116	DATA STORAGE SYSTEM ADAPTED TO VALIDATE ERROR DETECTION LOGIC USED IN SUCH SYSTEM	EMC Corporation
09916842	6672914	METHODS AND APPARATUS FOR MOUNTING A BUS BAR ASSEMBLY	EMC Corporation
09920169	6530002	METHOD AND APPARATUS FOR MULTIPLE DISK DRIVE ACCESS IN A MULTI-PROCESSOR/MULTI-DISK DRIVE SYSTEM	EMC Corporation
09924777	6763446	SYSTEMS AND METHODS FOR HANDLING STORAGE ACCESS REQUESTS	EMC Corporation
09924923	6807618	ADDRESS TRANSLATION	EMC Corporation
09928207	6904541	METHODS AND APPARATUS FOR PROVIDING POWER TO ELECTRONIC CIRCUITRY	EMC Corporation
09929439	6687801	ADAPTIVE COPY PENDING OFF MODE	EMC Corporation
09933468	7401271	TESTING SYSTEM AND METHOD OF USING SAME	EMC Corporation
09935556	6697208	SYSTEM AND METHODS FOR USING OFFSET INFORMATION ON A DATA STORAGE MEDIUM	EMC Corporation
09940903	7249193	SRDF ASSIST	EMC Corporation
09941060	6636418	METHODS AND APPARATUS FOR INSTALLING ELECTRONIC CABINETS USING IMPROVED STABILIZATION TECHNIQUES	EMC Corporation
09941975	6482042	TECHNIQUES FOR ACCESSING A CIRCUIT BOARD UTILIZING AN IMPROVED ADAPTOR	EMC Corporation
09943244	6621692	COMPUTERIZED SYSTEM HAVING AN INTERFACE APPARATUS WITH IMPROVED MOUNTING FEATURES	EMC Corporation
09944287		[REDACTED]	EMC Corporation
09944288	7783727	DYNAMIC HOST CONFIGURATION PROTOCOL IN A STORAGE ENVIRONMENT	EMC Corporation
09945657	6832330	REVERSIBLE MIRRORED RESTORE OF AN ENTERPRISE LEVEL PRIMARY DISK	EMC Corporation
09945939	7111298	INTER-PROCESSOR COMPETITION FOR A SHARED RESOURCE	EMC Corporation
09946005	6978282	INFORMATION REPLICATION SYSTEM HAVING AUTOMATED REPLICATION STORAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
09946007	7076685	INFORMATION REPLICATION SYSTEM MOUNTING PARTIAL DATABASE REPLICATIONS	EMC Corporation
09946078	7096250	INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
09950165	7023869	DATA STORAGE SYSTEM WITH ONE OR MORE INTEGRATED SERVER-LIKE BEHAVIORS	EMC Corporation
09950546	6594739	MEMORY SYSTEM AND METHOD OF USING SAME	EMC Corporation
09951016	6715039	CACHE SLOT PROMOTION IN A REPLACEMENT QUEUE CACHE USING DETERMINATIONS OF PROBABILITIES AND COSTS	EMC Corporation
09951853	6980594	GENERATION OF MPEG SLOW MOTION PLAYOUT	EMC Corporation
09953226	7203925	GRAPHICAL COMPILER	EMC Corporation
09955225	6968091	INSERTION OF NOISE FOR REDUCTION IN THE NUMBER OF BITS FOR VARIABLE-LENGTH CODING OF (RUN, LEVEL) PAIRS	EMC Corporation
09955505	6959116	LARGEST MAGNITUDE INDEX SELECTION FOR SCALING OF BLOCK CODED VIDEO	EMC Corporation
09957219	7290017	SYSTEM AND METHOD FOR MANAGEMENT OF DATA REPLICATION	EMC Corporation
09957278	7155463	SYSTEM AND METHOD FOR REPLICATION OF ONE OR MORE DATABASES	EMC Corporation
09960177	6578126	MEMORY SYSTEM AND METHOD OF USING SAME	EMC Corporation
09960713	6823349	METHOD AND SYSTEM FOR ESTABLISHING, MAINTAINING, AND USING A PERSISTENT FRACTURE LOG	EMC Corporation
09962408	8055555	MEDIATION DEVICE FOR SCALABLE STORAGE SERVICE	EMC Corporation
09962485	7401322	SOFTWARE DEBUGGING TOOL	EMC Corporation
09962790	7552056	SCALABLE STORAGE SERVICE REGISTRATION APPLICATION	EMC Corporation
09964977	7269648	RESOLVING MULTIPLE MASTER NODE CONFLICT IN A DDB	EMC Corporation
09965168	6415292	SHUTTLE-BASED MECHANISM FOR NUMBERING CONCURRENT CHAINS OF INDEPENDENT DATA TRANSFERS	EMC Corporation
09965393	7020669	APPARATUS, METHOD AND SYSTEM FOR WRITING DATA TO NETWORK ACCESSIBLE FILE SYSTEM WHILE MINIMIZING RISK OF CACHE DATA LOSS/DATA CORRUPTION	EMC Corporation
09965421	6633955	FOUR WAY SUPPORT FOR DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
09965430	7120690	MANAGING A DISTRIBUTED DIRECTORY DATABASE	EMC Corporation
09965431	7024517	SYSTEM AND METHOD FOR CONFIGURING DATA STORAGE IN ACCORDANCE WITH WORKLOAD REQUIREMENTS	EMC Corporation
09965897	7237018	ORDERED WRITES FOR SRDF ASSIST	EMC Corporation
09965926	7237040	ERROR RECOVERY FOR SRDF ASSIST	EMC Corporation
09966322	6525273	CABLE MANAGEMENT	EMC Corporation
09966475	7032186	METHODS AND APPARATUS FOR REPRESENTING RESOURCES IN A COMPUTING SYSTEM ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
09966529	6966033	METHOD AND APPARATUS FOR GRAPHICALLY MANAGING RESOURCES	EMC Corporation
09966615	7010796	METHODS AND APPARATUS PROVIDING REMOTE OPERATION OF AN APPLICATION PROGRAMMING INTERFACE	EMC Corporation
09966639	6874046	METHOD AND APPARATUS FOR ENHANCING ACCESS TO REDUNDANT DATA STORAGE FACILITIES	EMC Corporation
09966709	8417788	FILE SYSTEM FOR VIRTUAL LOCAL AREA NETWORK	EMC Corporation
09966878	6978422	METHODS AND APPARATUS FOR DISPLAYING MANAGED RESOURCE INFORMATION	EMC Corporation
09967111	7254814	METHODS AND APPARATUS FOR MANAGING PLUG-IN SERVICES	EMC Corporation
09969079	6862697	METHOD AND SYSTEM FOR PSEUDO-RANDOM TESTING A FAULT TOLERANT NETWORK	EMC Corporation
09969295	6826582	METHOD AND SYSTEM FOR USING FILE SYSTEMS FOR CONTENT MANAGEMENT	EMC Corporation
09972284	7076636	DATA STORAGE SYSTEM HAVING AN IMPROVED MEMORY CIRCUIT BOARD CONFIGURED TO RUN SCRIPTS	EMC Corporation
09972314	7234021	METHODS AND APPARATUS FOR ACCESSING DATA ELEMENTS USING IMPROVED HASHING TECHNIQUES	EMC Corporation
09972321	6941308	METHODS AND APPARATUS FOR ACCESSING A DOUBLY LINKED LIST IN A DATA STORAGE SYSTEM	EMC Corporation
09982492	6842810	RESTRICTED ACCESS DEVICES	EMC Corporation
09989479	7660902	DYNAMIC ACCESS CONTROL AND MANAGEMENT	EMC Corporation
09994476	7602904	ORDER INVARIANT FUZZY COMMITMENT SYSTEM	EMC Corporation
09995464	6968369	REMOTE DATA FACILITY OVER AN IP NETWORK	EMC Corporation
09995919	6738268	METHODS AND APPARATUS FOR PROVIDING POWER SIGNALS TO OPERATING CIRCUITRY MOUNTED ON CIRCUIT BOARDS	EMC Corporation
09996831	6678161	FRAME CONNECTING TECHNIQUES FOR USE IN ELECTRONIC SYSTEMS	EMC Corporation
09997643	7296125	PRESERVING A SNAPSHOT OF SELECTED DATA OF A MASS STORAGE SYSTEM	EMC Corporation
09997656	6941490	DUAL CHANNEL RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SERVERS	EMC Corporation
09997810	6862632	DYNAMIC RDF SYSTEM FOR TRANSFERRING INITIAL DATA BETWEEN SOURCE AND DESTINATION VOLUME WHEREIN DATA MAY BE RESTORED TO EITHER VOLUME AT SAME TIME OTHER DATA IS WRITTEN	EMC Corporation
09997926	6859894	SYSTEM AND METHOD FOR RISK MANAGEMENT OF ERRORS IN SOFTWARE PROGRAM CODE	EMC Corporation
09998494	6701392	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
09998683	6976139	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation

Application Number	Registration Number	Title	Owner
10/962301	7217982	PHOTODIODE HAVING VOLTAGE TUNABLE SPECTRAL RESPONSE	EMC Corporation
10001317	6973537	DISK CACHE INTERFACING SYSTEM AND METHOD (AS AMENDED)	EMC Corporation
10001717	6782444	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STORED RECORDS	EMC Corporation
10002053	6594726	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING ARRANGEMENT FOR EFFICIENTLY CONTROLLING FAST WRITE STORAGE OPERATION	EMC Corporation
10004090	7174422	DATA STORAGE DEVICE WITH TWO-TIER RAID CONTROL CIRCUITRY	EMC Corporation
10007003	7685126	SYSTEM AND METHODS FOR PROVIDING A DISTRIBUTED FILE SYSTEM UTILIZING METADATA TO TRACK INFORMATION ABOUT DATA STORED THROUGHOUT THE SYSTEM	EMC Corporation
10007762	6681390	UPGRADE OF A PROGRAM	EMC Corporation
10010769	7363494	METHOD AND APPARATUS FOR PERFORMING ENHANCED TIME-BASED AUTHENTICATION	EMC Corporation
10010778	7010620	NETWORK ADAPTER HAVING INTEGRATED SWITCHING CAPABILITIES AND PORT CIRCUITRY THAT MAY BE USED IN REMOTE MIRRORING	EMC Corporation
10012007	6804733	OPTIMIZER IMPROVED DATA COMPRESSION	EMC Corporation
10013184	7113936	OPTIMIZER IMPROVED STATISTICS COLLECTION	EMC Corporation
10016440	6941503	METHOD AND APPARATUS FOR RETAINING ERROR-CONTROL CODE PROTECTION ACROSS BLOCK-SIZE DISCONTINUITIES	EMC Corporation
10017183	7596791	METHODS AND TECHNIQUES FOR DELIVERING RICH JAVA APPLICATIONS OVER THIN-WIRE CONNECTIONS WITH HIGH PERFORMANCE AND SCALABILITY	EMC Corporation
10017304	7539745	NETWORK MANAGEMENT FOR REPLICATION OF DATA STORED IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10020146	7120161	NETWORK ADAPTER AND METHOD OF USING SAME	EMC Corporation
10021949	6910145	DATA TRANSMISSION ACROSS ASYNCHRONOUS CLOCK DOMAINS	EMC Corporation
10022080	7020754	METHOD AND SYSTEM FOR MAINTAINING DATA INTEGRITY USING DUAL WRITE OPERATIONS	EMC Corporation
10024796	8549048	WORKFLOW DATABASE FOR SCALABLE STORAGE SERVICE	EMC Corporation
10024971	7146387	SYSTEM AND METHOD FOR CONFIGURING AND PREFORMING APPLICATION BACKUPS AND RESTORES IN DIVERSE ENVIRONMENTS	EMC Corporation
10025005	7024427	VIRTUAL FILE SYSTEM	EMC Corporation
10026194	6680847	ELECTRONIC CIRCUITRY ENCLOSURE WITH AIR VENTS THAT COMPLY WITH EMISSIONS AND SAFETY STANDARDS	EMC Corporation
10027694	7054910	DATA REPLICATION FACILITY FOR DISTRIBUTED COMPUTING ENVIRONMENTS	EMC Corporation
10029054	6534716	FIBRE CHANNEL CABLE	EMC Corporation

Application Number	Registration Number	Title	Owner
10029189	6871271	INCREMENTALLY RESTORING A MASS STORAGE DEVICE TO A PRIOR STATE	EMC Corporation
10029344	6934725	MANAGEMENT OF FILE EXTENT MAPPING TO HASTEN MIRROR BREAKING IN FILE LEVEL MIRRORED BACKUPS	EMC Corporation
10029638	7539746	HIGHLY AVAILABLE TRANSACTION FAILURE DETECTION AND RECOVERY FOR ELECTRONIC COMMERCE TRANSACTIONS	EMC Corporation
10032075	7266574	IDENTIFICATION OF UPDATED FILES FOR INCREMENTAL BACKUP	EMC Corporation
10032077	6938180	LOGICAL RESTORES OF PHYSICALLY BACKED UP DATA	EMC Corporation
10032825	6848017	METHOD AND APPARATUS FOR DETERMINING CONNECTIONS IN A CROSSBAR SWITCH	EMC Corporation
10034854	7143394	ANALYZING SOFTWARE BEHAVIOR	EMC Corporation
10036333	7624265	METHODS AND APPARATUS FOR ESTABLISHING COMMUNICATIONS WITH A DATA STORAGE SYSTEM	EMC Corporation
10036547	6799248	CACHE MANAGEMENT SYSTEM FOR A NETWORK DATA NODE HAVING A CACHE MEMORY MANAGER FOR SELECTIVELY USING DIFFERENT CACHE MANAGEMENT METHODS	EMC Corporation
10037117	6526487	PERFORMING ACKNOWLEDGED OPERATIONS ON ORIGINAL AND MIRRORED COPIES OF DATA	EMC Corporation
10038949	7054367	EDGE DETECTION BASED ON VARIABLE-LENGTH CODES OF BLOCK CODED VIDEO	EMC Corporation
10050974	6976134	POOLING AND PROVISIONING STORAGE RESOURCES IN A STORAGE NETWORK	EMC Corporation
10051093	7558264	PACKET CLASSIFICATION IN A STORAGE SYSTEM	EMC Corporation
10051164	7185062	SWITCH-BASED STORAGE SERVICES	EMC Corporation
10051321	7707304	STORAGE SWITCH FOR STORAGE AREA NETWORK	EMC Corporation
10051339	7421509	ENFORCING QUALITY OF SERVICE IN A STORAGE NETWORK	EMC Corporation
10051396	7864758	VIRTUALIZATION IN A STORAGE SYSTEM	EMC Corporation
10051415	7404000	PROTOCOL TRANSLATION IN A STORAGE SYSTEM	EMC Corporation
10054241	6988152	DATA STORAGE SYSTEM	EMC Corporation
10056401	6574703	INITIALIZING SELECTED EXTENTS OF A STORAGE DEVICE	EMC Corporation
10058651	7093021	ELECTRONIC DEVICE AND METHOD FOR SECURE AUTHENTICATION OF OBJECTS SUCH AS COMPUTERS IN A DATA NETWORK	EMC Corporation
10061081	7007141	ARCHIVAL DATA STORAGE SYSTEM AND METHOD	EMC Corporation
10061895	7487535	AUTHENTICATION ON DEMAND IN A DISTRIBUTED NETWORK ENVIRONMENT	EMC Corporation
10068079	6941492	DEBUGGING TOOL FOR EFFICIENT SWITCHING BETWEEN TARGETS IN A MULTI-PROCESSOR ENVIRONMENT	EMC Corporation
10072988		SYSTEM AND METHOD OF INDEXING UNIQUE ELECTRONIC MAIL MESSAGES AND USES FOR THE SAME	EMC Corporation
10073708	7031966	METHOD FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
10074027	6792510	SYSTEM AND METHOD FOR UPDATING A CACHE	EMC Corporation
10076016	6879556	METHOD AND APPARATUS FOR OPTICAL DATA STORAGE	EMC Corporation
10078923	6757790	DISTRIBUTED, SCALABLE DATA STORAGE FACILITY WITH CACHE MEMORY	EMC Corporation
10079090	6985914	CLUSTER META FILE SYSTEM OF FILE SYSTEM CELLS MANAGED BY RESPECTIVE DATA MOVERS OF A NETWORK FILE SERVER	EMC Corporation
10080321	7177853	CACHE MANAGEMENT VIA STATISTICALLY ADJUSTED TIMESTAMP QUEUE	EMC Corporation
10081682	7406574	MANAGEMENT OF INVALID TRACKS	EMC Corporation
10083195	6736308	SYSTEMS AND METHODS FOR DISTRIBUTING SOLDER PASTE USING A TOOL HAVING A SOLDER PASTE APERTURE WITH A NON-CIRCULAR CROSS-SECTIONAL SHAPE	EMC Corporation
10083670	7181727	PROVIDING DATA INDICATIVE OF THE PERFORMANCE OF A COMPETING ALGORITHM AND AN INCUMBENT ALGORITHM	EMC Corporation
10093142	7093018	METHODS, SYSTEMS, AND DATA STRUCTURES TO CONNECT SERVICES	EMC Corporation
10098499	7103637	NETWORK FILE SHARING METHOD AND SYSTEM	EMC Corporation
10100458	6973593	SYSTEM ANALYZER FOR A DATA STORAGE SYSTEM	EMC Corporation
10100520	7024593	END-TO-END CHECKSUMMING FOR DATABASE ENVIRONMENTS	EMC Corporation
10100560	7062503	SHUTTLE-BASED MECHANISM FOR NUMBERING CONCURRENT CHAINS OF INDEPENDENT DATA TRANSFERS	EMC Corporation
10102460	6845556	TECHNIQUES FOR REWORKING CIRCUIT BOARDS WITH NI/AU FINISH	EMC Corporation
10103012	7058835	SYSTEM, METHOD AND APPARATUS FOR CONTROLLING SUPPLY OF BACKUP POWER TO FIRST AND SECOND POWER PLANES IN THE EVENT OF A POWER FAILURE OF A MAIN POWER SUPPLY	EMC Corporation
10104146	7386835	TECHNIQUE FOR GRAPHICAL USER INTERFACE MODIFICATION	EMC Corporation
10105492	6952699	METHOD AND SYSTEM FOR MIGRATING DATA WHILE MAINTAINING ACCESS TO DATA WITH USE OF THE SAME PATHNAME	EMC Corporation
10105821	6922761	METHOD AND SYSTEM FOR MIGRATING DATA	EMC Corporation
10105976	7080102	METHOD AND SYSTEM FOR MIGRATING DATA WHILE MAINTAINING HARD LINKS	EMC Corporation
10106337	7178146	PIZZA SCHEDULER	EMC Corporation
10109013	7350149	BACKUP REPORTING FRAMEWORK GRAPHICAL USER INTERFACE	EMC Corporation
10109036	7404145	GENERIC MECHANISM FOR REPORTING ON BACKUPS	EMC Corporation
10109244	7228353	GENERATING AND LAUNCHING REMOTE METHOD INVOCATION SERVERS FOR INDIVIDUAL CLIENT APPLICATIONS	EMC Corporation
10109499	6795904	SYSTEM AND METHOD FOR IMPROVING PERFORMANCE OF A DATA BACKUP OPERATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10109504	6715048	A SYSTEM AND METHOD FOR EFFICIENTLY PERFORMING A RESTORE OPERATION IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10109583	6907483	DATA STORAGE SYSTEM HAVING DUMMY PRINTED CIRCUIT BOARDS WITH JUMPERS	EMC Corporation
10109603	6868479	DATA STORAGE SYSTEM HAVING REDUNDANT SERVICE PROCESSORS	EMC Corporation
10109614	6597232	DATA STORAGE HAVING ENVIRONMENTAL COMMUNICATION MODULE (ECM)	EMC Corporation
10109997	6877059	COMMUNICATIONS ARCHITECTURE FOR A HIGH THROUGHPUT STORAGE PROCESSOR	EMC Corporation
10112089	6865643	COMMUNICATIONS ARCHITECTURE FOR A HIGH THROUGHPUT STORAGE PROCESSOR PROVIDING USER DATA PRIORITY ON SHARED CHANNELS	EMC Corporation
10112209	6813689	COMMUNICATIONS ARCHITECTURE FOR A HIGH THROUGHPUT STORAGE PROCESSOR EMPLOYING EXTENSIVE I/O PARALLELIZATION	EMC Corporation
10112342	7774844	INTRUSION DETECTION THROUGH STORAGE MONITORING	EMC Corporation
10112598	6877061	DATA STORAGE SYSTEM HAVING DUMMY PRINTED CIRCUIT BOARDS	EMC Corporation
10113023	6792506	MEMORY ARCHITECTURE FOR A HIGH THROUGHPUT STORAGE PROCESSOR	EMC Corporation
10113027	7209979	STORAGE PROCESSOR ARCHITECTURE FOR HIGH THROUGHPUT APPLICATIONS PROVIDING EFFICIENT USER DATA CHANNEL LOADING	EMC Corporation
10113168	7752316	METHOD AND SYSTEM FOR SECURING NETWORK ACCESS TO DATA STORED IN A DATA STORAGE SYSTEM	EMC Corporation
10113249	6901477	PROVISION OF A VICTIM CACHE WITHIN A STORAGE CACHE HIERARCHY	EMC Corporation
10113307	7870239	SYSTEM AND METHOD FOR SECURING NETWORK ACCESS TO DYNAMICALLY UPDATEABLE DATA STORED IN A DATA STORAGE SYSTEM	EMC Corporation
10113368	7266538	METHOD AND APPARATUS FOR CONTROLLING ACCESS TO DATA IN A DATA STORAGE SYSTEM	EMC Corporation
10116369	7010554	DELEGATION OF METADATA MANAGEMENT IN A STORAGE SYSTEM BY LEASING OF FREE FILE SYSTEM BLOCKS AND I-NODES FROM A FILE SYSTEM OWNER	EMC Corporation
10117397	6544392	METHOD FOR MANUFACTURING PCB'S	EMC Corporation
10118518	6542974	METHOD AND APPARATUS FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SHEET	EMC Corporation
10120016	7340489	VIRTUAL STORAGE DEVICES	EMC Corporation
10120957	6957285	DATA STORAGE SYSTEM	EMC Corporation
10122556	7076690	METHOD AND APPARATUS FOR MANAGING ACCESS TO VOLUMES OF STORAGE	EMC Corporation
10122601	6889309	METHOD AND APPARATUS FOR IMPLEMENTING AN ENTERPRISE VIRTUAL STORAGE SYSTEM	EMC Corporation
10123661	7330956	BUCKET BASED MEMORY ALLOCATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10124630	7277953	INTEGRATED PROCEDURE FOR PARTITIONING NETWORK DATA SERVICES AMONG MULTIPLE SUBSCRIBERS	EMC Corporation
10124881	7383357	IMPLEMENTING MANAGED NETWORK SERVICES FOR CUSTOMERS WITH DUPLICATE IP NETWORKS	EMC Corporation
10126711	7159085	METHOD OF ALLOWING POINT-IN-TIME VIEW OF DATA ON A DISK	EMC Corporation
10132434	7319661	HIGH AVAILABILITY FOR COMMUNICATION FOR WIRELESS NETWORKS	EMC Corporation
10132769	7240323	PLUG AND PLAY INTERFACE FOR USER ACTIONS	EMC Corporation
10133392	7634557	APPARATUS AND METHOD FOR NETWORK ANALYSIS	EMC Corporation
10134420	6983353	METHOD AND APPARATUS FOR ENHANCING OPERATIONS IN DISK ARRAY STORAGE DEVICES	EMC Corporation
10135070	6513102	INTERNAL COPY FOR A STORAGE CONTROLLER	EMC Corporation
10139490	6988130	VIRTUAL PORTS FOR PARTITIONING OF DATA STORAGE	EMC Corporation
10139500	6637641	SYSTEMS AND METHODS FOR MANUFACTURING A CIRCUIT BOARD	EMC Corporation
10142164	6581143	DATA PROCESSING METHOD AND APPARATUS FOR ENABLING INDEPENDENT ACCESS TO REPLICATED DATA	EMC Corporation
10142478	6772198	SYSTEM AND METHOD FOR RESTORING PREVIOUSLY BACKED-UP DATA IN A MASS STORAGE SUBSYSTEM	EMC Corporation
10145932	6542944	METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM BASED ON THE STATE OF PREVIOUS I/O OPERATIONS	EMC Corporation
10147751	7546364	REPLICATION OF REMOTE COPY DATA FOR INTERNET PROTOCOL (IP) TRANSMISSION	EMC Corporation
10152080	6834330	PRE-FETCH OF RECORDS IDENTIFIED BY AN I/O TRACE	EMC Corporation
10153583	7124171	IN A NETWORKED COMPUTING CLUSTER STORAGE SYSTEM AND PLURALITY OF SERVERS SHARING FILES, IN THE EVENT OF SERVER UNAVAILABILITY, TRANSFERRING A FLOATING IP NETWORK ADDRESS FROM FIRST SERVER TO SECOND SERVER TO ACCESS AREA OF DATA	EMC Corporation
10154269	6826337	METHOD AND APPARATUS FOR TRANSMITTING FIBRE-CHANNEL AND NON-FIBRE CHANNEL SIGNALS THROUGH A COMMON CABLE	EMC Corporation
10155299	7383330	METHOD FOR MAPPING A NETWORK FABRIC	EMC Corporation
10156574	6615284	METHOD AND APPARATUS FOR PERFORMING INPUT/OUTPUT OPERATIONS BETWEEN REQUESTING DEVICE AND RESPONDING DEVICE (AS AMENDED)	EMC Corporation
10157427	6609183	METHOD AND SYSTEM FOR MIRRORING AND ARCHIVING MASS STORAGE	EMC Corporation
10166433	6694405	METHOD FOR ANALYZING DISK SEEK TIMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
10171288	6990520	SYSTEM AND METHOD FOR MANAGING COMPUTER NETWORKS	EMC Corporation

Application Number	Registration Number	Title	Owner
10172615	7130899	ROBUST INDICATION PROCESSING	EMC Corporation
10174115	6889301	DATA STORAGE SYSTEM	EMC Corporation
10175811	7203738	SYSTEM AND METHOD FOR DISTRIBUTING APPLICATION OBJECTS	EMC Corporation
10178085	7143393	METHOD FOR CACHE MANAGEMENT FOR POSITIONING CACHE SLOT	EMC Corporation
10179113	7062675	DATA STORAGE CACHE SYSTEM SHUTDOWN SCHEME	EMC Corporation
10179421	7039659	METHOD AND APPARATUS FOR MAKING DIFFERENTIAL INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
10179536	6865648	DATA STRUCTURE FOR WRITE PENDING	EMC Corporation
10179753	6941429	SYSTEM AND METHOD FOR IMPROVING PERFORMANCE OF A DATA BACKUP OPERATION	EMC Corporation
10180639	8145788	DISTRIBUTED ISP LOAD BALANCER	EMC Corporation
10180703	6820035	SYSTEM AND METHOD FOR DETERMINING WORKLOAD CHARACTERISTICS FOR ONE OR MORE APPLICATIONS OPERATING IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10180704	6944702	DATA STORAGE SYSTEM	EMC Corporation
10180716	7035970	SYSTEM AND METHOD FOR DETERMINING WORKLOAD CHARACTERISTICS FOR ONE OR MORE APPLICATIONS OPERATING IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10180749	6914784	DATA STORAGE SYSTEM CABINET	EMC Corporation
10180750	6934158	DISK DRIVE SYSTEM FOR A DATA STORAGE SYSTEM	EMC Corporation
10180751	7117305	DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER	EMC Corporation
10180805	8463781	PRE-FETCH OF DATA RECORDS IDENTIFIED BY AN INDEX RECORD	EMC Corporation
10180849	6775826	SYSTEM AND METHOD FOR REPLAYING WORKLOAD DATA IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10184495	6716072	SYSTEMS AND METHODS FOR DISPOSING A CIRCUIT BOARD COMPONENT ON A CIRCUIT BOARD USING A SOLDERING PIN	EMC Corporation
10185814	6701393	SYSTEMS AND METHODS FOR MANAGING STORAGE LOCATION DESCRIPTORS	EMC Corporation
10185898	7089379	LARGE HIGH BANDWIDTH MEMORY SYSTEM	EMC Corporation
10186250	7003527	METHODS AND APPARATUS FOR MANAGING DEVICES WITHIN STORAGE AREA NETWORKS	EMC Corporation
10188626	7546354	DYNAMIC NETWORK BASED STORAGE WITH HIGH AVAILABILITY	EMC Corporation
10196867	6920537	APPARATUS AND METHODS FOR COPYING, BACKING UP AND RESTORING LOGICAL OBJECTS IN A COMPUTER STORAGE SYSTEM BY TRANSFERRING BLOCKS OUT OF ORDER OR IN PARALLEL	EMC Corporation
10198005	7149960	METHOD AND APPARATUS FOR CONTROLLING CREATION AND MANAGEMENT OF PAGES OF PORTAL CONTENT IN A DIRECTORY	EMC Corporation

Application Number	Registration Number	Title	Owner
10206377	7308417	METHOD FOR CREATING AND DISPLAYING A MULTI-DIMENSIONAL BUSINESS MODEL COMPARATIVE STATIC	EMC Corporation
10209774	6601133	MAILBOX FOR CONTROLLING STORAGE SUBSYSTEM RECONFIGURATIONS	EMC Corporation
10213241	6792518	DATA STORAGE SYSTEM HAVING META BIT MAPS FOR INDICATING WHETHER DATA BLOCKS ARE INVALID IN SNAPSHOT COPIES	EMC Corporation
10213242	6934822	ORGANIZATION OF MULTIPLE SNAPSHOT COPIES IN A DATA STORAGE SYSTEM	EMC Corporation
10213335	6957362	INSTANTANEOUS RESTORATION OF A PRODUCTION COPY FROM A SNAPSHOT COPY IN A DATA STORAGE SYSTEM	EMC Corporation
10215394	6943463	SYSTEM AND METHOD OF TESTING CONNECTIVITY BETWEEN A MAIN POWER SUPPLY AND A STANDBY POWER SUPPLY	EMC Corporation
10215573	6695149	TECHNIQUES FOR FASTENING A PANEL TO AN ELECTRONIC CABINET FRAME	EMC Corporation
10216030	7725730	CRYPTOGRAPHIC METHODS AND APPARATUS FOR SECURE AUTHENTICATION	EMC Corporation
10224006	6944726	DISTRIBUTED BACKGROUND TRACK PROCESSING	EMC Corporation
10224918	7117386	SAR RESTART AND GOING HOME PROCEDURES	EMC Corporation
10225021	7024528	STORAGE AUTOMATED REPLICATION PROCESSING	EMC Corporation
10225916	6618818	RESOURCE ALLOCATION THROTTLING IN REMOTE DATA MIRRORING SYSTEM	EMC Corporation
10226845	6909052	TECHNIQUES FOR MAKING A CIRCUIT BOARD WITH IMPROVED IMPEDANCE CHARACTERISTICS	EMC Corporation
10228513	7120721	FIBRE CHANNEL ARCHITECTURE PORT HAVING OPTICAL AND COPPER CONNECTORS	EMC Corporation
10229259	6584545	MAXIMIZING SEQUENTIAL OUTPUT IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
10229685	7003702	END-TO-END CHECKSUMMING FOR READ OPERATIONS	EMC Corporation
10229730	7694344	METHOD AND SYSTEM FOR ENFORCING NETWORK SECURITY BY PRESERVING EVENT EXECUTION INFORMATION UTILIZING A SERVICE EVENT STACK	EMC Corporation
10235137	6807619	ADVANCING BANK POINTER IN PRIME NUMBERS UNIT	EMC Corporation
10238219	6993581	METHOD AND APPARATUS FOR PROVIDING SECURE ACCESS TO A COMPUTER SYSTEM RESOURCE	EMC Corporation
10238806	6993589	METHOD AND APPARATUS FOR PROVIDING SECURE ACCESS TO A COMPUTER SYSTEM RESOURCE	EMC Corporation
10242176	7136489	METHOD AND SYSTEM FOR ENHANCING NETWORK SECURITY USING A MULTILATERAL AUTHORIZATION MECHANISM	EMC Corporation
10242521	7076691	ROBUST INDICATION PROCESSING FAILURE MODE HANDLING	EMC Corporation

Application Number	Registration Number	Title	Owner
10245895	6567888	METHOD AND APPARATUS FOR EFFICIENTLY DESTAGING DATA FROM A CACHE TO TWO OR MORE NON-CONTIGUOUS STORAGE LOCATIONS	EMC Corporation
10250262	7426726	SYSTEM AND METHOD FOR CONFIGURING A HOST FOR OPERATIONALLY COOPERATING WITH DATA STORAGE SYSTEM AND INCLUDING SELECTIVE HOST ADAPTER SETTINGS	EMC Corporation
10253255	6826057	ELECTRONIC CABINET PANEL WITH IMPROVED LATCHING MECHANISM	EMC Corporation
10254228	7065624	SYSTEM AND METHOD FOR DETERMINING WORKLOAD CHARACTERISTICS FOR ONE OR MORE APPLICATIONS OPERATING IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10255148	7475124	NETWORK BLOCK SERVICES FOR CLIENT ACCESS OF NETWORK-ATTACHED DATA STORAGE IN AN IP NETWORK	EMC Corporation
10255223	6809505	SYSTEM AND METHOD OF DETECTING AN IMPROPER CABLE CONNECTION IN A SYSTEM	EMC Corporation
10255291	6901202	STORAGE SYSTEM WITH A DISKLESS ENCLOSURE	EMC Corporation
10259011	7356452	SYSTEM AND METHOD FOR SIMULATING PERFORMANCE OF ONE OR MORE DATA STORAGE SYSTEMS	EMC Corporation
10259053	6773269	CIRCUIT BOARD ASSEMBLY WHICH UTILIZES A PIN ASSEMBLY AND TECHNIQUES FOR MAKING THE SAME	EMC Corporation
10259335	7254741	ATTAINING HIGH AVAILABILITY THROUGH A POWER SYSTEM BRANCH ARCHITECTURE	EMC Corporation
10260945	7287046	METHOD AND SYSTEM OF COMPACTING SPARSE DIRECTORIES IN A FILE SYSTEM	EMC Corporation
10261168	7206961	METHOD OF PRESERVING SNAPSHOTS DURING DISK-BASED RESTORE PROCESSING	EMC Corporation
10261727	6800545	MICRO SOLDERED CONNECTION	EMC Corporation
10262684	6910075	DYNAMIC RDF GROUPS	EMC Corporation
10264972	6775905	METHOD FOR FORMING AN IMPROVED ADAPTOR	EMC Corporation
10270912	7793342	SINGLE SIGN-ON WITH BASIC AUTHENTICATION FOR A TRANSPARENT PROXY	EMC Corporation
10279517	7383442	NESTED STRONG LOADER APPARATUS AND METHOD	EMC Corporation
10281467	7146524	SYSTEM AND METHODS FOR PROVIDING A DISTRIBUTED FILE SYSTEM UTILIZING METADATA TO TRACK INFORMATION ABOUT DATA STORED THROUGHOUT THE SYSTEM	EMC Corporation
10281524	7546482	METHOD AND APPARATUS FOR MONITORING THE STORAGE OF DATA IN A COMPUTER SYSTEM	EMC Corporation
10283908	7945669	METHOD AND APPARATUS FOR PROVISIONING STORAGE RESOURCES	EMC Corporation
10283960	7653645	MULTI-EPOCH METHOD FOR SAVING AND EXPORTING FILE SYSTEM EVENTS	EMC Corporation
10283976	6954835	INTERCEPTING CONTROL OF A HOST I/O PROCESS	EMC Corporation
10304935	7040491	TECHNIQUES FOR MANAGING A SET OF CABLES	EMC Corporation
10306268	7340461	DEACTIVATING VIRTUAL DEVICES AND ROLLING BACKUP	EMC Corporation
10306378	7249130	VIRTUAL STORAGE DEVICES	EMC Corporation

Application Number	Registration Number	Title	Owner
10306659	7266572	RESTORING VIRTUAL DEVICES	EMC Corporation
10306706	8032492	SIMULTANEOUS ACTIVATION OF VIRTUAL DEVICES	EMC Corporation
10308159	6889288	REDUCING DATA COPY OPERATIONS FOR WRITING DATA FROM A NETWORK TO STORAGE OF A CACHED DATA STORAGE SYSTEM BY ORGANIZING CACHE BLOCKS AS LINKED LISTS OF DATA FRAGMENTS	EMC Corporation
10308161	7028218	REDUNDANT MULTI-PROCESSOR AND LOGICAL PROCESSOR CONFIGURATION FOR A FILE SERVER	EMC Corporation
10308445	7284016	CLIENT-SERVER PROTOCOL FOR DIRECTORY ACCESS OF SNAPSHOT FILE SYSTEMS IN A STORAGE SYSTEM	EMC Corporation
10315412	7263696	DYNAMIC WEB BASED JAR FILE FINDER	EMC Corporation
10315472	7080225	METHOD AND APPARATUS FOR MANAGING MIGRATION OF DATA IN A COMPUTER SYSTEM	EMC Corporation
10315791	7376764	METHOD AND APPARATUS FOR MIGRATING DATA IN A COMPUTER SYSTEM	EMC Corporation
10316286	7084353	TECHNIQUES FOR MOUNTING A CIRCUIT BOARD COMPONENT TO A CIRCUIT BOARD	EMC Corporation
10318949	6791841	METHODS AND APPARATUS FOR MANAGING A SET OF CABLES	EMC Corporation
10320019	7065661	USING REQUEST AND GRANT SIGNALS TO READ REVISION INFORMATION FROM AN ADAPTER BOARD THAT INTERFACES A DISK DRIVE	EMC Corporation
10320212	6829658	COMPATIBLE SIGNAL-TO-PIN CONNECTOR ASSIGNMENTS FOR USAGE WITH FIBRE CHANNEL AND ADVANCED TECHNOLOGY ATTACHMENT DISK DRIVES	EMC Corporation
10327338	7194673	DETECTING INTERMITTENT LOSSES OF SYNCHRONIZATION IN A FIBRE CHANNEL LOOP	EMC Corporation
10327483	7127621	PEER POWER CONTROL	EMC Corporation
10330806	7127638	METHOD AND APPARATUS FOR PRESERVING DATA IN A HIGH-AVAILABILITY SYSTEM	EMC Corporation
10331366	6973551	DATA STORAGE SYSTEM HAVING ATOMIC MEMORY OPERATION	EMC Corporation
10331423	7062620	DUAL POWER BUS DATA STORAGE SYSTEM	EMC Corporation
10333426	7949840	METHOD FOR SAVING COMPUTER DATA	EMC Corporation
10334964	7472182	DATA COLLECTION POLICY FOR STORAGE DEVICES	EMC Corporation
10335329	6804627	SYSTEM AND METHOD FOR GATHERING AND ANALYZING DATABASE PERFORMANCE STATISTICS	EMC Corporation
10335330	7315985	METHODS AND APPARATUS FOR MANAGING NETWORK RESOURCES USING A NETWORK TOPOLOGY VIEW	EMC Corporation
10335349	7587713	SYSTEM AND METHOD FOR CONTROLLING INSTALLATION OF ONE OR MORE COMPONENTS FOR A DATA STORAGE MANAGEMENT SYSTEM	EMC Corporation
10335497	7197489	METHODS AND APPARATUS FOR MAINTAINING OBJECT DATA FOR COMPONENTS IN A NETWORK	EMC Corporation

Application Number	Registration Number	Title	Owner
10335509	7587715	SYSTEM AND METHOD FOR SELECTIVE INSTALLATION OF ONE OR MORE COMPONENTS FOR A DATA STORAGE MANAGEMENT SYSTEM	EMC Corporation
10335546	7454487	METHODS AND APPARATUS PROVIDING AN EXTENSIBLE MANAGEABLE ENTITY MODEL FOR A NETWORK	EMC Corporation
10335591	7401298	STREAMING ALGORITHM THAT POPULATES USER INFORMATION FROM DATABASE BASED ON SCROLLING ACTIVITY	EMC Corporation
10335601	7228306	POPULATION OF DISCOVERY DATA	EMC Corporation
10335603	7469290	AUTOMATIC SYSTEM RESOURCE MANAGEMENT	EMC Corporation
10335643	6769054	SYSTEM AND METHOD FOR PREPARATION OF WORKLOAD DATA FOR REPLAYING IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10343893	7660954	TECHNIQUES FOR SAVING DATA	EMC Corporation
10353322	7707151	METHOD AND APPARATUS FOR MIGRATING DATA	EMC Corporation
10359864	7246246	SYSTEM FOR KEYING PROTECTED ELECTRONIC DATA TO PARTICULAR MEDIA TO PREVENT UNAUTHORIZED COPY USING A COMPOUND	EMC Corporation
10368720	6938059	SYSTEM FOR DETERMINING MAPPING OF LOGICAL OBJECTS IN A COMPUTER SYSTEM	EMC Corporation
10374694	6931502	RECOVERY OF DATA USING WRITE REQUEST COPIES IN DELTA QUEUE	EMC Corporation
10375991	7216336	SEQUENTIAL EVENT MONITORING MODULE	EMC Corporation
10376855	6993530	METHOD AND APPARATUS FOR OBTAINING AN IDENTIFIER FOR A LOGICAL UNIT OF DATA IN A DATABASE	EMC Corporation
10382662	6987631	DATA READ/WRITE METHOD AND APPARATUS	EMC Corporation
10392626	7383492	FIRST-IN/FIRST-OUT (FIFO) INFORMATION PROTECTION AND ERROR DETECTION METHOD AND APPARATUS	EMC Corporation
10396033	7254752	PROTECTING DATABASE RECORDS AGAINST A FAILED WRITE OPERATION	EMC Corporation
10396786	6898685	ORDERING DATA WRITES FROM A LOCAL STORAGE DEVICE TO A REMOTE STORAGE DEVICE	EMC Corporation
10396800	7113945	VIRTUAL STORAGE DEVICE THAT USES VOLATILE MEMORY	EMC Corporation
10397403	6904470	DEVICE SELECTION BY A DISK ADAPTER SCHEDULER	EMC Corporation
10400208	6718437	METHOD AND APPARATUS FOR RECONFIGURING STRIPED LOGICAL DEVICES IN A DISK ARRAY STORAGE	EMC Corporation
10400333	6850410	ADVANCED TECHNOLOGY ATTACHMENT DISK DRIVE MODULE WITH FIBRE CHANNEL SYSTEM CHARACTERISTICS	EMC Corporation
10400718	6868367	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
10401523	7068500	MULTI-DRIVE HOT PLUG DRIVE CARRIER	EMC Corporation
10402009	7818447	END-TO-END BROADCAST BASED FLOW CONTROL IN A SWITCH FABRIC	EMC Corporation

Application Number	Registration Number	Title	Owner
10402334	7216188	TECHNIQUES FOR ACCESSING DEVICES THROUGH A SET OF SERIAL BUSES AUTOMATICALLY SETTING UNIQUE ENCLOSURE ADDRESSES AND DETECTING NON-UNIQUE ENCLOSURE ADDRESSES UPON INITIALIZATION	EMC Corporation
10402363	7216195	ARCHITECTURE FOR MANAGING DISK DRIVES	EMC Corporation
10402514	7252100	SYSTEMS AND METHODS FOR PROCESSING A SET OF CIRCUIT BOARDS	EMC Corporation
10402594	7516272	MIDPLANE-INDEPENDENT IMPLEMENTATIONS OF DATA STORAGE SYSTEM ENCLOSURES	EMC Corporation
10402883	6955410	TECHNIQUES FOR INTERCONNECTING ELECTRONIC CABINET FRAMES	EMC Corporation
10403262	7143306	DATA STORAGE SYSTEM	EMC Corporation
10403263	6981111	DATA STORAGE SYSTEM	EMC Corporation
10403473	7249184	ARCHITECTURE FOR DETERMINING A WORLD WIDE NAME FOR USE WITH A HOST FOR ENABLING COMMUNICATION WITH A DATA STORAGE SYSTEM WITHOUT REQUIRING THAT THE HOST AND DATA STORAGE SYSTEM BE IN COMMUNICATION DURING THE DETERMINATION	EMC Corporation
10403748	7440949	SYSTEM AND METHOD FOR CONFIGURING A HOST FOR OPERATIONALLY COOPERATING WITH DATA STORAGE SYSTEM	EMC Corporation
10408383	6883072	MEMORY SYSTEM AND METHOD OF USING SAME	EMC Corporation
10411500	6760823	FILE MAPPING SYSTEM AND RELATED TECHNIQUES	EMC Corporation
10421239	7415591	METHOD AND APPARATUS FOR MIGRATING DATA AND AUTOMATICALLY PROVISIONING A TARGET FOR THE MIGRATION	EMC Corporation
10421252	7093088	METHOD AND APPARATUS FOR UNDOING A DATA MIGRATION IN A COMPUTER SYSTEM	EMC Corporation
10421401	7080221	METHOD AND APPARATUS FOR MANAGING MIGRATION OF DATA IN A CLUSTERED COMPUTER SYSTEM ENVIRONMENT	EMC Corporation
10421478	7263590	METHOD AND APPARATUS FOR MIGRATING DATA IN A COMPUTER SYSTEM	EMC Corporation
10421500	7805583	METHOD AND APPARATUS FOR MIGRATING DATA IN A CLUSTERED COMPUTER SYSTEM ENVIRONMENT	EMC Corporation
10435322	7100049	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
10442805	7022916	TECHNIQUES FOR CONTROLLING MOVEMENT OF A SET OF CABLES	EMC Corporation
10447923	7587656	METHOD AND APPARATUS FOR DETECTING AND CORRECTING ERRORS IN STORAGE INFORMATION	EMC Corporation
10452688	7194492	METHOD AND APPARATUS FOR EFFICIENTLY COPYING DISTRIBUTED DATA FILES	EMC Corporation
10462949	7136969	USING THE MESSAGE FABRIC TO MAINTAIN CACHE COHERENCY OF LOCAL CACHES OF GLOBAL MEMORY	EMC Corporation
10463247	7047366	QOS FEATURE KNOBS	EMC Corporation

Application Number	Registration Number	Title	Owner
10463649	7254595	METHOD AND APPARATUS FOR STORAGE AND RETRIEVAL OF VERY LARGE DATABASES USING A DIRECT PIPE	EMC Corporation
10468181	8442957	EFFICIENT MANAGEMENT OF LARGE FILES	EMC Corporation
10468184	7500246	SHARING OBJECTS BETWEEN COMPUTER SYSTEMS	EMC Corporation
10468185	8484172	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
10469951	7499889	TRANSACTION SYSTEM	EMC Corporation
10549542	7979707	SECURE SEED GENERATION PROTOCOL	EMC Corporation
10578591	9076132	SYSTEM AND METHOD OF ADDRESSING EMAIL AND ELECTRONIC COMMUNICATION FRAUD	EMC Corporation
10600133	6986009	INTERCEPTING CONTROL OF A HOST I/O PROCESS	EMC Corporation
10601359	7099875	METHOD AND APPARATUS FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
10603411	7567991	REPLICATION OF SNAPSHOT USING A FILE SYSTEM COPY DIFFERENTIAL	EMC Corporation
10603951	7275177	DATA RECOVERY WITH INTERNET PROTOCOL REPLICATION WITH OR WITHOUT FULL RESYNC	EMC Corporation
10606483	6971805	TECHNIQUES FOR PROVIDING MULTIPLE COMMUNICATIONS PATHWAYS	EMC Corporation
10606617	6870093	ADAPTABLE EMI/RFI SHIELDING FOR A FRONT-PANEL ATTACHMENT TO AN ENCLOSURE	EMC Corporation
10606699	7380082	READING VIRTUAL ORDERED WRITES AT LOCAL STORAGE DEVICE	EMC Corporation
10606819	7099971	ARBITRATION SYSTEM	EMC Corporation
10606872	7272668	SYSTEM HAVING BACKPLANE PERFORMANCE CAPABILITY SELECTION LOGIC	EMC Corporation
10607041	7051176	READING VIRTUAL ORDERED WRITES AT A REMOTE STORAGE DEVICE	EMC Corporation
10607400	7159758	CIRCUIT BOARD PROCESSING TECHNIQUES USING SOLDER FUSING	EMC Corporation
10607653	7146439	MANAGEMENT OF BACKGROUND COPY TASK FOR POINT-IN-TIME COPIES	EMC Corporation
10608608	7275098	METHODS AND APPARATUS FOR ADMINISTERING SOFTWARE MODULES IN A STORAGE AREA NETWORK MANAGEMENT APPLICATION	EMC Corporation
10608618	6934152	SYSTEMS AND METHODS FOR CONNECTING AN ELECTRONIC APPARATUS TO A BACKPLANE	EMC Corporation
10608635	7154723	HIGHLY AVAILABLE DUAL SERIAL BUS ARCHITECTURE	EMC Corporation
10608745	6924986	INVERTIBLE, PLUGGABLE MODULE FOR VARIABLE I/O DENSITIES	EMC Corporation
10608757	7827136	MANAGEMENT FOR REPLICATION OF DATA STORED IN A DATA STORAGE ENVIRONMENT INCLUDING A SYSTEM AND METHOD FOR FAILOVER PROTECTION OF SOFTWARE AGENTS OPERATING IN THE ENVIRONMENT	EMC Corporation
10611237	7424498	PROBABILISTIC SUMMARY DATA STRUCTURE BASED ENCODING FOR GARBAGE COLLECTION	EMC Corporation
10611291	7451168	INCREMENTAL GARBAGE COLLECTION OF DATA IN SECONDARY STORAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
10611309	7143251	DATA STORAGE USING IDENTIFIERS	EMC Corporation
10611312	7318071	SYSTEM AND METHOD FOR TRANSFERRING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
10613114	7103797	RESOURCE ALLOCATION THROTTLING IN REMOTE DATA MIRRORING SYSTEM	EMC Corporation
10614630	7627779	MULTIPLE HIERARCHAL/PEER DOMAIN FILE SERVER WITH DOMAIN BASED, CROSS DOMAIN COOPERATIVE FAULT HANDLING MECHANISMS	EMC Corporation
10619886	7603481	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation
10623103	7281111	METHODS AND APPARATUS FOR INTERFACING TO A DATA STORAGE SYSTEM	EMC Corporation
10623234	7484049	DATA STORAGE SYSTEM PACKER/DEPACKER	EMC Corporation
10631989	7730518	METHOD AND APPARATUS FOR GRAPH-BASED PARTITION OF CRYPTOGRAPHIC FUNCTIONALITY	EMC Corporation
10641467	7107418	METHOD AND SYSTEM FOR MIRRORING AND ARCHIVING MASS STORAGE	EMC Corporation
10642912	7266719	HOST SYSTEM FOR MASS STORAGE BUSINESS CONTINUANCE VOLUMES	EMC Corporation
10645976	7412496	MANAGEMENT OF THE FILE-MODIFICATION TIME ATTRIBUTE IN A MULTI-PROCESSOR FILE SERVER SYSTEM	EMC Corporation
10646851	7953819	MULTI-PROTOCOL SHARABLE VIRTUAL STORAGE OBJECTS MANAGEMENT AND CONTROL	EMC Corporation
10652371	7702670	SYSTEM AND METHOD FOR TRACKING CHANGES ASSOCIATED WITH INCREMENTAL COPYING	EMC Corporation
10652967	7165155	SYSTEM AND METHOD FOR TRACKING CHANGES ASSOCIATED WITH INCREMENTAL COPYING	EMC Corporation
10654137	7849112	USING A FILE HANDLE FOR ASSOCIATING THE FILE WITH A TREE QUOTA IN A FILE SERVER	EMC Corporation
10654852	7149947	METHOD OF AND SYSTEM FOR VALIDATING AN ERROR CORRECTION CODE AND PARITY INFORMATION ASSOCIATED WITH A DATA WORD	EMC Corporation
10655693	7051182	MAPPING OF HOSTS TO LOGICAL STORAGE UNITS AND DATA STORAGE PORTS IN A DATA PROCESSING SYSTEM	EMC Corporation
10658695	6987673	TECHNIQUES FOR COOLING A SET OF CIRCUIT BOARDS WITHIN A RACK MOUNT CABINET	EMC Corporation
10662082	7921080	SYSTEM AND METHOD FOR BACKUP A PARALLEL SERVER DATA STORAGE SYSTEM	EMC Corporation
10666773	7343432	MESSAGE-BASED GLOBAL DISTRIBUTION LOCKS WITH AUTOMATIC EXPIRATION FOR INDICATING THAT SAID LOCKS IS EXPIRED	EMC Corporation
10667170	7363431	MESSAGE-BASED DISTRIBUTED SYNCHRONIZATION IN A STORAGE SYSTEM	EMC Corporation
10667564	7089357	LOCALLY BUFFERED CACHE EXTENSIONS HAVING ASSOCIATED CONTROL PARAMETERS TO DETERMINE USE FOR CACHE ALLOCATION OR SUBSEQUENT REQUESTS	EMC Corporation

Application Number	Registration Number	Title	Owner
10668467	7865485	MULTI-THREADED WRITE INTERFACE AND METHODS FOR INCREASING THE SINGLE FILE READ AND WRITE THROUGHPUT OF A FILE SERVER	EMC Corporation
10668546	7555504	MAINTENANCE OF A FILE VERSION SET INCLUDING READ-ONLY AND READ-WRITE SNAPSHOT COPIES OF A PRODUCTION FILE	EMC Corporation
10668783	7035881	ORGANIZATION OF READ-WRITE SNAPSHOT COPIES IN A DATA STORAGE SYSTEM	EMC Corporation
10673305	7188202	TECHNIQUES FOR ACCESSING DEVICES THROUGH A SET OF SERIAL BUSES	EMC Corporation
10673356	7503076	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
10673540	6970070	METHOD AND APPARATUS FOR SELECTIVE BLOCKING OF RADIO FREQUENCY IDENTIFICATION DEVICES	EMC Corporation
10673664	7447860	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND RECOVERY PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10673722	7096331	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND REPLICATION PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10673829	7102893	METHODS AND APPARATUS FOR FORMING A COHESIVE BACKPLANE INTERCONNECT SYSTEM	EMC Corporation
10673836	7346805	PROTECTION OF MIRRORED DATA	EMC Corporation
10673853	7257653	SWITCHING BETWEEN COPY MODE AND SYNCHRONOUS RDF MODE	EMC Corporation
10673864	7133985	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND REPLICATION PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10674080	7416106	TECHNIQUES FOR CREATING OPTIMIZED PAD GEOMETRIES FOR SOLDERING	EMC Corporation
10674321	7340747	SYSTEM AND METHODS FOR DEPLOYING AND INVOKING A DISTRIBUTED OBJECT MODEL	EMC Corporation
10674322	7603458	SYSTEM AND METHODS FOR PROCESSING AND DISPLAYING AGGREGATE STATUS EVENTS FOR REMOTE NODES	EMC Corporation
10675002	7712004	METHOD OF AND SYSTEM FOR ERROR CHECKING IN A DATA STORAGE SYSTEM	EMC Corporation
10675016	7281236	SYSTEM AND METHODS FOR DEVELOPING AND DEPLOYING A REMOTE DOMAIN SYSTEM	EMC Corporation
10675039	7124245	DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK	EMC Corporation
10675040	7437425	DATA STORAGE SYSTEM HAVING SHARED RESOURCE	EMC Corporation
10675041	7073024	DATA PROTECTION METHOD WHEREIN DATA PROTECTION CODE IS STORED TOGETHER WITH PARITY	EMC Corporation

Application Number	Registration Number	Title	Owner
10675058	7136959	DATA STORAGE SYSTEM HAVING CROSSBAR PACKET SWITCHING NETWORK	EMC Corporation
10675164	7158976	SPATIAL DOMAIN MECHANISM	EMC Corporation
10675166	7454536	DATA SYSTEM HAVING A VIRTUAL QUEUE	EMC Corporation
10675205	7233957	METHOD AND APPARATUS FOR IDENTIFYING AND PROCESSING CHANGES TO MANAGEMENT INFORMATION	EMC Corporation
10675218	7555719	METHODS AND APPARATUS FOR DISPLAYING DATA STORAGE MANAGEMENT INFORMATION	EMC Corporation
10675220	7600229	METHODS AND APPARATUS FOR LOAD BALANCING PROCESSING OF MANAGEMENT INFORMATION	EMC Corporation
10675281	7444355	SYSTEM AND METHOD FOR ASSIGNING MANAGEMENT RESPONSIBILITY FOR MANAGEABLE ENTITIES	EMC Corporation
10675423	7234073	SYSTEM AND METHODS FOR FAILOVER MANAGEMENT OF MANAGEABLE ENTITY AGENTS	EMC Corporation
10675561	7159139	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STOPPED RECORDS AND UTILIZATION OF A CHECK VALUE FOR VERIFYING THAT A RECORD IS FROM A PARTICULAR STORAGE LOCATION	EMC Corporation
10675586	7437676	METHODS AND APPARATUS FOR MANAGING NETWORK RESOURCES VIA USE OF A RELATIONSHIP VIEW	EMC Corporation
10676138	7770204	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
10676831	7325097	METHOD AND APPARATUS FOR DISTRIBUTING A LOGICAL VOLUME OF STORAGE FOR SHARED ACCESS BY MULTIPLE HOST COMPUTERS	EMC Corporation
10676833	7124249	METHOD AND APPARATUS FOR IMPLEMENTING A SOFTWARE CACHE	EMC Corporation
10679662	7188223	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND RECOVERY PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10679726	7353351	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND RECOVERY PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10688180	6839773	DATA PROCESSING SYSTEM WITH PARALLEL ACCESS TO A LOGICAL VOLUME ON A DISK ARRAY STORAGE DEVICE	EMC Corporation
10692120	6990536	METHOD FOR ENABLING OVERLAPPED INPUT/OUTPUT REQUESTS TO A LOGICAL DEVICE FROM MULTIPLE HOSTS WITH EXPLICIT ALLEGIANCES	EMC Corporation
10692285	7516168	METHOD AND APPARATUS FOR MONITORING UPDATE ACTIVITY IN A DATA STORAGE FACILITY	EMC Corporation
10692641	7016150	METHOD AND APPARATUS FOR CLEANING HEAD WITH OVER-DAMPED HARMONIC OSCILLATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10699572	7640496	METHOD AND APPARATUS FOR GENERATING REPORT VIEWS	EMC Corporation
10701167	7395497	SYSTEM AND METHODS FOR PROCESSING LARGE DATASETS	EMC Corporation
10702259	8527541	METHOD FOR MAPPING A FLAT NAMESPACE ONTO A HIERARCHICAL NAMESPACE USING LOCALITY OF REFERENCE CUES	EMC Corporation
10703754	6980384	EXTENDED POSITION ERROR SIGNAL FOR ANALOGUE SERVO DISK DRIVE	EMC Corporation
10705772	7395283	METHOD AND APPARATUS FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
10714039	7092202	ENHANCED AIRFLOW CONDITIONING SYSTEM FOR REMOVABLE DATA STORAGE CARTRIDGE	EMC Corporation
10714326	7937421	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
10718341	7230781	INFORMATION STORAGE SYSTEM AND A METHOD OF OPERATING IT	EMC Corporation
10720629	7085781	MULTI-VOLUME EXTENT BASED FILE SYSTEM	EMC Corporation
10720969	7428558	PERSISTENT RESTORE OF VIRTUAL DEVICES	EMC Corporation
10722146	7962914	METHOD AND APPARATUS FOR LOAD BALANCING OF DISTRIBUTED PROCESSING UNITS BASED ON PERFORMANCE METRICS	EMC Corporation
10724034	7502933	IDENTITY AUTHENTICATION SYSTEM AND METHOD	EMC Corporation
10724269	7447875	METHOD AND SYSTEM FOR MANAGEMENT OF GLOBAL QUEUES UTILIZING A LOCKED STATE	EMC Corporation
10724669	7054883	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
10724670	7228456	DATA RECOVERY FOR VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
10727386	7153723	METHOD OF FORMING A BALL GRID ARRAY DEVICE	EMC Corporation
10728262	6972607	CLOCK SIGNAL REGENERATION CIRCUITRY	EMC Corporation
10731603	7162571	METHODS AND APPARATUS FOR PARSING A CONTENT ADDRESS TO FACILITATE SELECTION OF A PHYSICAL STORAGE LOCATION IN A DATA STORAGE SYSTEM	EMC Corporation
10731613	7263576	METHODS AND APPARATUS FOR FACILITATING ACCESS TO CONTENT IN A DATA STORAGE SYSTEM	EMC Corporation
10731622	7502886	DATA STORAGE DEVICE WITH TWO-TIER RAID CONTROL CIRCUITRY	EMC Corporation
10731790	9075851	METHOD AND APPARATUS FOR DATA RETENTION IN A STORAGE SYSTEM	EMC Corporation
10731796	7159070	METHODS AND APPARATUS FOR CACHING A LOCATION INDEX IN A DATA STORAGE SYSTEM	EMC Corporation
10731845	7444389	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
10735238	7039737	METHOD AND APPARATUS FOR RESOURCE ARBITRATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10735422	7171428	TESTING SYSTEM WITH DATABASE-GENERIC FRONT END	EMC Corporation
10735432	8176156	SERVER IDENTIFICATION ASSIGNMENT IN A DISTRIBUTED SWITCHED STORAGE ENVIRONMENT	EMC Corporation
10736954	7454349	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
10737170	7131025	RESOURCE ALLOCATION AWARE QUEUING OF REQUESTS FOR MEDIA RESOURCES	EMC Corporation
10737305	7174406	SYSTEM AND METHOD FOR ARBITRATING ACCESS TO A SHARED RESOURCE	EMC Corporation
10737317	6862200	METHOD AND APPARATUS FOR PROVIDING POWER SIGNALS TO OPERATING CIRCUITRY MOUNTED ON CIRCUIT BOARDS	EMC Corporation
10737505	7404087	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
10739504	7123446	REMOVABLE CARTRIDGE RECORDING DEVICE INCORPORATING ANTIFERROMAGNETICALLY COUPLED RIGID MAGNETIC MEDIA	EMC Corporation
10740219	7231492	DATA STORAGE SYSTEM	EMC Corporation
10740220	7099980	DATA STORAGE SYSTEM HAVING PORT DISABLE MECHANISM	EMC Corporation
10740343	7073031	MULTI-PROCESSOR SYSTEM HAVING DATA COHERENCY	EMC Corporation
10740990	7457118	METHOD AND APPARATUS FOR DISPERSING HEAT FROM HIGH-POWER ELECTRONIC DEVICES	EMC Corporation
10741829	7275141	SYSTEM AND METHOD FOR PERFORMING A FULL COPY IN A DATA STORAGE ENVIRONMENT HAVING A CAPABILITY FOR PERFORMING AN INCREMENTAL COPY	EMC Corporation
10742668	7072995	METHODS AND APPARATUS FOR INDICATING WHETHER A DEVICE IS CONNECTED TO A SERIAL ATA COMMUNICATIONS CABLE	EMC Corporation
10744536	7206795	PREFETCHING AND MULTITHREADING FOR IMPROVED FILE READ PERFORMANCE	EMC Corporation
10745100	7145776	MIDPLANE-LESS DATA STORAGE ENCLOSURE	EMC Corporation
10745431	8244903	DATA STREAMING AND BACKUP SYSTEMS HAVING MULTIPLE CONCURRENT READ THREADS FOR IMPROVED SMALL FILE PERFORMANCE	EMC Corporation
10745732	7111158	TECHNIQUES FOR TRANSITIONING CONTROL OF A SERIAL ATA DEVICE AMONG MULTIPLE HOSTS USING SLEEP AND WAKE COMMANDS	EMC Corporation
10746317	7590776	DATA STORAGE TECHNIQUES UTILIZING HOST-SIDE MULTIPLEXERS	EMC Corporation
10748008	8544096	ON-ACCESS AND ON-DEMAND DISTRIBUTED VIRUS SCANNING	EMC Corporation
10748753	7155586	METHOD OF ALLOWING POINT-IN-TIME VIEW OF DATA ON A DISK USING A MAP ON CACHE DISK	EMC Corporation
10749114	7457868	METHODS AND APPARATUS FOR MEASURING NETWORK PERFORMANCE	EMC Corporation
10749692	7627619	DATA VERIFICATION FOLLOWING DATABASE WRITE	EMC Corporation

Application Number	Registration Number	Title	Owner
10750227	7559065	METHODS AND APPARATUS PROVIDING AN EVENT SERVICE INFRASTRUCTURE	EMC Corporation
10750334	7590714	METHODS AND APPARATUS FOR PROVIDING EXTENSIBLE LIGHTWEIGHT SERVICES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10750336	7401137	METHODS AND APPARATUS FOR APPLICATION OF MANAGEMENT ACTIONS TO RESOURCES SHARING RELATIONSHIPS	EMC Corporation
10750413	7552446	METHODS AND APPARATUS FOR A TIMER EVENT SERVICE INFRASTRUCTURE	EMC Corporation
10752256	7313578	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
10758327	7546367	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation
10761767	7639713	DATABASE BLOCK NETWORK ATTACHED STORAGE PACKET JOINING	EMC Corporation
10761826	7430645	METHODS AND APPARATUS FOR EXTENDING A RETENTION PERIOD FOR DATA IN A STORAGE SYSTEM	EMC Corporation
10762036	7801920	METHODS AND APPARATUS FOR INDIRECTLY IDENTIFYING A RETENTION PERIOD FOR DATA IN A STORAGE SYSTEM	EMC Corporation
10762043	7249251	METHODS AND APPARATUS FOR SECURE MODIFICATION OF A RETENTION PERIOD FOR DATA IN A STORAGE SYSTEM	EMC Corporation
10762044	7580961	METHODS AND APPARATUS FOR MODIFYING A RETENTION PERIOD FOR DATA IN A STORAGE SYSTEM	EMC Corporation
10767884	7647256	TECHNIQUES FOR ESTABLISHING AND MANAGING A DISTRIBUTED CREDENTIAL STORE	EMC Corporation
10769943	7555569	QUICK CONFIGURATION STATUS	EMC Corporation
10771591	7383463	INTERNET PROTOCOL BASED DISASTER RECOVERY OF A SERVER	EMC Corporation
10771811	7380043	METHOD AND APPARATUS FOR ARBITRATING FOR SERIAL BUS ACCESS	EMC Corporation
10779355	7574418	METHOD AND APPARATUS FOR STORING COMPOSITE DATA STREAMS	EMC Corporation
10782309	7532104	LOW-COMPLEXITY CRYPTOGRAPHIC TECHNIQUES FOR USE WITH RADIO FREQUENCY IDENTIFICATION DEVICES	EMC Corporation
10785614	7281157	METHOD AND APPARATUS FOR ENABLING CONSISTENT ANCILLARY DISK ARRAY STORAGE DEVICE OPERATIONS WITH RESPECT TO A MAIN APPLICATION	EMC Corporation
10786644	7640342	SYSTEM AND METHOD FOR DETERMINING CONFIGURATION OF ONE OR MORE DATA STORAGE SYSTEMS	EMC Corporation
10787337	9229646	METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
10795682	7505972	METHOD AND SYSTEM FOR DYNAMIC ASSIGNMENT OF ENTITLEMENTS	EMC Corporation

Application Number	Registration Number	Title	Owner
10795686	7228396	SWITCHING BETWEEN VIRTUAL ORDERED WRITES MODE OR SYNCHRONOUS OR SEMI-SYNCHRONOUS RDF TRANSFER MODE AND SYNCHRONOUS OR SEMI-SYNCHRONOUS RDF TRANSFER MODE	EMC Corporation
10795851	7240131	METHOD AND APPARATUS FOR IMPROVING THE PROCESS OF MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
10802489	7318134	CONTINUOUS DATA BACKUP USING DISTRIBUTED JOURNALING	EMC Corporation
10802584	7281156	SYSTEM AND METHOD FOR WRITING DATA TO A DISK DRIVE ASSEMBLY TO MINIMIZE THE EFFECT OF A SINGLE HEAD FAILURE	EMC Corporation
10803377	7178000	TRACE BUFFER FOR DDR MEMORIES	EMC Corporation
10805852	7234009	USE OF AN OPTICAL INTERFACE FOR REMOVABLE MAGNETIC MEDIA	EMC Corporation
10807945	7321972	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
10808781	7599951	CONTINUOUS DATA BACKUP	EMC Corporation
10808839	7293198	TECHNIQUES FOR MAINTAINING OPERATION OF A DATA STORAGE SYSTEM DURING A FAILURE	EMC Corporation
10809732	7016240	NON-DESTRUCTIVE MEMORY READ STROBE PULSE OPTIMIZATION TRAINING SYSTEM	EMC Corporation
10809733	7107424	MEMORY READ STROBE PULSE OPTIMIZATION TRAINING SYSTEM	EMC Corporation
10809959	7216264	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND FOR HANDLING ERRORS IN SUCH A NETWORK	EMC Corporation
10810431	7281150	METHODS AND APPARATUS FOR CONTROLLING OPERATION OF A DATA STORAGE SYSTEM	EMC Corporation
10810530	7162666	MULTI-PROCESSOR SYSTEM HAVING A WATCHDOG FOR INTERRUPTING THE MULTIPLE PROCESSORS AND DEFERRING PREEMPTION UNTIL RELEASE OF SPINLOCKS	EMC Corporation
10810971	7225317	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND FOR MANAGING SCALABILITY OF VOLUMES IN SUCH A NETWORK	EMC Corporation
10810988	7206863	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
10811566	7302526	HANDLING MEMORY FAULTS FOR MIRRORED MEMORY	EMC Corporation
10812262	7350884	TRAY WITH INTEGRATED RAIL GUIDES FOR FACILITATING INSTALLATION OF EQUIPMENT UNITS INTO A CABINET RACK	EMC Corporation
10812263	7188916	ADJUSTABLE SIDE RAILS AND METHOD OF ATTACHING SAME TO MOUNTING RAILS OF CABINET RACKS	EMC Corporation
10812291	7472221	MIRRORED MEMORY	EMC Corporation
10812429	7477502	METHOD AND SYSTEM FOR PROVIDING FAULT PROTECTION IN A POWER SUPPLY SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
10812442	7372693	DATA STORAGE SYSTEM WITH IMPROVED POWER SUPPLY INSTALLATION MECHANISM	EMC Corporation
10812456	7278003	DATA STORAGE SYSTEM HAVING ACCURATE AND COHERENT TIME INFORMATION	EMC Corporation
10812458	6992507	METHOD FOR SELECTING OPTIMAL I/O BUFFER	EMC Corporation
10812490	7243248	METHOD AND SYSTEM FOR PROVIDING REDUNDANT POWER TO A DISK DRIVE SYSTEM	EMC Corporation
10812498	7478404	SYSTEM AND METHODS FOR EVENT IMPACT ANALYSIS	EMC Corporation
10812509	7499994	SYSTEM AND METHOD OF PROVIDING PERFORMANCE INFORMATION FOR A COMMUNICATIONS NETWORK	EMC Corporation
10812511	7376898	METHODS AND APPARATUS FOR MANAGING RESOURCES	EMC Corporation
10812512	7539706	METHODS AND APPARATUS FOR COLLECTING AND PROCESSING FILE SYSTEM DATA	EMC Corporation
10812580	7331004	DATA STORAGE SYSTEM ANALYZER HAVING SELF RESET	EMC Corporation
10812860	7437445	SYSTEM AND METHODS FOR HOST NAMING IN A MANAGED INFORMATION ENVIRONMENT	EMC Corporation
10813842	7930158	METHOD AND APPARATUS FOR MULTI-REALM SYSTEM MODELING	EMC Corporation
10813989	7254654	SPLIT-FIFO MULTI-STATION DATA TRANSFER SYSTEM	EMC Corporation
10814117	7523187	METHODS AND APPARATUS FOR MANAGING NETWORK RESOURCES	EMC Corporation
10814206	8589513	REMOTE MIRRORING OF GROUP NAME SERVICES	EMC Corporation
10814663	7254575	SYSTEM AND METHODS FOR IMPLEMENTING AN ADAPTIVE OBJECT MODEL	EMC Corporation
10814666	7543019	METHODS AND APPARATUS PROVIDING BACKWARD COMPATIBILITY FOR APPLICATIONS THAT ACCESS A CHANGING OBJECT MODEL	EMC Corporation
10814964	6965845	METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
10816202	7752176	SELECTIVE DATA RESTORATION	EMC Corporation
10827123	7409687	OPERATION PRIORITIZATION AND SELECTION IN PROBABILITY-BASED JOB SCHEDULER	EMC Corporation
10833457	7484058	REACTIVE DEADLOCK MANAGEMENT IN STORAGE AREA NETWORKS	EMC Corporation
10835746	7409391	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
10836104	8171170	STORAGE SWITCH TASK PROCESSING SYNCHRONIZATION	EMC Corporation
10836133	7773521	STORAGE SWITCH TRAFFIC BANDWIDTH CONTROL	EMC Corporation
10836415	7240150	METHODS AND APPARATUS FOR PROCESSING ACCESS REQUESTS IN A CONTENT ADDRESSABLE COMPUTER SYSTEM	EMC Corporation
10836502	7240151	METHODS AND APPARATUS FOR TRANSFERRING DATA IN A CONTENT ADDRESSABLE COMPUTER SYSTEM	EMC Corporation
10837240	7818475	STORAGE SWITCH MIRRORED WRITE SEQUENCE COUNT MANAGEMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
10837248	7529781	ONLINE INITIAL MIRROR SYNCHRONIZATION AND MIRROR SYNCHRONIZATION VERIFICATION IN STORAGE AREA NETWORKS	EMC Corporation
10837311	7428611	METHODS AND APPARATUS FOR FORWARDING ACCESS REQUESTS IN A CONTENT ADDRESSABLE COMPUTER SYSTEM	EMC Corporation
10846386	8356124	METHOD AND SYSTEM FOR PROCESSING PACKET TRANSFERS	EMC Corporation
10852789	7236361	FAN ASSEMBLY FOR INSTALLING AND REMOVING FANS INDIVIDUALLY AND COLLECTIVELY	EMC Corporation
10852897	7232193	LOCKING MECHANISM FOR SECURING THE BEZEL OF AN ELECTRONICS ENCLOSURE TO A RACK STRUCTURE	EMC Corporation
10853014	8463748	FILE SYSTEM QUIESCING	EMC Corporation
10853035	7155573	CACHE FALL THROUGH TIME ESTIMATION	EMC Corporation
10853250	7000074	SYSTEM AND METHOD FOR UPDATING A CACHE	EMC Corporation
10853746	7254016	DATA STORAGE SYSTEM WITH IMPROVED SERVICEABILITY FEATURES	EMC Corporation
10854007	7502954	HIGH AVAILABILITY DATA STORAGE SYSTEM	EMC Corporation
10858597	7519696	METHOD AND APPARATUS FOR DYNAMICALLY MODIFYING A COMPUTER SYSTEM CONFIGURATION	EMC Corporation
10860523	7206915	VIRTUAL SPACE MANAGER FOR COMPUTER HAVING A PHYSICAL ADDRESS EXTENSION FEATURE	EMC Corporation
10861796	7272602	SYSTEM AND METHOD FOR UNORCHESTRATED DETERMINATION OF DATA SEQUENCES USING STICKY BYTE FACTORING TO DETERMINE BREAKPOINTS IN DIGITAL SEQUENCES	EMC Corporation
10861830	8352439	DATABASE VERIFICATION FOLLOWING DATABASE WRITE	EMC Corporation
10864266	7734829	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR TRANSPARENTLY CONTROLLING COMMUNICATIONS BETWEEN NETWORK APPLICATIONS AND A PLURALITY OF NETWORK COMMUNICATIONS PROTOCOL STACKS USING DEFERRED PROTOCOL STACK ASSOCIATION	EMC Corporation
10865136	7984136	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR DETERMINING LOCATIONS OF INTERCONNECTED PROCESSING MODULES AND FOR VERIFYING CONSISTENCY OF INTERCONNECT WIRING OF PROCESSING MODULES	EMC Corporation
10868266	7254685	METHOD FOR MAINTAINING HIGH PERFORMANCE WHILE PRESERVING RELATIVE WRITE I/O ORDERING FOR A SEMI-SYNCHRONOUS REMOTE REPLICATION SOLUTION	EMC Corporation
10869807	7565610	SYSTEM AND METHOD PROVIDING DETAILED NETWORK OBJECT PERFORMANCE INFORMATION TO LOCATE ROOT CAUSE	EMC Corporation
10872074	7707186	METHOD AND APPARATUS FOR DATA SET MIGRATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10872123	7827476	SYSTEM AND METHODS FOR A TASK MANAGEMENT USER INTERFACE	EMC Corporation
10873744	8356015	FILE SYSTEM QUIESCING DRIVER	EMC Corporation
10874647	7536687	SYSTEM AND METHOD FOR AUTOMATIC INSTALLATION OF EMBEDDED SOFTWARE PACKAGES	EMC Corporation
10874833	7899933	USE OF GLOBAL LOGICAL VOLUME IDENTIFIERS TO ACCESS LOGICAL VOLUMES STORED AMONG A PLURALITY OF STORAGE ELEMENTS IN A COMPUTER STORAGE SYSTEM	EMC Corporation
10875466	6889292	METHOD AND APPARATUS FOR ACCESSING DATA USING A CACHE	EMC Corporation
10875494	7797483	WRITE INTERCEPTOR FOR TRACKING CHANGES TO A DISK IMAGE	EMC Corporation
10875785	7660310	INDEX PROCESSING	EMC Corporation
10877152	7783798	SYSTEM AND METHOD FOR MANAGING USE OF AVAILABLE BANDWIDTH FOR A LINK USED FOR MOVEMENT OF DATA BEING COPIED IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10877244	7004764	CIRCUIT BOARD RETAINER	EMC Corporation
10878075	7660334	SINGLE PRINTED CIRCUIT BOARD CONFIGURATION FOR A DATA STORAGE SYSTEM	EMC Corporation
10878164	7240154	LOW COST FLEXIBLE NETWORK ACCESSED STORAGE ARCHITECTURE	EMC Corporation
10878300	7293181	USE OF ONE VOLTAGE REGULATOR MODULE TO SUPPORT TWO PROCESSORS TO IMPROVE POWER AND THERMAL LIMITATIONS	EMC Corporation
10879383	7640408	ONLINE DATA MIGRATION	EMC Corporation
10879543	7574538	CONTIGUOUS I/O COMMAND QUEUING WITHIN A DATA STORAGE DEVICE	EMC Corporation
10879687	7711813	METHODS AND APPARATUS FOR DISPLAYING STORAGE RESOURCES	EMC Corporation
10879688	7730428	METHODS AND APPARATUS FOR DISPLAYING STORAGE RESOURCES	EMC Corporation
10880279	7434022	DISTRIBUTED WORKFLOW TECHNIQUES	EMC Corporation
10880431	7475363	METHODS AND APPARATUS FOR VIEWING NETWORK RESOURCES	EMC Corporation
10881131	8051260	DETERMINING ENVIRONMENTAL AVAILABILITY IN A STORAGE SUBSYSTEM	EMC Corporation
10881331	7353358	SYSTEM AND METHODS FOR REPORTING STORAGE UTILIZATION	EMC Corporation
10881332	7836448	SYSTEM AND METHODS FOR TASK MANAGEMENT	EMC Corporation
10881530	7281097	METHOD OF CONTROLLING THE PERFORMANCE OF A DATA STORAGE SYSTEM	EMC Corporation
10881553	7062594	ROOT COMPLEX CONNECTION SYSTEM	EMC Corporation
10881558	8677086	SYSTEM FOR CACHING DATA	EMC Corporation
10881562	8688934	METHOD FOR CACHING DATA	EMC Corporation
10881588	7155821	TECHNIQUES FOR MANUFACTURING A CIRCUIT BOARD HAVING A COUNTERSUNK VIA	EMC Corporation
10881705	8037072	SYSTEM AND METHOD FOR GENERATING CHARGE INFORMATION FOR USERS OF A DATA STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
10881880	7266652	SYSTEM AND METHOD FOR MANAGING DATA CONSISTENCY BETWEEN DIFFERENT DATA VOLUMES ON ONE OR MORE DATA STORAGE SYSTEMS IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10882651	7308529	EFFICIENT MOUNTING AND DISMOUNTING OF STORAGE MEDIA	EMC Corporation
10882843	7546428	COMPUTER ARCHITECTURE FOR MANAGING REPLICATION OF DATA IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10883017	7076327	SIMULTANEOUS PROCESSING OF MEDIA REQUESTS	EMC Corporation
10883451	7549027	SYSTEM AND METHOD FOR MANAGING REPLICATION OF DATA IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10883624	8561076	PRIORITIZATION AND QUEUING OF MEDIA REQUESTS	EMC Corporation
10884345	7499531	METHOD AND SYSTEM FOR INFORMATION LIFECYCLE MANAGEMENT	EMC Corporation
10884453	8103873	METHOD AND SYSTEM FOR PROCESSING AUDITORY COMMUNICATIONS	EMC Corporation
10884473	7457396	AUTOMATED CALL MANAGEMENT	EMC Corporation
10884477	7330536	MESSAGE INDEXING AND ARCHIVING	EMC Corporation
10886509	7000143	SYSTEM AND METHOD FOR DATA PROTECTION WITH MULTIDIMENSIONAL PARITY	EMC Corporation
10893839	7930550	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
10894450	7415731	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
10903898	7461399	PIN RECOVERY IN A SMART CARD	EMC Corporation
10905389	7337250	LOW LATENCY DATA TRANSMISSION METHOD AND SYSTEM	EMC Corporation
10905391	8270322	METHOD AND SYSTEM FOR ARBITRATING DATA TRANSMISSIONS	EMC Corporation
10905393	7400672	METHOD AND SYSTEM FOR DETECTING TRANSMITTER ERRORS	EMC Corporation
10909633	7376134	PRIVILEGED NETWORK ROUTING	EMC Corporation
10910076	7478022	COMPONENT EMULATION DEVICE AND METHOD OF DESIGN	EMC Corporation
10910985	7539813	METHODS AND APPARATUS FOR SEGREGATING A CONTENT ADDRESSABLE COMPUTER SYSTEM	EMC Corporation
10911330	8069269	METHODS AND APPARATUS FOR ACCESSING CONTENT IN A VIRTUAL POOL ON A CONTENT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
10911365	7552282	METHOD, COMPUTER READABLE MEDIUM, AND DATA STORAGE SYSTEM FOR SELECTIVE DATA REPLICATION OF CACHED DATA	EMC Corporation
10915189	7298243	RADIO FREQUENCY IDENTIFICATION SYSTEM WITH PRIVACY POLICY IMPLEMENTATION BASED ON DEVICE CLASSIFICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10917616	7292969	METHOD AND SYSTEM FOR SIMULATING PERFORMANCE ON ONE OR MORE DATA STORAGE SYSTEMS	EMC Corporation
10917737	7382824	METHOD AND APPARATUS FOR ACCURATE MODELING OF MULTI-DOMAIN CLOCK INTERFACES	EMC Corporation
10917753	7392360	METHOD AND SYSTEM FOR CAPACITY PLANNING AND CONFIGURING ONE OR MORE DATA STORAGE SYSTEMS	EMC Corporation
10918012	7483968	SYSTEM AND METHOD FOR CONFIGURING RESOURCE GROUPS	EMC Corporation
10918161	7383430	SYSTEM AND METHOD FOR VALIDATING RESOURCE GROUPS	EMC Corporation
10918578	7398471	SYSTEM AND METHOD FOR THE ADMINISTRATION OF RESOURCE GROUPS	EMC Corporation
10918805	7321893	SYSTEM AND METHOD FOR THE CONFIGURATION OF RESOURCES IN RESOURCE GROUPS	EMC Corporation
10925379	7730237	FLOW CONTROL MECHANISM	EMC Corporation
10931322	7210053	SYSTEMS AND METHODS FOR ASSIGNING TASKS TO DERIVED TIMERS OF VARIOUS RESOLUTIONS IN REAL-TIME SYSTEMS TO MAXIMIZE TIMER USAGE	EMC Corporation
10931325	7617365	SYSTEMS AND METHODS TO AVOID DEADLOCK AND GUARANTEE MIRROR CONSISTENCY DURING ONLINE MIRROR SYNCHRONIZATION AND VERIFICATION	EMC Corporation
10931681	8209185	INTERFACE FOR MANAGEMENT OF AUDITORY COMMUNICATIONS	EMC Corporation
10931794	7516214	RULES ENGINE FOR MANAGING VIRTUAL LOGICAL UNITS IN A STORAGE NETWORK	EMC Corporation
10931951	7072787	METHOD FOR ANALYZING DATA STORAGE SYSTEM TEST DATA	EMC Corporation
10932365	7373472	STORAGE SWITCH ASYNCHRONOUS REPLICATION	EMC Corporation
10934874	7165196	METHOD FOR TESTING SERIALIZERS/DE-SERIALIZERS	EMC Corporation
10935551	7346799	SYSTEMS AND METHODS FOR RECOVERING AND BACKING UP DATA	EMC Corporation
10935552	8645496	SYSTEMS AND METHODS FOR BACKING UP DATA	EMC Corporation
10936439	7095829	DATA MESSAGE MIRRORING AND REDIRECTION	EMC Corporation
10936442	7725098	DATA MESSAGE PROCESSING	EMC Corporation
10936443	7450937	MIRRORED DATA MESSAGE PROCESSING	EMC Corporation
10938422	8966276	SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
10938848	8572391	SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
10940408	7631144	WRITE LATENCY EFFICIENT STORAGE SYSTEM	EMC Corporation
10941671	7493458	TWO-PHASE SNAP COPY	EMC Corporation
10942174	7689633	NETWORK FILE SYSTEM-BASED DATA STORAGE SYSTEM	EMC Corporation
10943090	8631038	MANAGING DIGITAL IDENTITY INFORMATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10945653	8166005	PATHNAME CACHING AND PROTECTION OF THE ROOT DIRECTORY IN A NESTED MULTILAYER DIRECTORY STRUCTURE	EMC Corporation
10945654	7315926	LOCK MANAGEMENT FOR CONCURRENT ACCESS TO A SINGLE FILE FROM MULTIPLE DATA MOVER COMPUTERS	EMC Corporation
10945677	7529724	SERVICING WORK REQUESTS BETWEEN UNITS OF A STORAGE DEVICE	EMC Corporation
10945831	7353908	METHOD AND SYSTEM FOR ATTENUATING NOISE FROM A CABINET HOUSING COMPUTER EQUIPMENT	EMC Corporation
10946148	8122201	BACKUP WORK REQUEST PROCESSING BY ACCESSING A WORK REQUEST OF A DATA RECORD STORED IN GLOBAL MEMORY	EMC Corporation
10947063	7454437	METHODS AND APPARATUS FOR NAMING RESOURCES	EMC Corporation
10948270	7203782	QUEUEING METHOD SUPPORTING MULTIPLE CLIENT ACCESSES SIMULTANEOUSLY	EMC Corporation
10948514	7565581	ERROR HANDLING POLICY	EMC Corporation
10948620	7653915	N X M SNAPSHOT PLATFORM	EMC Corporation
10949415	7441023	METHOD AND APPARATUS FOR MODELING AND ANALYZING MPLS AND VIRTUAL PRIVATE NETWORKS	EMC Corporation
10949539	7516492	INFERRING DOCUMENT AND CONTENT SENSITIVITY FROM PUBLIC ACCOUNT ACCESSIBILITY	EMC Corporation
10949545	7523301	INFERRING CONTENT SENSITIVITY FROM PARTIAL CONTENT MATCHING	EMC Corporation
10949552	7954151	PARTIAL DOCUMENT CONTENT MATCHING USING SECTIONAL ANALYSIS	EMC Corporation
10949589	7720003	MODEL-BASED METHOD AND APPARATUS FOR DETERMINING MPLS NETWORK PROPERTIES	EMC Corporation
10949852	7716315	ENCLOSURE CONFIGURABLE TO PERFORM IN-BAND OR OUT-OF-BAND ENCLOSURE MANAGEMENT	EMC Corporation
10950150	7783778	MODEL-BASED MODEL-BASED METHOD AND APPARATUS FOR DETERMINING VIRTUAL PRIVATE NETWORK TOPOLOGIES	EMC Corporation
10950950	7305572	DISK DRIVE INPUT SEQUENCING FOR STAGGERED DRIVE SPIN-UP	EMC Corporation
10950951	7155552	APPARATUS AND METHOD FOR HIGHLY AVAILABLE MODULE INSERTION	EMC Corporation
10952320	7698424	TECHNIQUES FOR PRESENTING MULTIPLE DATA STORAGE ARRAYS TO ISCSI CLIENTS AS A SINGLE AGGREGATED NETWORK ARRAY	EMC Corporation
10953156	7423859	SYSTEM FOR PROTECTING COMPUTER EQUIPMENT FROM LIGHTNING VOLTAGE SURGES	EMC Corporation
10953541	8307174	SYSTEM AND METHOD FOR MANAGING SESSIONS AND REALLOCATING MEMORY RESOURCES USED FOR REPLICATION OF DATA IN A DATA STORAGE ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
10953639	7509465	SYSTEM AND METHOD FOR MANAGING MEMORY OR SESSION RESOURCES USED FOR MOVEMENT OF DATA BEING COPIED IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10953830	7299332	SYSTEM AND METHOD FOR MANAGING SESSIONS AND ALLOCATING MEMORY RESOURCES USED FOR REPLICATION OF DATA IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10954015	7315807	SYSTEM AND METHODS FOR STORAGE AREA NETWORK SIMULATION	EMC Corporation
10954915	7260689	METHODS AND APPARATUS FOR DETECTING USE OF COMMON RESOURCES	EMC Corporation
10954991	7546323	SYSTEM AND METHODS FOR MANAGING BACKUP STATUS REPORTS	EMC Corporation
10954992	7934018	METHODS AND APPARATUS FOR SYNCHRONIZING CONFIGURATION DATA	EMC Corporation
10955033	7246187	METHOD AND APPARATUS FOR CONTROLLING EXCLUSIVE ACCESS TO A SHARED RESOURCE IN A DATA STORAGE SYSTEM	EMC Corporation
10955136	8082397	PRIVATE SLOT	EMC Corporation
10955142	8185708	HOST IMPLEMENTATION OF TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
10955354	7263569	METHOD AND SYSTEM FOR DISTRIBUTING POWER IN A COMPUTER SYSTEM	EMC Corporation
10955355	7424554	METHOD OF AND SYSTEM FOR CHANGING THE ADDRESS OF A DISK ARRAY ENCLOSURE	EMC Corporation
10955470	8078813	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
10955588	7499834	SYSTEM AND METHODS FOR REPORTING DEVICE ALLOCATION	EMC Corporation
10955805	8918677	METHODS AND APPARATUS FOR PERFORMING DATA VALIDATION IN A NETWORK MANAGEMENT APPLICATION	EMC Corporation
10955964	7478018	SYSTEM AND METHODS FOR NETWORK CALL LOAD SIMULATION	EMC Corporation
10956482	7801922	FILE INDEX PROCESSING	EMC Corporation
10956484	7685129	DYNAMIC DATA SET MIGRATION	EMC Corporation
10956493	7114033	HANDLING DATA WRITES COPIED FROM A REMOTE DATA STORAGE DEVICE	EMC Corporation
10956814	8626514	INTERFACE FOR MANAGEMENT OF MULTIPLE AUDITORY COMMUNICATIONS	EMC Corporation
10956822	7239241	METHOD AND SYSTEM FOR INVENTORY CONTROL	EMC Corporation
10956833	7245221	INVENTORY CONTROL	EMC Corporation
10957069	7716262	INDEX PROCESSING	EMC Corporation
10960447	8135861	BACKUP PROXY	EMC Corporation
10962031	7930649	METHOD AND SYSTEM FOR SHARING AND MANAGING CONTEXT INFORMATION	EMC Corporation
10966873	9329905	METHOD AND APPARATUS FOR CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
10971892	8046560	SERIAL NUMBER BASED STORAGE DEVICE ALLOCATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10978025	7418619	BACKUP AND RESTORE OPERATIONS OF INTERDEPENDENT SYSTEM COMPONENTS	EMC Corporation
10978505	7260692	METHODS AND APPARATUS FOR ACCESSING TRACE DATA	EMC Corporation
10981885	7634518	METHOD AND APPARATUS FOR MANAGING AND ARCHIVING PERFORMANCE INFORMATION RELATING TO STORAGE SYSTEM	EMC Corporation
10982707	7949682	METHOD FOR PROVIDING A FLAT VIEW OF A HIERARCHICAL NAMESPACE WITHOUT REQUIRING UNIQUE LEAF NAMES	EMC Corporation
10984678	8161013	IMPLEMENTING APPLICATION SPECIFIC MANAGEMENT POLICIES ON A CONTENT ADDRESSED STORAGE DEVICE	EMC Corporation
10984686	7444464	CONTENT ADDRESSED STORAGE DEVICE CONFIGURED TO MAINTAIN CONTENT ADDRESS MAPPING	EMC Corporation
10985389	8626719	METHOD AND SYSTEM TO PROVIDE FILES TO A CLIENT COMPUTER	EMC Corporation
10995810	7409470	DETERMINING CONFIGURATION DATA IN CONNECTION WITH DYNAMIC RDF	EMC Corporation
10996997		MICRO-PAYMENT SCHEME ENCOURAGING COLLABORATION IN MULTI-HOP CELLULAR NETWORKS	EMC Corporation
10997580	7716684	SOFTWARE CONFIGURATION METHODS AND COMMON PRESENTATION LAYER	EMC Corporation
10998458	7558856	SYSTEM AND METHOD FOR INTELLIGENT, GLOBALLY DISTRIBUTED NETWORK STORAGE	EMC Corporation
10998491	7363453	METHOD AND APPARATUS FOR IMPROVING STORAGE DEVICE PERFORMANCE BY SELECTIVE VOLUME SWAPPING BASED ON HOT SPOT ANALYSIS	EMC Corporation
10999820	7734051	KEY DISTRIBUTION	EMC Corporation
11/034192	7003433	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
11/134479	8781975	SYSTEM AND METHOD OF FRAUD REDUCTION	EMC Corporation
11/536157	7725669	BACKUP AND RESTORE OPERATIONS USING COHERENCY GROUPS FOR ISB PROTOCOL SYSTEMS	EMC Corporation
11/769747	7631128	PROTOCOL CONTROLLER FOR A DATA STORAGE SYSTEM	EMC Corporation
11/774857	9280871	GAMING SYSTEMS WITH AUTHENTICATION TOKEN SUPPORT	EMC Corporation
11/840629	8494959	PAYMENT CARD WITH DYNAMIC ACCOUNT NUMBER	EMC Corporation
11/845163	7828004	METHOD AND DEVICE FOR STORING CHEMICAL PRODUCTS IN A CONTAINER	EMC Corporation
11/965254	9350595	SYSTEM AND METHOD FOR SERIALIZING AND DESERIALIZING DATA OBJECTS INTO A SINGLE BINARY STREAM	EMC Corporation
11001201	9268780	CONTENT-DRIVEN INFORMATION LIFECYCLE MANAGEMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
11001229	7359927	METHOD FOR PERFORMING PERIODIC REPLICATION OF DATA ON A REMOTE STORAGE SYSTEM	EMC Corporation
11001448	7478026	APPLICATION PROGRAMMING INTERFACE SIMULATOR FOR A DATA STORAGE SYSTEM	EMC Corporation
11001489	7620720	METHODS AND APPARATUS FOR DEALLOCATION OF RESOURCES	EMC Corporation
11002543	7475285	METHOD AND APPARATUS FOR PROVIDING HOST RESOURCES FOR AN ELECTRONIC COMMERCE SITE	EMC Corporation
11006472	7529181	METHOD AND APPARATUS FOR ADAPTIVE MONITORING AND MANAGEMENT OF DISTRIBUTED SYSTEMS	EMC Corporation
11008861	7123485	TECHNIQUES FOR MOVING A POWER SUPPLY WITHIN AN ELECTRONIC CABINET	EMC Corporation
11011177	8996821	METHODS AND SYSTEMS FOR PROVIDING RESOURCE SHARING THROUGH FILE ISOMORPHISM DESCRIPTOR	EMC Corporation
11011345	7676587	DISTRIBUTED IP TRUNKING AND SERVER CLUSTERING FOR SHARING OF AN IP SERVER ADDRESS AMONG IP SERVERS	EMC Corporation
11014338	7707331	PATH DETERMINATION USING PREFERRED PATHS OR RANDOMLY SELECTING SOURCE AND TARGET PORTS	EMC Corporation
11014405	7743171	FORMATTING AND INITIALIZATION OF DEVICE MIRRORS USING INITIALIZATION INDICATORS	EMC Corporation
11014597	7634595	METHOD FOR SUSPENDING A DISCOVERY PROCESS, SAVING THE STATE OF THE DISCOVERY PROCESS, AND RESUMING THE DISCOVERY PROCESS DURING A DISTRIBUTED COPY OPERATION	EMC Corporation
11015219	7308670	SYSTEM AND METHOD FOR DESIGNING ELECTRICAL TRACE LENGTHS ON PRINTED CIRCUIT BOARDS BETWEEN IMPEDANCE DISCONTINUITIES	EMC Corporation
11017244	7424785	LABEL CASSETTE FOR AN ELECTRONICS ENCLOSURE	EMC Corporation
11017292	7398431	SYSTEM AND METHOD OF DYNAMICALLY SETTING A FAULT THRESHOLD FOR AN OPERATIONAL MODULE	EMC Corporation
11017307	7386772	TEST MODULE FOR TESTING OF ELECTRONIC SYSTEMS	EMC Corporation
11017308	7238030	MULTI-FUNCTION EXPANSION SLOTS FOR A STORAGE SYSTEM	EMC Corporation
11017554	7343467	METHOD TO PERFORM PARALLEL DATA MIGRATION IN A CLUSTERED STORAGE ENVIRONMENT	EMC Corporation
11019483	7095578	DETECTION OF FLY HEIGHT CHANGE IN A DISK DRIVE USING HEAD DRAG	EMC Corporation
11019696	7746875	SYSTEM AND METHOD FOR PROTECTING AND SHARING DATA ACROSS A NETWORK	EMC Corporation

Application Number	Registration Number	Title	Owner
11019699	7275107	SYSTEM AND METHOD FOR DETERMINING A WORLD WIDE NAME FOR USE WITH A HOST FOR ENABLING COMMUNICATION WITH A DATA STORAGE SYSTEM WITHOUT REQUIRING THAT THE HOST AND DATA STORAGE SYSTEM BE IN COMMUNICATION DURING THE DETERMINATION	EMC Corporation
11019700		[REDACTED]	EMC Corporation
11020722	7133795	TECHNIQUES FOR TESTING AN ELECTRONIC SYSTEM USING IN-LINE SIGNAL DISTORTION	EMC Corporation
11020805	7222983	ELECTRONIC SYSTEM HAVING FRONT PANEL ASSEMBLY WITH REFLECTIVE CAPABILITY	EMC Corporation
11021012	7979665	METHOD AND APPARATUS FOR PROCESSING ACCESS REQUESTS IN A COMPUTER SYSTEM	EMC Corporation
11021107	7881946	METHODS AND APPARATUS FOR GUIDING A USER THROUGH A SAN MANAGEMENT PROCESS	EMC Corporation
11021355	8301739	STORAGE SYSTEM INITIALIZATION UTILITY	EMC Corporation
11021378	7376681	METHODS AND APPARATUS FOR ACCESSING INFORMATION IN A HIERARCHICAL FILE SYSTEM	EMC Corporation
11021565	7478107	METHODS AND APPARATUS FACILITATING MANAGEMENT OF A SAN	EMC Corporation
11021892	7366836	SOFTWARE SYSTEM FOR PROVIDING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
11022211	7406633	ARCHITECTURE FOR HANDLING ERRORS IN ACCORDANCE WITH A RISK SCORE FACTOR	EMC Corporation
11022509	7262972	ELECTRONIC SYSTEM HAVING SPACE-EFFICIENT FRONT PANEL ASSEMBLY	EMC Corporation
11022512	7393193	TECHNIQUES FOR MAKING A METALLIC PRODUCT UTILIZING ELECTRIC CURRENT IN A CONSOLIDATION PROCESS	EMC Corporation
11022530	7401266	SYSTEM AND METHOD FOR HANDLING ERRORS IN ACCORDANCE WITH A RISK SCORE FACTOR	EMC Corporation
11022998	7729239	PACKET SWITCHING NETWORK END POINT CONTROLLER	EMC Corporation
11022999	7211767	TECHNIQUES FOR TREATING A SURFACE CRACK ON A COMPONENT	EMC Corporation
11023000	7313656	PRE-FETCH PREDICTION METHOD FOR DISK DRIVES	EMC Corporation
11023103	7302821	TECHNIQUES FOR MANUFACTURING A PRODUCT USING ELECTRIC CURRENT DURING PLASTIC DEFORMATION OF MATERIAL	EMC Corporation
11023301	7774445	SYSTEM AND METHOD FOR MANAGING ZONING IN A STORAGE AREA NETWORK BY COMPARING ZONE SETS AND IDENTIFYING DIFFERENCES BETWEEN ZONE SETS	EMC Corporation
11023668	7457824	METHODS AND APPARATUS FOR MANAGING GROUPS OF RESOURCES	EMC Corporation
11023773	7284011	SYSTEM AND METHODS FOR PROCESSING A MULTIDIMENSIONAL DATABASE	EMC Corporation
11024231	7469284	METHODS AND APPARATUS FOR ASSIGNING MANAGEMENT RESPONSIBILITIES TO MULTIPLE AGENTS	EMC Corporation

Application Number	Registration Number	Title	Owner
11025580	8190715	SYSTEM AND METHODS FOR REMOTE AGENT INSTALLATION	EMC Corporation
11026736	7254673	PROVISION OF A VICTIM CACHE WITHIN A STORAGE CACHE HIERARCHY	EMC Corporation
11027505	7293135	INVERTIBLE DISK DRIVE CONNECTION SCHEME	EMC Corporation
11027997	8180742	POLICY BASED INFORMATION MANAGEMENT	EMC Corporation
11028080	8180743	INFORMATION MANAGEMENT	EMC Corporation
11028089	8229904	STORAGE POOLS FOR INFORMATION MANAGEMENT	EMC Corporation
11034613	7428621	METHODS AND APPARATUS FOR STORING A REFLECTION ON A STORAGE SYSTEM	EMC Corporation
11034732	7698516	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
11034737	7281084	METHOD AND APPARATUS FOR MODIFYING A RETENTION PERIOD	EMC Corporation
11037932	7437515	DATA STRUCTURE FOR WRITE PENDING	EMC Corporation
11049817	7392361	GENERIC REALLOCATION FUNCTION FOR HEAP RECONSTITUTION IN A MULTI-PROCESSOR SHARED MEMORY ENVIRONMENT	EMC Corporation
11050549	7730321	SYSTEM AND METHOD FOR AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
11052395	7624167	METHOD AND APPARATUS FOR ARRANGING DISTRIBUTED SYSTEM TOPOLOGY AMONG A PLURALITY OF NETWORK MANAGERS	EMC Corporation
11054331	7568156	LANGUAGE RENDERING	EMC Corporation
11054577	7698406	METHOD AND SYSTEM FOR IDENTIFYING AND CLASSIFYING NETWORK-BASED APPLICATIONS	EMC Corporation
11054578	7761527	METHOD AND APPARATUS FOR DISCOVERING NETWORK BASED DISTRIBUTED APPLICATIONS	EMC Corporation
11059885	7672303	ARBITRATION METHOD AND SYSTEM	EMC Corporation
11059961	7853716	DATA STORAGE SYSTEM HAVING PACKET SWITCHING NETWORK WITH LATENCY ARBITRATION	EMC Corporation
11069373	7000086	VIRTUAL ORDERED WRITES	EMC Corporation
11070516	7295398	HIGH SPEED CLEANUP OF REMOVABLE STORAGE DEVICE	EMC Corporation
11072128	7310716	TECHNIQUES FOR PRODUCING A CONSISTENT COPY OF SOURCE DATA AT A TARGET LOCATION	EMC Corporation
11072141	8005795	TECHNIQUES FOR RECORDING FILE OPERATIONS AND CONSISTENCY POINTS FOR PRODUCING A CONSISTENT COPY	EMC Corporation
11072612	7177994	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
11076618	7162559	SYSTEM FOR CONTROLLING INTERRUPTS BETWEEN INPUT/OUTPUT DEVICES AND CENTRAL PROCESSING UNITS	EMC Corporation
11077932	7949739	METHOD AND APPARATUS FOR DETERMINING CAUSALITY MAPPING OF DISTRIBUTED SYSTEMS	EMC Corporation
11077933	7546609	METHOD AND APPARATUS FOR DETERMINING MONITORING LOCATIONS IN DISTRIBUTED SYSTEMS	EMC Corporation
11079560	7606804	SYSTEM AND METHOD FOR INFORMATION MANAGEMENT IN A DISTRIBUTED NETWORK	EMC Corporation

Application Number	Registration Number	Title	Owner
11080047	7210060	SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
11080229	7526514	SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
11081177	7703091	METHODS AND APPARATUS FOR INSTALLING AGENTS IN A MANAGED NETWORK	EMC Corporation
11083486	8812595	SCANNING A MESSAGE-LIST	EMC Corporation
11083571	7574555	MEMORY SYSTEM HAVING DAISY CHAINED MEMORY CONTROLLERS	EMC Corporation
11084065	8676862	INFORMATION MANAGEMENT	EMC Corporation
11084179	8260753	BACKUP INFORMATION MANAGEMENT	EMC Corporation
11084679		VERSATILE INFORMATION MANAGEMENT	EMC Corporation
11085898	8055724	SELECTION OF MIGRATION METHODS INCLUDING PARTIAL READ RESTORE IN DISTRIBUTED STORAGE MANAGEMENT	EMC Corporation
11085911	7546431	DISTRIBUTED OPEN WRITABLE SNAPSHOT COPY FACILITY USING FILE MIGRATION POLICIES	EMC Corporation
11087111	7281105	METHOD AND APPARATUS FOR SELECTING DATA STORAGE DEVICES FOR PARTICIPATING IN LOGICAL VOLUME EXCHANGE PROCESS BASED ON AGGREGATED WORKLOAD STATISTICS	EMC Corporation
11087113	7281106	METHOD AND APPARATUS FOR SELECTIVE VOLUME SWAPPING IN A DATA STORAGE DEVICE BASED ON MERGING MULTIPLE SETS OF CANDIDATE STORAGE DEVICES	EMC Corporation
11087114	7334092	METHOD AND APPARATUS FOR SCORING DATA STORAGE DEVICES FOR PARTICIPATING IN LOGICAL VOLUME EXCHANGE PROCESS	EMC Corporation
11088349	7562222	SYSTEM AND METHOD FOR AUTHENTICATING ENTITIES TO USERS	EMC Corporation
11089702	7457914	ASYNCHRONOUS EVENT NOTIFICATION	EMC Corporation
11089817	7121857	TOLERANCE-ABSORBING INTERCONNECT SYSTEM USING A SPRING-LOADED CONNECTOR	EMC Corporation
11090732	7097477	TECHNIQUES FOR CONTROLLING COUPLING BETWEEN A MOTHERBOARD AND A DAUGHTER CARD	EMC Corporation
11091910	7793160	SYSTEMS AND METHODS FOR TRACING ERRORS	EMC Corporation
11092006	7363520	TECHNIQUES FOR PROVIDING POWER TO A SET OF POWERABLE DEVICES	EMC Corporation
11092039	7362572	TECHNIQUES FOR REDUNDANT COMPUTING WITHIN A 1U FORM FACTOR WITH IMPROVED RESOURCE PARTITIONING AND MANAGEMENT	EMC Corporation
11092535	7486526	TECHNIQUES FOR REDUNDANT COMPUTING FROM WITHIN A 1U FORM FACTOR WITH IMPROVED SERVICEABILITY AND HIGH AVAILABILITY CHARACTERISTICS	EMC Corporation
11093019	7606815	NON-RECURSIVE PROCESSING OF HIERARCHICAL DATA	EMC Corporation
11093632	7945756	SYSTEM AND METHOD FOR MANAGING A DATA STORAGE SYSTEM BY CONTACTING A SINGLE PROCESSOR IN A DATA STORAGE SYSTEM HAVING MORE THAN ONE PROCESSOR	EMC Corporation
11094024	7173787	APPARATUS AND METHOD FOR CONTROLLING DISK DRIVE SPIN UP	EMC Corporation

Application Number	Registration Number	Title	Owner
11094026	8261066	SYSTEM AND METHOD FOR SECURE STORAGE, TRANSFER AND RETRIEVAL OF CONTENT ADDRESSABLE INFORMATION	EMC Corporation
11094050	7321948	HIGHLY AVAILABLE SYSTEM TEST MECHANISM	EMC Corporation
11094118	7277986	SECTOR-EDGE CACHE	EMC Corporation
11094494	7954098	SYSTEM AND METHODS FOR SAN AGENT INSTALLATION	EMC Corporation
11094637	7395198	TECHNIQUES FOR POWERING AN ELECTRONIC DEVICE WITH SIMULATED BACKUP POWER SUPPLY COMMUNICATIONS	EMC Corporation
11094649	8086569	ASYNCHRONOUS DETECTION OF LOCAL EVENT BASED POINT-IN-TIME STATE OF LOCAL-COPY IN THE REMOTE-COPY IN A DELTA-SET ASYNCHRONOUS REMOTE REPLICATION	EMC Corporation
11094772	7694007	METHODS AND APPARATUS FOR MANAGING REQUESTS	EMC Corporation
11094773	7640533	SYSTEM AND METHODS FOR DEFINING A SOFTWARE BUILD	EMC Corporation
11094817	7653712	METHODS AND APPARATUS FOR PROCESSING CONFIGURATION DATA	EMC Corporation
11095099	7219175	METHOD AND SYSTEM FOR IMPROVING THE LATENCY IN A DATA TRANSMISSION SYSTEM	EMC Corporation
11095406	7546309	METHODS AND APPARATUS FOR CREATING MIDDLEWARE INDEPENDENT SOFTWARE	EMC Corporation
11095420	7243177	METHOD AND SYSTEM FOR THROTTLING DATA PACKETS IN A DATA TRANSMISSION SYSTEM	EMC Corporation
11095421	7444350	METHOD AND APPARATUS FOR PROCESSING MANAGEMENT INFORMATION	EMC Corporation
11095885	7328318	SYSTEM AND METHOD FOR ATOMIC MULTI-VOLUME OPERATIONS	EMC Corporation
11095886	7334096	ARCHITECTURE AND APPARATUS FOR ATOMIC MULTI-VOLUME OPERATIONS	EMC Corporation
11095986	7516452	METHOD AND SYSTEM FOR MANAGING INSTALLATION OF SOFTWARE ON A COMPUTER SYSTEM PLATFORM	EMC Corporation
11096816	7707037	ARCHIVING OF SURVEILLANCE DATA	EMC Corporation
11096962	7444287	EFFICIENT MONITORING SYSTEM AND METHOD	EMC Corporation
11097887	8244542	VIDEO SURVEILLANCE	EMC Corporation
11104735	7275201	MEMORY SYSTEM	EMC Corporation
11107063	7392235	METHODS AND APPARATUS FOR RETRIEVAL OF CONTENT UNITS IN A TIME-BASED DIRECTORY STRUCTURE	EMC Corporation
11107194	7765191	METHODS AND APPARATUS FOR MANAGING THE REPLICATION OF CONTENT	EMC Corporation
11107995	7657579	TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
11112059	8132011	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
11112938	8751801	SYSTEM AND METHOD FOR AUTHENTICATING USERS USING TWO OR MORE FACTORS	EMC Corporation
11114761	7290330	COUPLING INVERTIBLE AND PLUGGABLE MODULE TO A CIRCUIT BOARD	EMC Corporation
11120602	7716642	TECHNIQUES FOR DETECTING CODING INCOMPATIBILITIES	EMC Corporation

Application Number	Registration Number	Title	Owner
11121213	8522086	METHOD AND APPARATUS FOR PROVIDING RELOCATION NOTIFICATION	EMC Corporation
11124776	7243046	SYSTEM AND METHOD FOR PREPARING TRACE DATA FOR ANALYSIS	EMC Corporation
11124875	7797585	SYSTEM AND METHOD FOR HANDLING TRACE DATA FOR ANALYSIS	EMC Corporation
11129023	7240116	DYNAMIC RDF GROUPS	EMC Corporation
11129858	7434093	DUAL CHANNEL RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SERVERS	EMC Corporation
11130042	7626939	METHOD AND APPARATUS FOR AUTOMATED TIME-BASED PEER-TO-PEER THRESHOLDING	EMC Corporation
11130046	7970945	METHOD AND APPARATUS FOR AUTOMATIC PEER-TO-PEER CONTENT COMPARISON	EMC Corporation
11134935	7444485	METHOD AND APPARATUS FOR DUPLICATING COMPUTER BACKUP DATA	EMC Corporation
11137749	7797675	CATEGORICAL APPROACH FOR IMPLEMENTING A SOFTWARE COMPONENT DEVELOPMENT ARCHITECTURE	EMC Corporation
11138065	7801859	TRACKING FILESYSTEM BACKUPS	EMC Corporation
11139013	8335768	SELECTING DATA IN BACKUP DATA SETS FOR GROOMING AND TRANSFERRING	EMC Corporation
11143272	7337289	METHOD AND APPARATUS FOR COMPUTING FILE STORAGE ELEMENTS FOR BACKUP AND RESTORE	EMC Corporation
11143813	7281086	DISK QUEUE MANAGEMENT FOR QUALITY OF SERVICE	EMC Corporation
11148477	7818735	SYSTEM AND METHOD FOR ENABLING ACCESS AND USE OF SOFTWARE INSTALLED ON A DATA STORAGE SYSTEM	EMC Corporation
11151619	7591022	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
11153678	8261336	SYSTEM AND METHOD FOR MAKING ACCESSIBLE A SET OF SERVICES TO USERS	EMC Corporation
11153932	7454561	METHOD FOR OPERATING DISK DRIVES IN A DATA STORAGE SYSTEM	EMC Corporation
11154234	8423728	PHYSICAL BASED SCHEDULER USING RUN COUNT AND SKIP COUNT VALUES	EMC Corporation
11154964	8301851	CONSECUTIVE SCHEDULING OF JOBS FOR A DEVICE USING RUN COUNT VALUES	EMC Corporation
11158591	7331619	LATCH-SPRING ASSEMBLY FOR ENCLOSURES	EMC Corporation
11158722	7809888	CONTENT-AWARE CACHING TECHNIQUES	EMC Corporation
11158769	7774763	TECHNIQUES FOR FORMING A MULTI-TASKING EXECUTABLE PROGRAM AND USING THE SAME	EMC Corporation
11158866	7849460	METHODS AND APPARATUS FOR MULTIPLE POINT IN TIME DATA ACCESS	EMC Corporation
11159279	8244811	METHOD AND APPARATUS FOR SEARCHING MESSAGING IDENTITIES	EMC Corporation
11159280	7908326	METHOD AND APPARATUS FOR MANAGING MESSAGING IDENTITIES	EMC Corporation
11159281	7899868	METHOD AND APPARATUS FOR DEFINING MESSAGING IDENTITIES	EMC Corporation

Application Number	Registration Number	Title	Owner
11165104	7805470	METHODS AND APPARATUS FOR MANAGING THE STORAGE OF CONTENT IN A FILE SYSTEM	EMC Corporation
11166579	7783883	METHOD AND APPARATUS FOR VALIDATING E-MAIL MESSAGES	EMC Corporation
11166822	7298167	POWER SUPPLY SYSTEM	EMC Corporation
11166934	7673285	SYSTEM AND METHODS FOR GENERATING A SOFTWARE COMPONENT INTERFACE	EMC Corporation
11166956	8281152	STORAGE DATA ENCRYPTION	EMC Corporation
11167704	7577866	TECHNIQUES FOR FAULT TOLERANT DATA STORAGE	EMC Corporation
11167884	7472210	MULTIPLEXING AND BYPASS CIRCUIT FOR INTERFACING EITHER SINGLE OR DUAL PORTED DRIVES TO MULTIPLE STORAGE PROCESSORS	EMC Corporation
11168136	7620671	DELEGATION OF METADATA MANAGEMENT IN A STORAGE SYSTEM BY LEASING OF FREE FILE SYSTEM BLOCKS FROM A FILE SYSTEM OWNER	EMC Corporation
11169418	7716185	CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
11169419	8024292	CREATION OF A SINGLE SNAPSHOT USING A SERVER JOB REQUEST	EMC Corporation
11169458	7577681	METHODS AND APPARATUS FOR MANAGING CONTENTS OF A DATABASE	EMC Corporation
11169460	7716498	POWER CONTROL IN A DATA STORAGE SYSTEM	EMC Corporation
11169463	8209354	TRANSACTION LIFECYCLE MANAGEMENT IN DISTRIBUTED MANAGEMENT SYSTEMS	EMC Corporation
11169464	7447709	METHODS AND APPARATUS FOR SYNCHRONIZING CONTENT	EMC Corporation
11169473	7447833	TECHNIQUES FOR PROVIDING COMMUNICATIONS IN A DATA STORAGE SYSTEM USING A SINGLE IC FOR BOTH STORAGE DEVICE COMMUNICATIONS AND PEER-TO-PEER COMMUNICATIONS	EMC Corporation
11169853	7549028	BACKUP AND RESTORE OPERATIONS USING A SINGLE SNAPSHOT DRIVEN BY A SERVER JOB REQUEST	EMC Corporation
11170015	7523278	BACKUP AND RESTORE OPERATIONS USING A SINGLE SNAPSHOT	EMC Corporation
11170026	7506336	SYSTEM AND METHODS FOR VERSION COMPATIBILITY CHECKING	EMC Corporation
11170027	8180846	METHOD AND APPARATUS FOR OBTAINING AGENT STATUS IN A NETWORK MANAGEMENT APPLICATION	EMC Corporation
11171841	8639864	METHOD AND SYSTEM FOR FACILITATING COMMUNICATION BETWEEN A HOST AND DOWNSTREAM DEVICES IN A DATA STORAGE SYSTEM	EMC Corporation
11171906	8646070	VERIFYING AUTHENTICITY IN DATA STORAGE MANAGEMENT SYSTEMS	EMC Corporation
11172378	7886345	PASSWORD-PROTECTION MODULE	EMC Corporation
11173174	8059805	ENHANCED SERVICES PROVIDED USING COMMUNICATION REDIRECTION AND PROCESSING	EMC Corporation
11173910	8161005	EFFICIENT INDEX PROCESSING	EMC Corporation

Application Number	Registration Number	Title	Owner
11173949	8605878	REDIRECTING AND MIRRORING OF TELEPHONIC COMMUNICATIONS	EMC Corporation
11174070	8156079	SYSTEM AND METHOD FOR INDEX PROCESSING	EMC Corporation
11174083	7966292	INDEX PROCESSING	EMC Corporation
11174288	8831194	TELEPHONIC COMMUNICATION REDIRECTION AND COMPLIANCE PROCESSING	EMC Corporation
11176784	7065467	METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
11183461	7174423	REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation
11186554	8239518	METHOD FOR DETECTING AND RESOLVING A PARTITION CONDITION IN A CLUSTER	EMC Corporation
11188220	7779296	STORING DATA REPLICAS REMOTELY	EMC Corporation
11189043	7747763	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK SERVICE	EMC Corporation
11191633	7750793	METHODS AND APPARATUS FOR RFID DEVICE AUTHENTICATION	EMC Corporation
11196928	7793112	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
11197126		[REDACTED]	EMC Corporation
11197854	7506157	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
11207588	7716171	SNAPSHOT INDEXING	EMC Corporation
11207596	9026512	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
11207606		SEARCHABLE BACKUPS	EMC Corporation
11208096		[REDACTED]	EMC Corporation
11208291	7293136	MANAGEMENT OF TWO-QUEUE REQUEST STRUCTURE FOR QUALITY OF SERVICE IN DISK STORAGE SYSTEMS	EMC Corporation
11210477	7530115	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
11211050	8195153	MOBILE ACCESS TO BACKUP AND RECOVERY SERVICES	EMC Corporation
11211234	7860016	METHOD AND APPARATUS FOR CONFIGURATION AND ANALYSIS OF NETWORK ROUTING PROTOCOLS	EMC Corporation
11211250	7912055	METHOD AND SYSTEM FOR CONFIGURATION AND ANALYSIS OF NETWORK MULTICAST ROUTING PROTOCOLS	EMC Corporation
11212898	7350041	METHODS AND APPARATUS FOR MANAGING THE STORAGE OF CONTENT	EMC Corporation
11213233	7320059	METHODS AND APPARATUS FOR DELETING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
11213565	7636704	METHODS AND APPARATUS FOR SCHEDULING AN ACTION ON A COMPUTER	EMC Corporation
11214549	7193809	METHOD OF COMPENSATING FOR MICROJOG ERROR DUE TO REPEATABLE RUN-OUT	EMC Corporation
11220780	7617216	METADATA OFFLOAD FOR A FILE SERVER CLUSTER	EMC Corporation
11224408	7430589	REMOTE DATA FACILITY OVER AN IP NETWORK	EMC Corporation

Application Number	Registration Number	Title	Owner
11224509	7577767	DATA STORAGE SYSTEM HAVING PLURAL STORAGE PROCESSORS IN A SINGLE CHASSIS	EMC Corporation
11229976	7673115	DATA OPERATION VALIDATION	EMC Corporation
11230706	7355417	TECHNIQUES FOR OBTAINING ELECTROMAGNETIC DATA FROM A CIRCUIT BOARD	EMC Corporation
11231705	7571387	METHODS AND APPARATUS FACILITATING MANAGEMENT OF A SAN	EMC Corporation
11231730	7434012	TECHNIQUES FOR MEDIA SCRUBBING	EMC Corporation
11233261	7603376	FILE AND FOLDER SCANNING METHOD AND APPARATUS	EMC Corporation
11233292	7668924	METHODS AND SYSTEM FOR INTEGRATING SAN SERVERS	EMC Corporation
11233643	7475076	METHOD AND APPARATUS FOR PROVIDING REMOTE ALERT REPORTING FOR MANAGED RESOURCES	EMC Corporation
11233687	7640264	SYSTEM AND METHODS FOR QUERYING A REPORT DATABASE	EMC Corporation
11233810	7721211	METHODS AND APPARATUS PROVIDING FILTERING IN A MANAGEMENT APPLICATION	EMC Corporation
11233811	7546312	SYSTEM AND METHODS FOR MODELING A REPORT QUERY DATABASE	EMC Corporation
11233838	7668877	SYSTEM AND METHODS FOR DEFINING A CANONICAL QUERY EXPRESSION	EMC Corporation
11233843	7783743	METHODS AND APPARATUS FOR PROCESSING ELECTRONIC MAIL-RELATED DATA	EMC Corporation
11234612	7454668	TECHNIQUES FOR DATA SIGNATURE AND PROTECTION AGAINST LOST WRITES	EMC Corporation
11237051	7363418	DATA STORAGE SYSTEM VOLUME MATRIX	EMC Corporation
11237628	7584338	REPLICATION OF DEDUPLICATED STORAGE SYSTEM	EMC Corporation
11238283	7405942	MODULE INSERTION/EXTRACTION DEVICE	EMC Corporation
11238284	7134902	POWER CORD RETAINER	EMC Corporation
11238350	7621460	DATA STORAGE SYSTEM HAVING COOLING FAN SPEED PROTECTION	EMC Corporation
11238352	7307832	CHASSIS COVER WITH AIR FLOW CONTROL FLAPS	EMC Corporation
11238475	7509535	SYSTEM AND METHOD FOR MANAGING FAILOVER IN A DATA STORAGE ENVIRONMENT	EMC Corporation
11238512	7370235	SYSTEM AND METHOD FOR MANAGING AND SCHEDULING RECOVERY AFTER A FAILURE IN A DATA STORAGE ENVIRONMENT	EMC Corporation
11238548	7574542	SAS EXPANSION TOPOLOGY FOR RAID DATA STORAGE INCLUDING MULTIPLEXERS AND SAS EXPANDERS FOR INTERFACING WITH SINGLE OR DUAL PORTS DRIVES	EMC Corporation
11238561	7401251	ARCHITECTURE FOR MANAGING FAILOVER AND RECOVERY AFTER FAILOVER IN A DATA STORAGE ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
11238563	7377800	RAID DATA STORAGE SYSTEM HAVING KEYED SAS EXPANSION CABLES	EMC Corporation
11238600	7627005	MULTIPLEXING SYSTEM	EMC Corporation
11238601	7624206	RAID DATA STORAGE SYSTEM WITH SAS EXPANSION	EMC Corporation
11238604	8072883	INTERNET SMALL COMPUTER SYSTEMS INTERFACE (ISCSI) DISTANCE ACCELERATION DEVICE	EMC Corporation
11239037	8086760	MANAGING COMMUNICATIONS CONNECTIONS WITH DATA STORAGE SYSTEMS	EMC Corporation
11239568	7549002	ENCLOSURE NUMBERING IN RAID DATA STORAGE SYSTEMS	EMC Corporation
11239776	7810094	DISTRIBUTED TASK SCHEDULING FOR SYMMETRIC MULTIPROCESSING ENVIRONMENTS	EMC Corporation
11239801	7571333	METHOD AND SYSTEM FOR AUTOMATICALLY SETTING THE OPERATING VOLTAGE AND SPEED OF DIPLEX COMMUNICATION IN A DATA STORAGE SYSTEM	EMC Corporation
11240003	7680905	METHODS AND SYSTEM FOR VIEWING SAN RESOURCES	EMC Corporation
11240164	7587483	SYSTEM AND METHOD FOR MANAGING COMPUTER NETWORKS	EMC Corporation
11241053	7805416	FILE SYSTEM QUERY AND METHOD OF USE	EMC Corporation
11241054	8135763	APPARATUS AND METHOD FOR MAINTAINING A FILE SYSTEM INDEX	EMC Corporation
11241132	7783615	APPARATUS AND METHOD FOR BUILDING A FILE SYSTEM INDEX	EMC Corporation
11241146	7536484	SYSTEM FOR SETTING THE OPERATING VOLTAGE OF DISK ARRAY ENCLOSURES IN A DATA STORAGE DEVICE	EMC Corporation
11241165	8072987	FULL ARRAY NON-DISRUPTIVE DATA MIGRATION	EMC Corporation
11241166	7386666	GLOBAL SPARING OF STORAGE CAPACITY ACROSS MULTIPLE STORAGE ARRAYS	EMC Corporation
11241167	7954034	METHOD OF AND SYSTEM FOR PROTECTING DATA DURING CONVERSION FROM AN ECC PROTECTION SCHEME TO A PARITY PROTECTION SCHEME	EMC Corporation
11241338	7464132	METHOD AND APPARATUS FOR REFERENCE MODEL CHANGE GENERATION IN MANAGED SYSTEMS	EMC Corporation
11242179	7627609	INDEX PROCESSING USING TRANSFORMED VALUES	EMC Corporation
11242218	7698325	INDEX PROCESSING FOR LEGACY SYSTEMS	EMC Corporation
11242514	7752211	ADAPTIVE INDEX PROCESSING	EMC Corporation
11244978	7451175	SYSTEM AND METHOD FOR MANAGING COMPUTER NETWORKS	EMC Corporation
11251618	7870103	TOLERATING AND REPORTING COLLISIONS IN CONTENT-DERIVED IDENTIFIERS OF DATA SEGMENTS USING SECONDARY IDENTIFIERS	EMC Corporation
11251627	7624335	VERIFYING A FILE IN A SYSTEM WITH DUPLICATE SEGMENT ELIMINATION USING SEGMENTION-INDEPENDENT CHECKSUMS	EMC Corporation
11254089	7558919	DYNAMIC CACHE PARTITIONING	EMC Corporation

Application Number	Registration Number	Title	Owner
11255337	7917474	SYSTEMS AND METHODS FOR ACCESSING AND UPDATING DISTRIBUTED DATA	EMC Corporation
11255346	7346720	SYSTEMS AND METHODS FOR MANAGING CONCURRENT ACCESS REQUESTS TO A SHARED RESOURCE	EMC Corporation
11255817	7788303	SYSTEMS AND METHODS FOR DISTRIBUTED SYSTEM SCANNING	EMC Corporation
11255818	7797283	SYSTEMS AND METHODS FOR MAINTAINING DISTRIBUTED DATA	EMC Corporation
11256317	7386675	SYSTEMS AND METHODS FOR USING EXCITEMENT VALUES TO PRE3DICT FUTURE ACCESS TO RESOURCES	EMC Corporation
11256410	7551572	SYSTEMS AND METHODS FOR PROVIDING VARIABLE PROTECTION	EMC Corporation
11262306	8055711	NON-BLOCKING COMMIT PROTOCOL SYSTEMS AND METHODS	EMC Corporation
11262308	8051425	DISTRIBUTED SYSTEM WITH ASYNCHRONOUS EXECUTION SYSTEMS AND METHODS	EMC Corporation
11262314	8238350	MESSAGE BATCHING WITH CHECKPOINTS SYSTEMS AND METHODS	EMC Corporation
11265510	7502467	SYSTEM AND METHOD FOR AUTHENTICATION SEED DISTRIBUTION	EMC Corporation
11265539	7739733	STORING DIGITAL SECRETS IN A VAULT	EMC Corporation
11273279	7634601	METHOD AND APPARATUS FOR PROVIDING CONTINUOUS COMMUNICATION BETWEEN COMPUTERS	EMC Corporation
11276929	7358752	SIGNAL LAUNCH FOR HIGH SPEED DIFFERENTIAL SIGNALS	EMC Corporation
11277790		COMBINED CONTENT INDEXING AND DATA REDUCTION	EMC Corporation
11277958	7600070	DISK DRIVE PACKAGING ENCLOSURE	EMC Corporation
11278152	7821922	FAULT ISOLATION AND HANDLING IN A PACKET SWITCHING NETWORK	EMC Corporation
11278157	8554943	METHOD AND SYSTEM FOR REDUCING PACKET LATENCY IN NETWORKS WITH BOTH LOW LATENCY AND HIGH BANDWIDTHS REQUIREMENTS	EMC Corporation
11281157	7770228	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
11283447	7187547	TECHNIQUES FOR COOLING A SET OF CIRCUIT BOARDS WITHIN A RACK MOUNT CABINET	EMC Corporation
11286168	7539824	POOLING AND PROVISIONING STORAGE RESOURCES IN A STORAGE NETWORK	EMC Corporation
11287106	7343429	SCALABLE COMMUNICATION WITHIN A DISTRIBUTED SYSTEM USING DYNAMIC COMMUNICATION TREES	EMC Corporation
11288578	7765187	REPLICATION OF A CONSISTENCY GROUP OF DATA STORAGE OBJECTS FROM SERVERS IN A DATA NETWORK	EMC Corporation
11290971	7647624	TECHNIQUES FOR PRESERVING AND MANAGING IDENTITIES IN AN AUDIT LOG	EMC Corporation

Application Number	Registration Number	Title	Owner
11301975	8549252	FILE BASED VOLUMES AND FILE SYSTEMS	EMC Corporation
11303602	7409667	TECHNIQUES FOR MODELING A CIRCUIT BOARD STRUCTURE	EMC Corporation
11303752	8060922	CONSUMER INTERNET AUTHENTICATION DEVICE	EMC Corporation
11305308	7454579	MANAGING ACCESS TO SHARED RESOURCES	EMC Corporation
11311565	7697391	MASSIVELY MULTI-LEVEL OPTICAL DATA STORAGE USING SUBWAVELENGTH SIZED NANO-GRATING STRUCTURES	EMC Corporation
11318675	7500134	VIRTUAL ARRAY FAILOVER	EMC Corporation
11318719	7697515	ON-LINE DATA MIGRATION OF A LOGICAL/VIRTUAL STORAGE ARRAY	EMC Corporation
11318734	7697554	ON-LINE DATA MIGRATION OF A LOGICAL/VIRTUAL STORAGE ARRAY BY REPLACING VIRTUAL NAMES	EMC Corporation
11318756	8107467	FULL ARRAY NON-DISRUPTIVE FAILOVER	EMC Corporation
11318757	9348530	PRESENTATION OF VIRTUAL ARRAYS USING N-PORT ID VIRTUALIZATION	EMC Corporation
11321066	7693889	AUTOMATED BACKUP AND RECOVERY FOR CONTENT REPOSITORY	EMC Corporation
11322174	8832705	ORDERED MUTUAL EXCLUSION	EMC Corporation
11323483	7653624	FILE SYSTEM CHANGE TRACKING	EMC Corporation
11324017	7974952	TRACKING FILE SYSTEM CHANGES FOR BACKUP	EMC Corporation
11324351	7581044	DATA TRANSMISSION METHOD AND SYSTEM USING CREDITS, A PLURALITY OF BUFFERS AND A PLURALITY OF CREDIT BUSES	EMC Corporation
11324352	7675929	METHOD AND SYSTEM FOR MANAGING DATA FLOW IN A DATA TRANSMISSION SYSTEM	EMC Corporation
11324354	7388749	SUPPORT CARRIER FOR A DISK-DRIVE WITH INTEGRATED HEAT-SINK	EMC Corporation
11324418	7634617	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR OPTIMIZED COPYING OF LOGICAL UNITS (LUNS) IN A REDUNDANT ARRAY OF INEXPENSIVE DISKS (RAID) ENVIRONMENT USING BUFFERS THAT ARE LARGER THAN LUN DELTA MAP CHUNKS	EMC Corporation
11324452	7441078	MANAGING DISK DRIVE STATUS	EMC Corporation
11324461	7627873	SYSTEM AND METHOD FOR HANDLING DEVICE OBJECTS IN A DATA STORAGE ENVIRONMENT FOR MAINTAINING CONSISTENCY DURING DATA REPLICATION	EMC Corporation
11324530	7784049	SYSTEM AND METHOD FOR PROVIDING A PLURALITY OF VIRTUAL COMPUTING ENVIRONMENTS THAT EFFICIENTLY USE DATA IN THE VIRTUAL ENVIRONMENTS	EMC Corporation
11324553	7574560	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR DYNAMIC MAPPING OF LOGICAL UNITS IN A REDUNDANT ARRAY OF INEXPENSIVE DISKS (RAID) ENVIRONMENT	EMC Corporation
11324593	7574445	GENERATING A SELECTION REPRESENTATION FOR ITEMS IN TREE STRUCTURES	EMC Corporation

Application Number	Registration Number	Title	Owner
11324642	8095542	METHODS AND APPARATUS FOR ALLOWING ACCESS TO CONTENT	EMC Corporation
11324646	7539838	METHODS AND APPARATUS FOR INCREASING THE STORAGE CAPACITY OF A STORAGE SYSTEM	EMC Corporation
11324666	7325084	MESSAGES SIGNALING INTERRUPT (MSI) PROCESSING SYSTEM	EMC Corporation
11324667	7398343	INTERRUPT PROCESSING SYSTEM	EMC Corporation
11324695	7328296	INTERRUPT PROCESSING SYSTEM	EMC Corporation
11324721	7634618	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR OPTIMIZED COPYING OF LOGICAL UNITS (LUNS) IN A REDUNDANT ARRAY OF INEXPENSIVE DISKS (RAID) ENVIRONMENT USING BUFFERS THAT ARE SMALLER THAN LUN DELTA MAP CHUNKS	EMC Corporation
11324726	7958101	METHODS AND APPARATUS FOR MOUNTING A FILE SYSTEM	EMC Corporation
11324728	7529972	METHODS AND APPARATUS FOR RECONFIGURING A STORAGE SYSTEM	EMC Corporation
11324740	7664125	INDICATION FORWARDING IN A DISTRIBUTED ENVIRONMENT	EMC Corporation
11324750	8015235	GROUP SERVICES	EMC Corporation
11324751	8631114	INFORMATION ROLL-UP IN DISTRIBUTED ENVIRONMENTS	EMC Corporation
11324766	8046545	CONTINUOUS BACKUP	EMC Corporation
11324785	8892750	TRANSPARENT HBA REPLACEMENT	EMC Corporation
11324786	8185639	SERVER IDENTIFICATION IN STORAGE NETWORKS	EMC Corporation
11324839	7609651	METHODS AND SYSTEMS FOR MAINTAINING CONFIGURATION INFORMATION	EMC Corporation
11324841	8032621	METHODS AND APPARATUS PROVIDING ROOT CAUSE ANALYSIS ON ALERTS	EMC Corporation
11324842	7895520	METHODS AND APPARATUS FOR MANAGING SCHEDULED ACTIVITIES IN A STORAGE AREA NETWORK	EMC Corporation
11324843	7596572	METHODS AND APPARATUS PROVIDING A CATEGORICAL APPROACH TO VALUETYPE BRIDGE SUPPORT	EMC Corporation
11324844	7606811	METHODS AND APPARATUS FOR SYNCHRONIZING INFORMATION	EMC Corporation
11324970	7182623	LEVER-AND-SPRING ASSEMBLY FOR AN ELECTRONICS MODULE	EMC Corporation
11324973	7447834	MANAGING SERIAL ATTACHED SMALL COMPUTER SYSTEMS INTERFACE COMMUNICATIONS	EMC Corporation
11324974	7315449	APPARATUS FOR SUPPORTING A HEATSINK	EMC Corporation
11324975	7552279	SYSTEM AND METHOD FOR MULTIPLE VIRTUAL COMPUTING ENVIRONMENTS IN DATA STORAGE ENVIRONMENT	EMC Corporation
11324984	7440215	MANAGING DISK DRIVE SPIN UP	EMC Corporation
11324989	7996848	SYSTEMS AND METHODS FOR SUSPENDING AND RESUMING THREADS	EMC Corporation
11324992	7751407	SETTING A CEILING FOR BANDWIDTH USED BY BACKGROUND TASKS IN A SHARED PORT ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
11325001	7574540	MANAGING MANAGEMENT CONTROLLER COMMUNICATIONS	EMC Corporation
11325078	8677087	CONTINUOUS BACKUP TO A REMOTE STORAGE DEVICE	EMC Corporation
11325108		METHOD AND APPARATUS FOR REPRESENTING, MANAGING AND PROBLEM REPORTING IN RFID NETWORKS	EMC Corporation
11325109	7797420	METHOD AND APPARATUS FOR REPRESENTING, MANAGING AND PROBLEM REPORTING IN VOIP NETWORKS	EMC Corporation
11325144	7512595	METHODS AND SYSTEMS FOR UTILIZING CONFIGURATION INFORMATION	EMC Corporation
11325146	7739688	TECHNIQUES FOR MANAGING DISTRIBUTION OF WELL-DEFINED OBJECTS IN A CLIENT/SERVER SYSTEM	EMC Corporation
11325172	7788677	METHODS AND APPARATUS PROVIDING A CATEGORICAL APPROACH TO STRONGLY TYPED COMPONENT MANAGEMENT	EMC Corporation
11325228	7631143	DATA STORAGE SYSTEM EMPLOYING VIRTUAL DISK ENCLOSURE	EMC Corporation
11325285	9064046	USING CORRELATED STACK TRACES TO DETERMINE FAULTS IN CLIENT/SERVER SOFTWARE	EMC Corporation
11325286	7849469	SYSTEM AND METHODS FOR GENERIC INSTALLATION PREREQUISITE VERIFICATION	EMC Corporation
11325494	7634496	TECHNIQUES FOR MANAGING STATE CHANGES OF A DATA STORAGE SYSTEM UTILIZING THE OBJECT ORIENTED PARADIGM	EMC Corporation
11325689	7526495	REAL-TIME CONSTRUCTION OF A SELECTION REPRESENTATION FOR ITEMS IN TREE STRUCTURES	EMC Corporation
11325914	7715378	ERROR NOTIFICATION AND FORCED RETRY IN A DATA STORAGE SYSTEM	EMC Corporation
11326035	9268659	DETECTING FAILOVER IN A DATABASE MIRRORING ENVIRONMENT	EMC Corporation
11327961	7197616	VIRTUAL ORDERED WRITES	EMC Corporation
11336461	7254515	METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
11341353	8560569	METHOD AND APPARATUS FOR PERFORMING BULK FILE SYSTEM ATTRIBUTE RETRIEVAL	EMC Corporation
11343012	8150936	METHODS AND APPARATUS TO MANAGE SHADOW COPY PROVIDERS	EMC Corporation
11343152	8914596	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
11343313	8170985	PRIMARY STUB FILE RETENTION AND SECONDARY RETENTION COORDINATION IN A HIERARCHICAL STORAGE SYSTEM	EMC Corporation
11345816	8341127	CLIENT INITIATED RESTORE	EMC Corporation
11345859	8886902	DISK BACKUP SET ACCESS	EMC Corporation
11346005	7913044	EFFICIENT INCREMENTAL BACKUPS USING A CHANGE DATABASE	EMC Corporation

Application Number	Registration Number	Title	Owner
11346898	8015441	IMPROVED VERIFICATION OF COMPUTER BACKUP DATA	EMC Corporation
11347117	8042172	REMOTE ACCESS ARCHITECTURE ENABLING A CLIENT TO PERFORM AN OPERATION	EMC Corporation
11347124	7890746	AUTOMATIC AUTHENTICATION OF BACKUP CLIENTS	EMC Corporation
11347758	7966513	AUTOMATIC CLASSIFICATION OF BACKUP CLIENTS	EMC Corporation
11347759	7421551	FAST VERIFICATION OF COMPUTER BACKUP DATA	EMC Corporation
11348982	7822717	POINT-IN-TIME DATABASE RESTORE	EMC Corporation
11353360	7346636	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
11354730	7490072	ROLE BASED ACCESS CONTROLS	EMC Corporation
11355097	8214398	ROLE BASED ACCESS CONTROLS	EMC Corporation
11355286	7647639	METHODS FOR DETECTING EXECUTABLE CODE WHICH HAS BEEN ALTERED	EMC Corporation
11357724	8370638	DERIVATIVE SEEDS	EMC Corporation
11357740	7848261	SYSTEMS AND METHODS FOR PROVIDING A QUIESCING PROTOCOL	EMC Corporation
11360270	7624155	DATA REPLICATION FACILITY FOR DISTRIBUTED COMPUTING ENVIRONMENTS	EMC Corporation
11361907	7516348	SELECTIVE POWER MANAGEMENT OF DISK DRIVES DURING SEMI-IDLE TIME IN ORDER TO SAVE POWER AND INCREASE DRIVE LIFE SPAN	EMC Corporation
11365261	7529777	CROSS-OBJECT ATTRIBUTE RESTORATION	EMC Corporation
11369488	8528057	METHOD AND APPARATUS FOR ACCOUNT VIRTUALIZATION	EMC Corporation
11372651	7788537	TECHNIQUES FOR COLLECTING CRITICAL INFORMATION FROM A MEMORY DUMP	EMC Corporation
11376355	7830770	TECHNIQUES FOR STORING AND RETRIEVING DATA USING A SPHERE-SHAPED DATA STORAGE STRUCTURE	EMC Corporation
11377129	7264497	METHOD AND APPARATUS FOR RETAINING A POWER CORD	EMC Corporation
11378722	7421552	TECHNIQUES FOR MANAGING DATA WITHIN A DATA STORAGE SYSTEM UTILIZING A FLASH-BASED MEMORY VAULT	EMC Corporation
11380082	7605815	SELECTION REPRESENTATION METHODS APPLIED TO LOGICAL GROUPINGS	EMC Corporation
11381336	7689597	MIRRORED STORAGE ARCHITECTURE USING CONTINUOUS DATA PROTECTION TECHNIQUES	EMC Corporation

Application Number	Registration Number	Title	Owner
11381339	7765190	PSEUDOSNAPSHOT CREATION AND IMPLEMENTATION USING CONTINUOUS DATA PROTECTION	EMC Corporation
11381345	7509358	PERFORMING REPLICATION OPERATIONS ON CONTINUOUS DATA PROTECTION SYSTEMS USING PSEUDOSNAPSHOTS	EMC Corporation
11382075	7945726	PRE-ALLOCATION AND HIERARCHICAL MAPPING OF DATA BLOCKS DISTRIBUTED FROM A FIRST PROCESSOR TO A SECOND PROCESSOR FOR USE IN A FILE SYSTEM	EMC Corporation
11382193	7676514	DISTRIBUTED MAINTENANCE OF SNAPSHOT COPIES BY A PRIMARY PROCESSOR MANAGING METADATA AND A SECONDARY PROCESSOR PROVIDING READ-WRITE ACCESS TO A PRODUCTION DATASET	EMC Corporation
11382233	7653832	STORAGE ARRAY VIRTUALIZATION USING A STORAGE BLOCK MAPPING PROTOCOL CLIENT AND SERVER	EMC Corporation
11382464	7546432	PASS-THROUGH WRITE POLICIES OF FILES IN DISTRIBUTED STORAGE MANAGEMENT	EMC Corporation
11384756	8825882	METHOD AND APPARATUS FOR IMPLEMENTING HIGH-PERFORMANCE, SCALEABLE DATA PROCESSING AND STORAGE SYSTEMS	EMC Corporation
11386029	7383373	DERIVING CORRESPONDING SIGNALS	EMC Corporation
11386884	7552125	SYNERGISTIC DATA STRUCTURES	EMC Corporation
11387129	7603529	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR MAPPED LOGICAL UNIT (MLU) REPLICATIONS, STORAGE, AND RETRIEVAL IN A REDUNDANT ARRAY OF INEXPENSIVE DISKS (RAID) ENVIRONMENT	EMC Corporation
11387426	7585005	LOCKING MECHANISM FOR SECURING BEZELS	EMC Corporation
11389786	8095937	METHODS AND APPARATUS PROVIDING PAYLOAD EVENT PROCESSING FOR MANAGED OBJECTS	EMC Corporation
11389800	7211739	ELECTROMAGNETIC INTERFERENCE (EMI) SHIELD FOR A CABLE-BULKHEAD INTERFACE	EMC Corporation
11390899	7849176	METHODS AND APPARATUS FOR RENDERING MESSAGES	EMC Corporation
11390900	7577724	METHODS AND APPARATUS ASSOCIATED WITH ADVISORY GENERATION	EMC Corporation
11391012	7496551	METHODS AND APPARATUS ASSOCIATED WITH ADVISORY GENERATION	EMC Corporation
11391104	7913108	SYSTEM AND METHOD FOR IMPROVING DISK DRIVE PERFORMANCE DURING HIGH FREQUENCY VIBRATION CONDITIONS	EMC Corporation
11391106	7814196	METHODS AND APPARATUS FOR MAPPING RESOURCES	EMC Corporation

Application Number	Registration Number	Title	Owner
11391704	8132266	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR IDENTIFYING AND ENFORCING SOFTWARE FEATURE LIMITS ACROSS DIFFERENT HARDWARE PLATFORMS, SOFTWARE RELEASES, AND TIERS	EMC Corporation
11391770	7519504	METHOD AND APPARATUS FOR REPRESENTING, MANAGING AND PROBLEM REPORTING IN SURVEILLANCE NETWORKS	EMC Corporation
11391935	7475203	METHODS AND SYSTEMS FOR ENABLING NON-DESTRUCTIVE ERASURE OF DATA	EMC Corporation
11393063	7409525	IMPLICIT LOCKS IN A SHARED VIRTUAL MEMORY SYSTEM	EMC Corporation
11393110	9026679	METHODS AND APPARATUS FOR PERSISTING MANAGEMENT INFORMATION CHANGES	EMC Corporation
11393111	7899780	METHODS AND APPARATUS FOR STRUCTURED PARTITIONING OF MANAGEMENT INFORMATION	EMC Corporation
11393137	7694119	TECHNIQUES FOR DEVICE INITIALIZATION	EMC Corporation
11393174	7680987	SUB-PAGE-GRANULAR CACHE COHERENCY USING SHARED VIRTUAL MEMORY MECHANISM	EMC Corporation
11393185	7711711	NETWORKED STORAGE SYSTEM EMPLOYING INFORMATION LIFECYCLE MANAGEMENT IN CONJUNCTION WITH A DISTRIBUTED GLOBAL FILE SYSTEM	EMC Corporation
11393216	7512578	SMART CONTAINERS	EMC Corporation
11393217	7962464	FEDERATED SEARCH	EMC Corporation
11393236	8230384	TECHNIQUES FOR GENERATING AND PROCESSING A SCHEMA INSTANCE	EMC Corporation
11393338	7214888	ADAPTIVE ELECTROMAGNETIC INTERFERENCE-RADIO FREQUENCY INTERFERENCE (EMI/RFI) SHIELD EXTENSION	EMC Corporation
11393339	7258569	CONNECTOR-ALIGNMENT COLLAR FOR BLIND MATING ELECTRICAL CONNECTORS	EMC Corporation
11393396	7930727	SYSTEM AND METHOD FOR MEASURING AND ENFORCING SECURITY POLICY COMPLIANCE FOR SOFTWARE DURING THE DEVELOPMENT PROCESS OF THE SOFTWARE	EMC Corporation
11393438	7774645	TECHNIQUES FOR MIRRORING DATA WITHIN A SHARED VIRTUAL MEMORY SYSTEM	EMC Corporation
11393467	7536507	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PRESERVING ATOMIC WRITES USING LEAVES AND BITMAPS	EMC Corporation
11393545	8635594	SCRIPT LANGUAGE FOR STORAGE MANAGEMENT OPERATIONS	EMC Corporation

Application Number	Registration Number	Title	Owner
11393638	7529887	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR POSTPONING BITMAP TRANSFERS AND ELIMINATING CONFIGURATION INFORMATION TRANSFERS DURING TRESPASS OPERATIONS IN A DISK ARRAY ENVIRONMENT	EMC Corporation
11393641	7681011	METHODS AND APPARATUS FOR PARTITIONING MANAGEMENT INFORMATION	EMC Corporation
11394536	7873835	ACCESSING DATA STORAGE DEVICES	EMC Corporation
11394651	7681130	METHODS AND APPARATUS FOR DISPLAYING NETWORK DATA	EMC Corporation
11394665	7647525	RESUMPTION OF OPERATIONS FOLLOWING FAILOVER IN CONNECTION WITH TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11394666	7620612	PERFORMING MODEL-BASED ROOT CAUSE ANALYSIS USING INTER-DOMAIN MAPPINGS	EMC Corporation
11394698	7852781	MANAGING COMMUNICATIONS SETTINGS	EMC Corporation
11394700	7676694	MANAGING SYSTEM COMPONENTS	EMC Corporation
11394701	7904909	ARCHITECTURE FOR USING A MODEL-BASED APPROACH FOR MANAGING RESOURCES IN A NETWORKED ENVIRONMENT	EMC Corporation
11394768	7676628	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PROVIDING ACCESS TO SHARED STORAGE BY COMPUTING GRIDS AND CLUSTERS WITH LARGE NUMBERS OF NODES	EMC Corporation
11394919	7502992	METHOD AND APPARATUS FOR DETECTING THE PRESENCE OF ERRORS IN DATA TRANSMITTED BETWEEN COMPONENTS IN A DATA STORAGE SYSTEM USING AN I2C PROTOCOL	EMC Corporation
11394943	8089903	METHOD AND APPARATUS FOR PROVIDING A LOGICAL SEPARATION OF A CUSTOMER DEVICE AND A SERVICE DEVICE CONNECTED TO A DATA STORAGE SYSTEM	EMC Corporation
11395427	7792857	MIGRATION OF CONTENT WHEN ACCESSED USING FEDERATED SEARCH	EMC Corporation
11395429	8285827	METHOD AND APPARATUS FOR RESOURCE MANAGEMENT WITH A MODEL-BASED ARCHITECTURE	EMC Corporation
11395441	7854006	DIFFERENTIAL VIRUS SCAN	EMC Corporation
11395456	7792045	METHOD AND APPARATUS FOR CONFIGURATION AND ANALYSIS OF INTERNAL NETWORK ROUTING PROTOCOLS	EMC Corporation
11395460	7279856	ENVIRONMENTAL AND HEALTH MONITORING CIRCUITRY FOR STORAGE PROCESSOR I/O ANNEX MODULE	EMC Corporation
11395621	7752340	ATOMIC COMMAND RETRY IN A DATA STORAGE SYSTEM	EMC Corporation
11395635	7613890	CONSISTENT REPLICATION ACROSS MULTIPLE STORAGE DEVICES	EMC Corporation
11395755	8205261	INCREMENTAL VIRUS SCAN	EMC Corporation
11396280	7953905	METHODS AND APPARATUS FOR MODELING A STORAGE AREA NETWORK	EMC Corporation
11396282	7756898	SYSTEMS AND METHODS FOR NOTIFYING LISTENERS OF EVENTS	EMC Corporation

Application Number	Registration Number	Title	Owner
11396336	7430646	PLANNED SWITCHOVER IN CONNECTION WITH TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11397025	8843783	FAILOVER TO SYNCHRONOUS BACKUP SITE IN CONNECTION WITH TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11401047	7423830	DETECTING HEAD/DISK CONTACT IN A DISK DRIVE USING A CALIBRATION PARAMETER	EMC Corporation
11402631	7562186	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
11403146	7949824	EFFICIENT DATA STORAGE USING TWO LEVEL DELTA RESEMBLANCE	EMC Corporation
11403154	7844652	EFFICIENT COMPUTATION OF SKETCHES	EMC Corporation
11406849	7502960	METHOD AND APPARATUS FOR MANAGING ACCESS TO VOLUMES OF STORAGE	EMC Corporation
11409304	7444420	APPARATUS AND METHOD FOR MIRRORING AND RESTORING DATA	EMC Corporation
11418363	7507104	MATING FOR SINGLE CONNECTOR ATTACHMENT (SCA) DISK CONNECTORS	EMC Corporation
11424427	7831837	ENCODING TOKEN COMMANDS/DATA WITHIN DATA STREAMS FOR STANDARD INTERFACES	EMC Corporation
11426071	8307359	EMBEDDED VIRTUAL STORAGE AREA NETWORK USING A VIRTUAL BLOCK NETWORK FABRIC	EMC Corporation
11426641	8185751	ACHIEVING STRONG CRYPTOGRAPHIC CORRELATION BETWEEN HIGHER LEVEL SEMANTIC UNITS AND LOWER LEVEL COMPONENTS IN A SECURE DATA STORAGE SYSTEM	EMC Corporation
11426645	8176319	IDENTIFYING AND ENFORCING STRICT FILE CONFIDENTIALITY IN THE PRESENCE OF SYSTEM AND STORAGE ADMINISTRATORS IN A NAS SYSTEM	EMC Corporation
11427074	8417747	VIRTUALLY PROVISIONED VOLUME RECOVERY	EMC Corporation
11427082	7552280	ASYMMETRICALLY INTERLEAVING ACCESS TO REDUNDANT STORAGE DEVICES	EMC Corporation
11427140	7425026	SEISMIC-RESISTANT EQUIPMENT CABINETS AND DOOR LATCHES	EMC Corporation
11427208	7385472	MULTI-LEVEL PRINTED CIRCUIT BOARD INTERSTITIAL VIAS	EMC Corporation
11427526	7509461	METHOD AND APPARATUS FOR INTELLIGENT BUFFER CACHE PRE-EMPTION	EMC Corporation
11427584	8078585	REACTIVE FILE RECOVERY BASED ON FILE NAMING AND ACCESS INFORMATION	EMC Corporation
11427585	7519769	SCALABLE STORAGE NETWORK VIRTUALIZATION	EMC Corporation
11427646	7685395	SPANNING VIRTUAL ARRAYS ACROSS MULTIPLE PHYSICAL STORAGE ARRAYS	EMC Corporation
11427664	8589504	FULL ARRAY NON-DISRUPTIVE MANAGEMENT DATA MIGRATION	EMC Corporation
11427677	7484056	PARTITIONING OF A STORAGE ARRAY INTO N-STORAGE ARRAYS USING FULL ARRAY NON-DISRUPTIVE DATA MIGRATION	EMC Corporation
11427685	7484057	CONSOLIDATING N-STORAGE ARRAYS INTO ONE STORAGE ARRAY USING FULL ARRAY NON-DISRUPTIVE DATA MIGRATION	EMC Corporation

Application Number	Registration Number	Title	Owner
11427699	7484059	FULL ARRAY NON-DISRUPTIVE MIGRATION OF EXTENDED STORAGE FUNCTIONALITY	EMC Corporation
11427724	7757059	VIRTUAL ARRAY NON-DISRUPTIVE MANAGEMENT DATA MIGRATION	EMC Corporation
11427731	8539177	PARTITIONING OF A STORAGE ARRAY INTO N-STORAGE ARRAYS USING VIRTUAL ARRAY NON-DISRUPTIVE DATA MIGRATION	EMC Corporation
11427744	8533408	CONSOLIDATING N-STORAGE ARRAYS INTO ONE STORAGE ARRAY USING VIRTUAL ARRAY NON-DISRUPTIVE DATA MIGRATION	EMC Corporation
11427749	8452928	VIRTUAL ARRAY NON-DISRUPTIVE MIGRATION OF EXTENDED STORAGE FUNCTIONALITY	EMC Corporation
11427759	8583861	PRESENTATION OF MANAGEMENT FUNCTIONALITY OF VIRTUAL ARRAYS	EMC Corporation
11427889	7904681	METHODS AND SYSTEMS FOR MIGRATING DATA WITH MINIMAL DISRUPTION	EMC Corporation
11428117	7676689	BROWSING AND SELECTING ITEMS IN RECOVERY STORAGE GROUPS TO PERFORM RECOVERY ONTO PRODUCTION SERVER	EMC Corporation
11430433		[REDACTED]	EMC Corporation
11431337	7369380	HIGHLY AVAILABLE DUAL SERIAL BUS ARCHITECTURE	EMC Corporation
11433961	7822974	IMPLICIT TRUST OF AUTHORSHIP CERTIFICATION	EMC Corporation
11438975	7281108	METHOD AND APPARATUS FOR MIGRATING DATA IN A COMPUTER SYSTEM	EMC Corporation
11439022		[REDACTED]	EMC Corporation
11440964	7937369	DATA MOVER DISCOVERY OF OBJECT EXTENT	EMC Corporation
11441752		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11441926		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11441927		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11442569		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11443325	8676960	NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11444566	8406421	METHOD AND SYSTEM FOR MULTI-LEVEL SECURE PERSONAL PROFILE MANAGEMENT AND ACCESS CONTROL TO THE ENTERPRISE MULTI-MODAL COMMUNICATION ENVIRONMENT IN HETEROGENEOUS CONVERGENT COMMUNICATION NETWORKS	EMC Corporation
11448524	8112396	BACKUP AND RECOVERY OF INTEGRATED LINKED DATABASES	EMC Corporation
11449104		METHOD AND APPARATUS FOR PROCESSING A DATABASE REPLICA	EMC Corporation
11449153	8140623	NON-BLOCKING COMMIT PROTOCOL SYSTEMS AND METHODS	EMC Corporation

Application Number	Registration Number	Title	Owner
11449163		METHOD AND APPARATUS FOR PROCESSING A DATABASE REPLICA	EMC Corporation
11452458	8478952	FLEXIBLE OPTIMIZED GROUP-BASED BACKUPS	EMC Corporation
11454739	8085794	TECHNIQUES FOR FAULT TOLERANT ROUTING IN A DESTINATION-ROUTED SWITCH FABRIC	EMC Corporation
11457177	8028011	GLOBAL UNIX FILE SYSTEM CYLINDER GROUP CACHE	EMC Corporation
11465119	7620646	REAL-TIME CONSTRUCTION OF A SELECTION REPRESENTATION FOR ITEMS IN TREE STRUCTURES	EMC Corporation
11471761	7844681	CLIENT/SERVER NETWORK FILE SHARING METHOD AND APPARATUS	EMC Corporation
11472685	7571293	EMULATION OF POINT-IN-TIME DATA COPYING OPERATIONS	EMC Corporation
11473475	7577808	EFFICIENT BACKUP DATA RETRIEVAL	EMC Corporation
11473485	7694103	EFFICIENT USE OF MEMORY AND ACCESSING OF STORED RECORDS	EMC Corporation
11473617	8533163	DATABASE OFFLOAD PROCESSING	EMC Corporation
11474192	7685463	DISK DRIVE MANAGEMENT SYSTEM	EMC Corporation
11474556	7502669	APPARATUS AND METHOD FOR GRAPHICALLY DISPLAYING DISK DRIVE ENCLOSURES AND CABLING IN A DATA STORAGE SYSTEM	EMC Corporation
11474635	7600088	TECHNIQUES FOR PROVIDING STORAGE ARRAY SERVICES TO A CLUSTER OF NODES USING PORTAL DEVICES	EMC Corporation
11474658	7627710	CONVERTING AN OBJECT IDENTIFIER TO A BLOCK I/O ADDRESS TO IDENTIFY A STORAGE LOCATION ON A SERVER	EMC Corporation
11474802	8429242	METHODS AND APPARATUS FOR PROVIDING CONTENT	EMC Corporation
11475060	7962567	SYSTEMS AND METHODS FOR DISABLING AN ARRAY PORT FOR AN ENTERPRISE	EMC Corporation
11475774	7779101	METHOD AND APPARATUS FOR MAPPING AND IDENTIFYING THE ROOT CAUSES OF PERFORMANCE PROBLEMS IN NETWORK-BASED SERVICES	EMC Corporation
11475775	8230051	METHOD AND APPARATUS FOR MAPPING AND IDENTIFYING RESOURCES FOR NETWORK-BASED SERVICES	EMC Corporation
11476380	7680831	METHODS AND APPARATUS FOR DETECTION AND RECOVERY OF DATABASE OUT OF SYNCHRONIZATION CONDITIONS	EMC Corporation
11476478	8386732	METHODS AND APPARATUS FOR STORING COLLECTED NETWORK MANAGEMENT DATA	EMC Corporation
11476521	7478099	METHODS AND APPARATUS FOR COLLECTING DATABASE TRANSACTIONS	EMC Corporation
11476523	7711705	METHODS AND APPARATUS FOR PROCESSING PARTITIONED CHANGES	EMC Corporation

Application Number	Registration Number	Title	Owner
11476887	7315914	SYSTEMS AND METHODS FOR MANAGING VIRTUALIZED LOGICAL UNITS USING VENDOR SPECIFIC STORAGE ARRAY COMMANDS LOGICAL UNITS USING VENDOR SPECIFIC STORAGE ARRAY COMMANDS	EMC Corporation
11476951		[REDACTED]	EMC Corporation
11476957	8868718	METHOD AND APPARATUS FOR PROVIDING SCALABILITY IN RESOURCE MANAGEMENT AND ANALYSIS SYSTEMS	EMC Corporation
11477022	7685368	METHODS AND APPARATUS FOR REMOVING DATA FROM A CACHE	EMC Corporation
11477026	7689565	METHODS AND APPARATUS FOR SYNCHRONIZING NETWORK MANAGEMENT DATA	EMC Corporation
11477058	8095966	METHODS AND APPARATUS FOR PASSWORD MANAGEMENT	EMC Corporation
11477215	8171098	TECHNIQUES FOR PROVIDING STORAGE SERVICES USING NETWORKED COMPUTERIZED DEVICES HAVING DIRECT ATTACHED STORAGE	EMC Corporation
11477216	8087084	SECURITY FOR SCANNING OBJECTS	EMC Corporation
11477292	8862996	METHOD AND APPARATUS FOR CONTAINER MAPPING PRESENTATION OF DISTRIBUTED SYSTEMS	EMC Corporation
11477301	8069309	SERVICING MEMORY IN RESPONSE TO SYSTEM FAILURE	EMC Corporation
11477302	7757123	MANAGING FAULTS	EMC Corporation
11477634	8443445	RISK-AWARE SCANNING OF OBJECTS	EMC Corporation
11477635	8122507	EFFICIENT SCANNING OF OBJECTS	EMC Corporation
11477965	7865677	ENHANCING ACCESS TO DATA STORAGE	EMC Corporation
11478029	7725653	METHOD FOR ENABLING A MEMORY AS A FUNCTION OF ESTIMATED POWER SOURCE CAPACITY	EMC Corporation
11478090	7818203	METHOD FOR SCORING CUSTOMER LOYALTY AND SATISFACTION	EMC Corporation
11478244	7761770	DISK CONTROLLER ARCHITECTURE TO ALLOW ON-THE-FLY ERROR CORRECTION AND WRITE DISRUPTION DETECTION	EMC Corporation
11478245	7460328	COMPENSATION FOR VARIABLE SERVO TRACK	EMC Corporation
11478370	7408734	PREVENTING DAMAGE TO THE HEADS AND MEDIA IN A REMOVABLE CARTRIDGE AND DISK DRIVE	EMC Corporation
11478557	7672077	AUTO LOADING DEVICE FOR DATA STORAGE CARTRIDGES	EMC Corporation
11478833	7555614	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PREVENTING CONCURRENT EXECUTION OF CONFLICTING SOFTWARE OPERATIONS ON THE SAME AND DIFFERENT STORAGE PROCESSORS HAVING ACCESS TO A COMMON STORAGE MEDIUM WHILE AVOIDING DEADLOCKS	EMC Corporation
11478897	7469313	METHODS AND SYSTEMS FOR PRESERVING DISK GEOMETRY OF VIRTUALIZED DATA VOLUMES	EMC Corporation

Application Number	Registration Number	Title	Owner
11478946	7536503	METHODS AND SYSTEMS FOR PRESERVING DISK GEOMETRY WHEN MIGRATING EXISTING DATA VOLUMES	EMC Corporation
11478958	7606825	METHOD AND APPARATUS FOR PRESENTING OBJECTS IN AN ARRANGED FASHION	EMC Corporation
11479317	7873601	BACKUP OF INCREMENTAL METADATA IN BLOCK BASED BACKUP SYSTEMS	EMC Corporation
11479336	7620774	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK USING ONE OR MORE CONTROL PATH CONTROLLERS WITH AN EMBEDDED ASIC ON EACH CONTROLLER	EMC Corporation
11479556	7606889	METHODS AND SYSTEMS FOR COMPARING STORAGE AREA NETWORK CONFIGURATIONS	EMC Corporation
11479557	7580938	METHODS AND APPARATUS FACILITATING EFFICIENT DISPLAY OF DATA	EMC Corporation
11479649	7620775	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK USING ONE OR MORE ASICS	EMC Corporation
11479864	7673099	AFFINITY CACHING	EMC Corporation
11479939	8473566	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR MANAGING QUALITY-OF-SERVICE ASSOCIATED WITH STORAGE SHARED BY COMPUTING GRIDS AND CLUSTERS WITH A PLURALITY OF NODES	EMC Corporation
11480322	7640262	POSITIONAL ALLOCATION	EMC Corporation
11480323	7720892	BULK UPDATES AND TAPE SYNCHRONIZATION	EMC Corporation
11480346	7930559	DECOUPLED DATA STREAM AND ACCESS STRUCTURES	EMC Corporation
11482912	7673100	METHODS AND SYSTEMS FOR DISTRIBUTED CACHE TAG MANAGEMENT	EMC Corporation
11483131	7882064	FILE SYSTEM REPLICATION	EMC Corporation
11483839	7814365	BACKING UP SELECTED FILES OF A COMPUTER SYSTEM	EMC Corporation
11484881	7504969	LOCALITY-BASED STREAM SEGMENTATION FOR DATA DEDUPLICATION	EMC Corporation
11485813	7478205	TECHNIQUES FOR PERFORMING DATA OPERATIONS SPANNING MORE THAN TWO DATA PARTITIONS	EMC Corporation
11486957	7979584	PARTITIONING A DATA STREAM USING EMBEDDED ANCHORS	EMC Corporation
11487439	8006052	SYSTEMS AND METHODS FOR TRACKING PORTIONS OF A LOGICAL VOLUME THAT HAVE NEVER BEEN WRITTEN BY A HOST	EMC Corporation
11488907	7562250	RESOURCE ALLOCATION THROTTLING IN REMOTE DATA MIRRORING SYSTEM	EMC Corporation
11489397	7660953	METHOD AND SYSTEM FOR MIRRORING AND ARCHIVING MASS STORAGE	EMC Corporation
11489963	7389339	AMBIGUITY-PURGING AND TEMPLATE-CONFLICT-RESOLUTION IN COMPUTER NETWORK EVENTS-NOTIFICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
11493010	7739735	SYSTEM AND METHOD FOR DYNAMIC OPTIMIZATIONS USING SECURITY ASSERTIONS	EMC Corporation
11497806	8539056	SYSTEMS AND METHODS FOR CONFIGURING MULTIPLE NETWORK INTERFACES	EMC Corporation
11499929	7529883	METHODS AND APPARATUS FOR PARSING A CONTENT ADDRESS TO FACILITATE SELECTION OF A PHYSICAL STORAGE LOCATION IN A DATA STORAGE SYSTEM	EMC Corporation
11503318	7509524	SYSTEMS AND METHODS FOR A DISTRIBUTED FILE SYSTEM WITH DATA RECOVERY	EMC Corporation
11503333	7386668	HANDLING DATA WRITES COPIED FROM A REMOTE DATA STORAGE DEVICE	EMC Corporation
11503338	7383408	STORAGE DEVICE THAT USES VIRTUAL ORDERED WRITES	EMC Corporation
11505559	8255998	INFORMATION PROTECTION METHOD AND SYSTEM	EMC Corporation
11506397	8079091	COMPLIANCE PROCESSING OF RIGHTS MANAGED DATA	EMC Corporation
11506591	7680842	SYSTEMS AND METHODS FOR A SNAPSHOT OF DATA	EMC Corporation
11506596	7953704	SYSTEMS AND METHODS FOR A SNAPSHOT OF DATA	EMC Corporation
11506597	7899800	SYSTEMS AND METHODS FOR PROVIDING NONLINEAR JOURNALING	EMC Corporation
11506610	7680836	SYSTEMS AND METHODS FOR A SNAPSHOT OF DATA	EMC Corporation
11507069	7882071	SYSTEMS AND METHODS FOR A SNAPSHOT OF DATA	EMC Corporation
11507070	7822932	SYSTEMS AND METHODS FOR PROVIDING NONLINEAR JOURNALING	EMC Corporation
11507073	7676691	SYSTEMS AND METHODS FOR PROVIDING NONLINEAR JOURNALING	EMC Corporation
11507075	7590652	SYSTEMS AND METHODS OF REVERSE LOOKUP	EMC Corporation
11507076	7752402	SYSTEMS AND METHODS FOR ALLOWING INCREMENTAL JOURNALING	EMC Corporation
11510028	8667494	CONTROLLING RESOURCE ALLOCATION USING THRESHOLDS AND SCHEDULING	EMC Corporation
11511998	7346775	SYSTEM AND METHOD FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
11512547	7590811	METHODS AND SYSTEM FOR IMPROVING DATA AND APPLICATION AVAILABILITY IN CLUSTERS	EMC Corporation
11519373	7565493	METHODS FOR ASSISTING COMPUTER USERS PERFORMING MULTIPLE TASKS	EMC Corporation
11519390	7451225	CONFIGURING A CACHE PREFETCH POLICY IN A COMPUTER SYSTEM EMPLOYING OBJECT ADDRESSABLE STORAGE	EMC Corporation
11519391	7565494	CONFIGURING A BOUNDED CACHE PREFETCH POLICY IN A COMPUTER SYSTEM EMPLOYING OBJECT ADDRESSABLE STORAGE	EMC Corporation
11519950	7526553	CONFIGURING A CACHE IN A COMPUTER SYSTEM EMPLOYING OBJECT ADDRESSABLE STORAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
11520979	7600202	TECHNIQUES FOR PROVIDING A FAILURES IN TIME (FIT) RATE FOR A PRODUCT DESIGN PROCESS	EMC Corporation
11522194	8250178	PROTECTING CLIENT-SIDE CODE	EMC Corporation
11525283	7685171	TECHNIQUES FOR PERFORMING A RESTORATION OPERATION USING DEVICE SCANNING	EMC Corporation
11525499	8028199	METHOD AND APPARATUS FOR DETERMINING A SOURCE OF PERFORMANCE DEGRADATION IN DISTRIBUTED SYSTEMS TRANSMISSION	EMC Corporation
11525647	8082231	TECHNIQUES USING IDENTIFIERS AND SIGNATURES WITH DATA OPERATIONS	EMC Corporation
11525649	7725704	TECHNIQUES FOR PERFORMING A PRIORITIZED DATA RESTORATION OPERATION	EMC Corporation
11527539	7908223	SYSTEM AND METHOD FOR CONDUCTING SECURE TRANSACTIONS	EMC Corporation
11527992	7702496	METHOD AND APPARATUS FOR ANALYZING AND PROBLEM REPORTING IN GRID COMPUTING NETWORKS	EMC Corporation
11528767	7617372	AVOIDING COPY ON FIRST WRITE	EMC Corporation
11528772	8135685	INFORMATION CLASSIFICATION	EMC Corporation
11528783		CASCADED DISCOVERY OF INFORMATION ENVIRONMENT	EMC Corporation
11528790	8832246	SERVICE LEVEL MAPPING METHOD	EMC Corporation
11528895	7603366	UNIVERSAL DATABASE SCHEMA AND USE	EMC Corporation
11528898	9135322	ENVIRONMENT CLASSIFICATION	EMC Corporation
11528900	7640345	INFORMATION MANAGEMENT	EMC Corporation
11529038	7701877	METHODS AND APPARATUS FOR REPRESENTING AND QUERYING STORAGE AREA NETWORK (SAN) TOPOLOGY	EMC Corporation
11529123	8108882	METHOD AND APPARATUS FOR INTERFACING AN OPERATING SYSTEM WITH A NETWORK INTERFACE DEVICE	EMC Corporation
11529124	7849350	RESPONDING TO A STORAGE PROCESSOR FAILURE WITH CONTINUED WRITE CACHING	EMC Corporation
11529125	7571279	ACCESSING A DISK DRIVE AT MULTIPLE SPEEDS	EMC Corporation
11529143	7472223	SURFACE LEVEL SPARING IN DISK DRIVES	EMC Corporation
11529675	7606813	MODEL CONSOLIDATION IN A DATABASE SCHEMA	EMC Corporation
11529864	8145865	VIRTUAL ORDERED WRITES SPILLOVER MECHANISM	EMC Corporation
11529866	7624229	SPILLOVER SLOT	EMC Corporation
11529901	8194547	CONFIGURING FLOW CONTROL SETTINGS	EMC Corporation
11529911	7229294	SUPPLYING POWER	EMC Corporation
11529919	7945776	SECURING A PASSPHRASE	EMC Corporation
11530655	8607045	TOKENCODE EXCHANGES FOR PERIPHERAL AUTHENTICATION	EMC Corporation
11530998	7562221	AUTHENTICATION METHOD AND APPARATUS UTILIZING PROOF-OF-AUTHENTICATION MODULE	EMC Corporation
11536033	7483268	DISK DRIVE CARRIER	EMC Corporation
11536044	7515427	BACK-TO-BACK DATA STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
11536064	7425685	CABLE ASSEMBLIES FOR CONNECTING DATA STORAGE CHASSIS TO A CABLE CONDUIT WITHIN A DATA STORAGE SYSTEM	EMC Corporation
11536088	7840992	SYSTEM AND METHOD FOR ENVIRONMENTALLY AWARE DATA PROTECTION	EMC Corporation
11536121	7584339	REMOTE BACKUP AND RESTORE OPERATIONS FOR ISB PROTOCOL SYSTEMS	EMC Corporation
11536130	7587565	GENERATING AUTOMATED AND SCHEDULED SAN COPY SESSIONS FOR ISB PROTOCOL SYSTEMS	EMC Corporation
11536141	7487310	ROTATION POLICY FOR SAN COPY SESSIONS FOR ISB PROTOCOL SYSTEMS	EMC Corporation
11536164	7685460	MULTIPLE CONCURRENT RESTORE USING SAME USER INTERFACE	EMC Corporation
11536850	8555021	SYSTEMS AND METHODS FOR AUTOMATING AND TUNING STORAGE ALLOCATIONS	EMC Corporation
11536952	8745005	CHECKPOINT RECOVERY USING B-TREE INTENT LOG WITH SYNCPOINTS	EMC Corporation
11536995	7809912	METHODS AND SYSTEMS FOR MANAGING I/O REQUESTS TO MINIMIZE DISRUPTION REQUIRED FOR DATA MIGRATION	EMC Corporation
11537001	8145947	USER CUSTOMIZABLE CVFS NAMESPACE	EMC Corporation
11537028	7900088	SYSTEM FOR PERFORMING INCREMENTAL FILE SYSTEM CHECK	EMC Corporation
11537073	8935751	METHOD FOR EXTENDING THE FRAGMENT MAPPING PROTOCOL TO PREVENT MALICIOUS ACCESS TO VIRTUALIZED STORAGE	EMC Corporation
11537202	7817562	METHODS AND SYSTEMS FOR BACK END CHARACTERIZATION USING I/O SAMPLING	EMC Corporation
11538307	7640406	DETECTING AND MANAGING ORPHAN FILES BETWEEN PRIMARY AND SECONDARY DATA STORES FOR CONTENT ADDRESSED STORAGE	EMC Corporation
11538313	7599971	DETECTING AND MANAGING MISSING PARENTS BETWEEN PRIMARY AND SECONDARY DATA STORES FOR CONTENT ADDRESSED STORAGE	EMC Corporation
11538316	7603397	DETECTING AND MANAGING MISSING PARENTS BETWEEN PRIMARY AND SECONDARY DATA STORES	EMC Corporation
11538351	7685177	DETECTING AND MANAGING ORPHAN FILES BETWEEN PRIMARY AND SECONDARY DATA STORES	EMC Corporation
11538546	7398366	TRACKING INCREMENTAL CHANGES IN A MASS STORAGE SYSTEM	EMC Corporation
11538554	7890796	AUTOMATIC MEDIA ERROR CORRECTION IN A FILE SERVER	EMC Corporation
11540017		[REDACTED]	EMC Corporation
11540018	7689786	TECHNIQUES FOR OVERRIDING DEVICE RESERVATIONS	EMC Corporation
11540048	8533158	RECLAIMING DATA SPACE BY REWRITING METADATA	EMC Corporation
11540058	7809884	DATA STORAGE SYSTEM POWER MANAGEMENT	EMC Corporation
11540096	8769065	METHODS AND APPARATUS FOR IMPLEMENTING A DATA MANAGEMENT FRAMEWORK TO COLLECT NETWORK MANAGEMENT DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
11540105	8041683	METHODS AND APPARATUS FOR LOCATING NETWORK LOGS	EMC Corporation
11540106		[REDACTED]	EMC Corporation
11540159	8024171	MANAGED RESOURCE SIMULATOR FOR STORAGE AREA NETWORKS	EMC Corporation
11540160	8020108	SEPARATION OF PRESENTATION AND BUSINESS MODELS FOR COMMON MANAGEMENT PLATFORM TASKS IN A STORAGE AREA NETWORK	EMC Corporation
11540183	8024712	COLLECTING APPLICATION LOGS	EMC Corporation
11540184	7743030	METHODS AND APPARATUS FOR DECLARATIVE LOG COLLECTION	EMC Corporation
11540336	7770059	FAILURE PROTECTION IN AN ENVIRONMENT INCLUDING VIRTUALIZATION OF NETWORKED STORAGE RESOURCES	EMC Corporation
11540415	7756831	COOPERATIVE LOCKING BETWEEN MULTIPLE INDEPENDENT OWNERS OF DATA SPACE	EMC Corporation
11540416	7818517	ARCHITECTURE FOR VIRTUALIZATION OF NETWORKED STORAGE RESOURCES	EMC Corporation
11540437	8862639	LOCKING ALLOCATED DATA SPACE	EMC Corporation
11540458	8424013	METHODS AND SYSTEMS FOR HANDLING INTERRUPTS ACROSS INSTANCES OF SOFTWARE	EMC Corporation
11540459	8533696	METHODS AND SYSTEMS FOR ALLOCATING HARDWARE RESOURCES TO INSTANCES OF SOFTWARE IMAGES	EMC Corporation
11540472	7969747	LINE CORD FILTER	EMC Corporation
11540474	7502881	DATA PACKET ROUTING MECHANISM UTILIZING THE TRANSACTION ID TAG FIELD	EMC Corporation
11540525	7526623	OPTIMIZING RECLAMATION OF DATA SPACE	EMC Corporation
11540832	7647466	LINEAR SPACE ALLOCATION MECHANISMS IN DATA SPACE	EMC Corporation
11540998	7587431	UPDATING SNAPSHOTS	EMC Corporation
11541062	7594085	RECLAIMING DATA SPACE	EMC Corporation
11541261	8645816	CUSTOMIZING USER DOCUMENTATION	EMC Corporation
11541262	7849262	SYSTEM AND METHOD FOR VIRTUALIZATION OF NETWORKED STORAGE RESOURCES	EMC Corporation
11541327		[REDACTED]	EMC Corporation
11541413	8468604	METHOD AND SYSTEM FOR DETECTING MALWARE	EMC Corporation
11550765	7743388	COMPUTER DIRECTORY SYSTEM HAVING AN APPLICATION INTEGRATION DRIVER INFRASTRUCTURE	EMC Corporation
11551827	7711858	MANAGEMENT OF BACKGROUND COPY TASK FOR POINT-IN-TIME COPIES	EMC Corporation
11551943	8589550	ASYMMETRIC DATA STORAGE SYSTEM FOR HIGH PERFORMANCE AND GRID COMPUTING	EMC Corporation
11556506	7849323	PASSWORD PRESENTATION FOR MULTIMEDIA DEVICES	EMC Corporation
11557941	7822728	METADATA PIPELINING AND OPTIMIZATION IN A FILE SERVER	EMC Corporation

Application Number	Registration Number	Title	Owner
11563450	7818609	METHODS AND SYSTEMS FOR MANAGING CORRUPTED META-DATA IN A COMPUTER SYSTEM OR NETWORK	EMC Corporation
11563467	7793166	METHODS AND SYSTEMS FOR RECOVERING META-DATA IN A CACHE MEMORY AFTER A CORRUPTION EVENT	EMC Corporation
11582610	7702782	USING WATERMARKS TO INDICATE ALERTS IN A STORAGE AREA NETWORK MANAGEMENT CONSOLE	EMC Corporation
11584433	7599932	DATA STORAGE USING IDENTIFIERS	EMC Corporation
11585319	8417592	INVENTORY OF LIBRARIES	EMC Corporation
11585389	7874012	PRIVILEGED ACCESS TO ENCRYPTED DATA	EMC Corporation
11595272	7945534	CONTINUOUS DATA BACKUP	EMC Corporation
11607067	7770053	SYSTEMS AND METHODS FOR MAINTAINING DATA INTEGRITY DURING A MIGRATION	EMC Corporation
11607836	7810147	DETECTING AND PREVENTING REPLAY IN AUTHENTICATION SYSTEMS	EMC Corporation
11608240	8527618	REPERCUSSIONLESS EPHENERAL AGENT FOR SCALABLE PARALLEL OPERATION OF DISTRIBUTED COMPUTERS	EMC Corporation
11608770	8706833	DATA STORAGE SERVER HAVING COMMON REPLICATION ARCHITECTURE FOR MULTIPLE STORAGE OBJECT TYPES	EMC Corporation
11608780	7769722	REPLICATION AND RESTORATION OF MULTIPLE DATA STORAGE OBJECT TYPES IN A DATA NETWORK	EMC Corporation
11608952	7857688	ELECTRICAL CABINET HAVING MULTI-CHANNEL EXHAUST WITH BLEEDING VENTS TO ALLEVIATE BACK-PRESSURE	EMC Corporation
11610623	7694163	SYSTEM FOR GENERATING AND MONITORING VOLTAGES GENERATED FOR A VARIETY OF DIFFERENT COMPONENTS ON A COMMON PRINTED CIRCUIT BOARD	EMC Corporation
11610745	8762636	DATA STORAGE SYSTEM HAVING A GLOBAL CACHE MEMORY DISTRIBUTED AMONG NON-VOLATILE MEMORIES WITHIN SYSTEM DISK DRIVES	EMC Corporation
11611219	7577787	METHODS AND SYSTEMS FOR SCHEDULING WRITE DESTAGES BASED ON A TARGET	EMC Corporation
11612761	7720666	METHOD FOR ESTABLISHING BIT ERROR RATE (BER) REQUIREMENT FOR A DATA COMMUNICATION SYSTEM	EMC Corporation
11616342	8234465	DISASTER RECOVERY USING MIRRORED NETWORK ATTACHED STORAGE	EMC Corporation
11619132	7631009	REDUNDANCY CHECK OF TRANSACTION RECORDS IN A FILE SYSTEM LOG OF A FILE SERVER	EMC Corporation
11621762	8032558	ROLE POLICY MANAGEMENT	EMC Corporation
11626186	7689862	APPLICATION FAILOVER IN A CLUSTER ENVIRONMENT	EMC Corporation
11627000	7383385	REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
11634355	7757013	TECHNIQUES FOR CONTROLLING DATA STORAGE SYSTEM PERFORMANCE	EMC Corporation
11636151	7502898	METHOD AND APPARATUS FOR MANAGING ACCESS TO STORAGE DEVICES IN A STORAGE SYSTEM WITH ACCESS CONTROL	EMC Corporation
11638125	7430495	METHOD AND APPARATUS FOR REPRESENTING, MANAGING, ANALYZING AND PROBLEM REPORTING IN HOME NETWORKS	EMC Corporation
11640068	8082403	METHOD FOR CERTIFYING ERASURE OF ONE OR MORE DATA STORAGE DISK DRIVES	EMC Corporation
11640599	7673031	RESOURCE MAPPING IN A NETWORK ENVIRONMENT	EMC Corporation
11640600	8046477	CONFIGURATION VALIDATION AND AMBIGUOUS MAPPING	EMC Corporation
11640667	7870276	INTERFACE PLUGIN	EMC Corporation
11640668	7624300	MANAGING STORAGE STABILITY	EMC Corporation
11640669	7486083	MANAGING SYSTEM STABILITY	EMC Corporation
11640670	7870220	METHODS AND APPARATUS FOR ANALYZING VSAN CONFIGURATION	EMC Corporation
11640671	7958450	MATCHING USER INTERFACE	EMC Corporation
11640741	7860015	METHODS AND APPARATUS FOR PHYSICAL AND LOGICAL SAN FABRIC ANALYSIS	EMC Corporation
11641411	7792796	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR OPTIMIZING RESOURCE ALLOCATION IN A HOST-BASED REPLICATION ENVIRONMENT	EMC Corporation
11643725	8286029	SYSTEMS AND METHODS FOR MANAGING UNAVAILABLE STORAGE DEVICES	EMC Corporation
11644088	7882061	MULTI-THREAD REPLICATION ACROSS A NETWORK	EMC Corporation
11644174	7818536	METHODS AND APPARATUS FOR STORING CONTENT ON A STORAGE SYSTEM COMPRISING A PLURALITY OF ZONES	EMC Corporation
11644341	8027970	QUERY TRANSLATION FOR SEARCHING COMPLEX STRUCTURES OF OBJECTS	EMC Corporation
11644421	7734889	METHODS AND APPARATUS FOR DISTRIBUTING INFORMATION TO MULTIPLE NODES	EMC Corporation
11644428	8046561	METHODS AND APPARATUS FOR SELECTING A STORAGE ZONE FOR A CONTENT UNIT	EMC Corporation
11644857	7913051	METHODS AND APPARATUS FOR INCREASING THE STORAGE CAPACITY OF A ZONE OF A STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
11645216	7593938	SYSTEMS AND METHODS OF DIRECTORY ENTRY ENCODINGS	EMC Corporation
11645332	7930456	DATA PACKET ARBITRATION SYSTEM	EMC Corporation
11646638	7779118	METHOD AND APPARATUS FOR REPRESENTING, MANAGING, ANALYZING AND PROBLEM REPORTING IN STORAGE NETWORKS	EMC Corporation
11646946	7930159	METHOD AND APPARATUS FOR MULTI-REALM SYSTEM MODELING	EMC Corporation
11647920	7779291	FOUR SITE TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11648069	8577680	MONITORING AND LOGGING VOICE TRAFFIC ON DATA NETWORK	EMC Corporation
11648734	7734884	SIMULTANEOUS CONCURRENT AND CASCADED TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11648770	7752404	TOGGLING BETWEEN CONCURRENT AND CASCADED TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11648772	7680997	DATA RECOVERY SIMULATION	EMC Corporation
11650572	7509448	SYSTEMS AND METHODS FOR MANAGING SEMANTIC LOCKS	EMC Corporation
11651400	7660956	SAVE SET BUNDLING FOR STAGING	EMC Corporation
11668932	7702655	MAINTAINING AND USING USER-CREATED MAPPING HISTORY FOR NETWORK RESOURCE MAPPING	EMC Corporation
11671264	9137012	WIRELESS AUTHENTICATION METHODS AND APPARATUS	EMC Corporation
11671275	8378786	SECURITY PROVISION IN STANDARDS--COMPLIANT RFID SYSTEMS	EMC Corporation
11672390	7839783	SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS	EMC Corporation
11673060	7599905	METHOD AND SYSTEM FOR ALLOCATING MULTIPLE ATTRIBUTE STORAGE PROPERTIES TO SELECTED DATA STORAGE RESOURCES	EMC Corporation
11674996	8156195	SYSTEMS AND METHODS FOR OBTAINING ULTRA-HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
11675397	7769931	METHODS AND SYSTEMS FOR IMPROVED VIRTUAL DATA STORAGE MANAGEMENT	EMC Corporation
11678049	7870356	CREATION OF SNAPSHOT COPIES USING A SPARSE FILE FOR KEEPING A RECORD OF CHANGED BLOCKS	EMC Corporation
11678430	7742404	SYSTEMS AND METHODS OF NETWORK MONITORING	EMC Corporation
11680618	7672981	OBJECT CLASSIFICATION AND INDEXING OF VERY LARGE NAME SPACES USING GRID TECHNOLOGY	EMC Corporation
11682049	7957398	METHODS AND SYSTEMS FOR DYNAMIC DIVISION OF PATH CAPACITY	EMC Corporation
11682783	8301901	SYSTEM AND METHOD FOR EXPRESSING AND EVALUATING SIGNED REPUTATION ASSERTIONS	EMC Corporation
11684108	7818302	SYSTEM AND METHOD FOR PERFORMING FILE SYSTEM CHECKS ON AN ACTIVE FILE SYSTEM	EMC Corporation
11684139	7730090	ARCHITECTURE FOR PERFORMING FILE SYSTEM CHECKING ON AN ACTIVE FILE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
11688203	7747831	HIGH EFFICIENCY PORTABLE ARCHIVE AND DATA PROTECTION USING A VIRTUALIZATION LAYER	EMC Corporation
11690147	7779306	METHOD FOR AUTOMATICALLY DIAGNOSING HARDWARE FAULTS IN A DATA STORAGE SYSTEM	EMC Corporation
11690153	8166315	METHOD FOR CALCULATING POWER FOR DATA STORAGE SYSTEMS	EMC Corporation
11690165	7538453	FAN POWER SUPPLY SYSTEM	EMC Corporation
11692051	7752312	GLOBAL VIEW OF SERVICE AREAS/LOCAL VIEW OF SERVICE NEEDS	EMC Corporation
11692058	8046366	ORCHESTRATING INDEXING	EMC Corporation
11692881	7653612	DATA PROTECTION SERVICES OFFLOAD USING SHALLOW FILES	EMC Corporation
11693165	8156516	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
11694094	7481679	ELECTRICAL CONNECTOR AND CIRCUIT CARD ASSEMBLY	EMC Corporation
11694753	8346748	ENVIRONMENT CLASSIFICATION AND SERVICE ANALYSIS	EMC Corporation
11694764	8543615	AUCTION-BASED SERVICE SELECTION	EMC Corporation
11700388	8997091	TECHNIQUES FOR COMPLIANCE TESTING	EMC Corporation
11701309	7966492	SYSTEM AND METHOD FOR ALLOWING AN E-MAIL MESSAGE RECIPIENT TO AUTHENTICATE THE MESSAGE	EMC Corporation
11705553	8234696	METHOD AND SYSTEM FOR PROVIDING A ONE TIME PASSWORD TO WORK IN CONJUNCTION WITH A BROWSER	EMC Corporation
11706172	8532300	SYMMETRIC ENCRYPTION KEY MANAGEMENT	EMC Corporation
11714714	8126854	USING VERSIONING TO BACK UP MULTIPLE VERSIONS OF A STORED OBJECT	EMC Corporation
11714715	8347271	SOFTWARE TESTING	EMC Corporation
11724030	7849281	METHOD AND SYSTEM FOR IMPLEMENTING HIERARCHICAL PERMISSION MAPS IN A LAYERED VOLUME GRAPH	EMC Corporation
11724477	7739448	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
11725346	8037243	INSTALLING DATA STORAGE SYSTEM SOFTWARE ON DISK DRIVE SYSTEMS	EMC Corporation
11725882	7962595	METHOD AND APPARATUS FOR DIAGNOSING HOST TO STORAGE DATA PATH LOSS DUE TO FIBRECHANNEL SWITCH FABRIC SPLITS	EMC Corporation
11726311	7797500	GEOMETRY ADAPTION USING DATA REDISTRIBUTION	EMC Corporation
11726326	7930161	METHOD AND APPARATUS FOR HORIZONTAL AND VERTICAL MODELED REPRESENTATION AND ANALYSIS OF DISTRIBUTED SYSTEMS	EMC Corporation
11726744	8069310	METHODS AND SYSTEMS FOR INCORPORATING SEQUENTIAL STREAM READ REQUESTS INTO PREFETCH MANAGEMENT FOR DATA STORAGE HAVING A CACHE MEMORY	EMC Corporation

Application Number	Registration Number	Title	Owner
11726831	9152349	AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
11728538	7634630	STORING AUTHENTICATION INFORMATION IN A CONTENT UNIT ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11728539	7904557	GRANTING ACCESS TO A CONTENT UNIT STORED ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11728540	7734886	CONTROLLING ACCESS TO CONTENT UNITS STORED ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11728749	8032785	ARCHITECTURE FOR MANAGING DISK DRIVES	EMC Corporation
11728768	7739470	LIMIT ALGORITHM USING QUEUE DEPTH TO CONTROL APPLICATION PERFORMANCE	EMC Corporation
11728907	8458263	METHOD AND APPARATUS FOR ELECTRONIC MESSAGE ARCHIVE VERIFICATION	EMC Corporation
11729164	8261029	DYNAMIC BALANCING OF WRITES BETWEEN MULTIPLE STORAGE DEVICES	EMC Corporation
11729166	7751398	TECHNIQUES FOR PRIORITIZATION OF MESSAGING TRAFFIC	EMC Corporation
11729222	8051324	MASTER-SLAVE PROVIDER ARCHITECTURE AND FAILOVER MECHANISM	EMC Corporation
11729707	7925829	I/O OPERATIONS FOR A STORAGE ARRAY	EMC Corporation
11729716	7945758	STORAGE ARRAY PARTITIONING	EMC Corporation
11729722	7970992	ASYMMETRICAL DEVICE DISTRIBUTION FOR A PARTITIONED STORAGE SUBSYSTEM	EMC Corporation
11729728	7809975	RECOVERY FROM A STORAGE PROCESSOR FAILURE WRITE CACHE PRESERVATION	EMC Corporation
11731130	8239692	AUTOMATIC POWER-ON SYSTEM AND METHOD USING HIGH-SPEED COMMUNICATION LINE	EMC Corporation
11731181	7716435	PROTECTION OF POINT-IN-TIME APPLICATION DATA	EMC Corporation
11731331	8527593	CHANGE OF AN ARCHIVED EMAIL PROPERTY IN THE EMAIL SYSTEM LOCAL STORE	EMC Corporation
11731467	8103685	METHODS AND APPARATUS FOR CAPTURING LAST DISCOVERY TIME OF MANAGED OBJECTS	EMC Corporation
11731468	7984515	SOFTWARE LICENSE ENFORCEMENT BY RUNTIME FEATURE ENABLEMENT	EMC Corporation
11731469	8219681	SYSTEM AND METHOD FOR MANAGING PROVISIONING OF STORAGE RESOURCES IN A NETWORK WITH VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
11731582	7720884	AUTOMATIC GENERATION OF ROUTINES AND/OR SCHEMAS FOR DATABASE MANAGEMENT	EMC Corporation
11731608	8032599	DISPLAY OF ARCHIVED EMAIL CONTENT IN A PREVIEW PANE	EMC Corporation
11731609	7730146	LOCAL EMAIL ARCHIVE STORE SIZE MANAGEMENT	EMC Corporation
11731675	8032701	SYSTEM AND METHOD FOR MANAGING PROVISIONING OF STORAGE RESOURCES IN A NETWORK WITH VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
11731679	7904965	USER ACTION SECURITY AUDITING	EMC Corporation

Application Number	Registration Number	Title	Owner
11731694	7860919	METHODS AND APPARATUS FOR ASSIGNING OPERATIONS TO AGENTS BASED ON VERSIONS	EMC Corporation
11731696	8203965	LAYERED APPROACH FOR REPRESENTING AND ANALYZING VIRTUAL PRIVATE NETWORK SERVICES	EMC Corporation
11731775	8015375	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PARALLEL PROCESSING AND SAVING TRACKING INFORMATION FOR MULTIPLE WRITE REQUESTS IN A DATA REPLICATION ENVIRONMENT INCLUDING MULTIPLE DATA STORAGE DEVICES	EMC Corporation
11731921	8463798	PRIORITIZED RESTORE	EMC Corporation
11731931	8375005	RAPID RESTORE	EMC Corporation
11732383	9391828	STORING AND MONITORING COMPUTED RELATIONSHIPS BETWEEN NETWORK COMPONENTS	EMC Corporation
11732664	8898126	METHOD AND APPARATUS FOR PROVIDING CONCURRENT DATA INSERTION AND UPDATING	EMC Corporation
11739311	9317222	CENTRALIZED CONTENT ADDRESSED STORAGE	EMC Corporation
11744200	9110920	CIFS ACCESS TO NFS FILES AND DIRECTORIES BY TRANSLATING NFS FILE HANDLES INTO PSEUDO-PATHNAMES	EMC Corporation
11746399	8065273	AUTOMATED PRIORITY RESTORES	EMC Corporation
11747567		[REDACTED]	EMC Corporation
11747871	7721144	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
11748457	7822927	DYNAMICALLY CONFIGURABLE REVERSE DNLC LOOKUP	EMC Corporation
11757280	7680998	JOURNALED DATA BACKUP DURING SERVER QUIESCENCE OR UNAVAILABILITY	EMC Corporation
11761918	8260949	METHOD AND SYSTEM FOR PROVIDING MULTIMEDIA INFORMATION ON DEMAND OVER WIDE AREA NETWORKS	EMC Corporation
11764355	8301789	TECHNIQUES FOR PORT HOPPING	EMC Corporation
11766301	8046596	RESET-TOLERANT AUTHENTICATION DEVICE	EMC Corporation
11768319	8416772	DATA STORAGE SYSTEM HAVING OPTICAL/NON-OPTICAL COMMUNICATION LCC	EMC Corporation
11768608	7848746	WIRELESS AUTHENTICATION METHODS AND APPARATUS	EMC Corporation
11768648	7626237	NON-VOLATILE MEMS MEMORY CELL AND METHOD OF FORMING SUCH MEMORY CELL	EMC Corporation
11769407	8499331	POLICY BASED NETWORK COMPLIANCE	EMC Corporation
11769499	7809667	RULE-BASED NETWORK RESOURCE COMPLIANCE	EMC Corporation
11769561	7934248	NETWORK POLICY ENFORCEMENT DASHBOARD VIEWS	EMC Corporation
11769737	7979572	DATA STORAGE SYSTEM HAVING OPERATION CODE IN ADDRESS PORTION FOR ATOMIC OPERATIONS	EMC Corporation
11769739	7707367	DATA STORAGE SYSTEM HAVING SEPARATE ATOMIC OPERATION/NON-ATOMIC OPERATION PATHS	EMC Corporation

Application Number	Registration Number	Title	Owner
11769740	7979588	DATA STORAGE SYSTEM HAVING ACCELERATION PATH FOR CONGESTED PACKET SWITCHING NETWORK	EMC Corporation
11769743	7769928	DATA STORAGE SYSTEM HAVING CPUS ADAPTED TO PERFORM A SECOND ATOMIC OPERATION REQUEST PRIOR TO COMPLETION OF A FIRST ATOMIC OPERATION REQUEST	EMC Corporation
11769744	7987229	DATA STORAGE SYSTEM HAVING PLURAL DATA PIPES	EMC Corporation
11769745	8090789	METHOD OF OPERATING A DATA STORAGE SYSTEM HAVING PLURAL DATA PIPES	EMC Corporation
11769746	8645623	METHOD FOR PERFORMING A RAID OPERATION IN A DATA STORAGE SYSTEM	EMC Corporation
11769790	7984131	NETWORK CONFIGURATION HISTORY TRACKING	EMC Corporation
11769855	9071439	METHOD AND APPARATUS FOR REMOTE ADMINISTRATION OF CRYPTOGRAPHIC DEVICES	EMC Corporation
11770059	8700575	SYSTEM AND METHOD FOR INITIALIZING A NETWORK ATTACHED STORAGE SYSTEM FOR DISASTER RECOVERY	EMC Corporation
11770216	7689587	AUTOREP PROCESS TO CREATE PRE-LOADED REPOSITORY AND UPGRADE SCRIPTS	EMC Corporation
11770824	8060759	SYSTEM AND METHOD OF MANAGING AND OPTIMIZING POWER CONSUMPTION IN A STORAGE SYSTEM	EMC Corporation
11770837	9158466	POWER-SAVING MECHANISMS FOR A DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
11771561	7882373	SYSTEM AND METHOD OF REDUCING POWER CONSUMPTION IN A STORAGE SYSTEM THROUGH SHORTENING OF SEEK DISTANCES	EMC Corporation
11771604	9098211	SYSTEM AND METHOD OF NON-DISRUPTIVE DATA MIGRATION BETWEEN A FULL STORAGE ARRAY AND ONE OR MORE VIRTUAL ARRAYS	EMC Corporation
11771655	9063895	SYSTEM AND METHOD OF NON-DISRUPTIVE DATA MIGRATION BETWEEN HETEROGENEOUS STORAGE ARRAYS	EMC Corporation
11771686	9063896	SYSTEM AND METHOD OF NON-DISRUPTIVE DATA MIGRATION BETWEEN VIRTUAL ARRAYS OF HETEROGENEOUS STORAGE ARRAYS	EMC Corporation
11772129	7631155	THIN PROVISIONING OF A FILE SYSTEM AND AN ISCSI LUN THROUGH A COMMON MECHANISM	EMC Corporation
11772138	8285758	TIERING STORAGE BETWEEN MULTIPLE CLASSES OF STORAGE ON THE SAME CONTAINER FILE SYSTEM	EMC Corporation
11772149	7694191	SELF HEALING FILE SYSTEM	EMC Corporation
11772154	7818535	IMPLICIT CONTAINER PER VERSION SET	EMC Corporation
11772179	9361354	HIERARCHY OF SERVICE AREAS	EMC Corporation
11772182	9002800	ARCHIVE AND BACKUP VIRTUALIZATION	EMC Corporation
11772183	9235477	VIRTUALIZED BACKUP SOLUTION	EMC Corporation
11772192	8612570	DATA CLASSIFICATION AND MANAGEMENT USING TAP NETWORK ARCHITECTURE	EMC Corporation
11772513	7769736	SYSTEM AND METHOD FOR EFFICIENT ISSUANCE OF QUERIES	EMC Corporation

Application Number	Registration Number	Title	Owner
11772552	8898261	CONFIGURING AGENT SERVICES OPERABLE BY AGENTS IN A STORAGE AREA NETWORK	EMC Corporation
11772805	7792800	DATA REPOSITORY UPGRADE PROCESS	EMC Corporation
11779486	8099401	EFFICIENTLY INDEXING AND SEARCHING SIMILAR DATA	EMC Corporation
11781739	7852581	NETWORK SECURITY DEVICES AND METHODS	EMC Corporation
11782594	7707166	PROBABILISTIC SUMMARY DATA STRUCTURE BASED ENCODING FOR GARBAGE COLLECTION	EMC Corporation
11784171	7730147	PRIORITIZING ARCHIVED EMAIL REQUESTS	EMC Corporation
11784172	7730148	BACKFILLING A LOCAL EMAIL ARCHIVE STORE	EMC Corporation
11784173	8156188	EMAIL ARCHIVE SERVER PRIMING FOR A CONTENT REQUEST	EMC Corporation
11784193	8930464	EMAIL CONTENT PRE-CACHING TO A LOCAL ARCHIVE STORE	EMC Corporation
11784194	8856241	MANAGEMENT OF EMAIL ARCHIVE SERVER REQUESTS	EMC Corporation
11784963	9235641	METHOD AND APPARATUS FOR ARCHIVE PROCESSING OF ELECTRONIC MESSAGES	EMC Corporation
11787117	7900015	SYSTEMS AND METHODS OF QUOTA ACCOUNTING	EMC Corporation
11787224	8966080	SYSTEMS AND METHODS OF MANAGING RESOURCES UTILIZATION ON A THREADED COMPUTER SYSTEM	EMC Corporation
11787225	7779048	SYSTEMS AND METHODS FOR PROVIDING POSSIBLE VALUE RANGES	EMC Corporation
11788407	7747581	NETWORK FILE SYSTEM-BASED DATA STORAGE SYSTEM	EMC Corporation
11789554	7567978	POPULATION OF DISCOVERY DATA	EMC Corporation
11799847	7925796	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PERFORMING AN INPUT/OUTPUT (I/O) OPERATION THAT INCLUDES A VIRTUAL DRAIN	EMC Corporation
11800091	7996574	MESSAGING MECHANISM FOR INTER PROCESSOR COMMUNICATION	EMC Corporation
11801484	7836272	METHODS AND APPARATUS FOR INTERFACING TO A DATA STORAGE SYSTEM	EMC Corporation
11803385	8010697	ORDERED WRITES FOR SRDF ASSIST	EMC Corporation
11803607	7546220	SYSTEM AND METHOD FOR PREPARING TRACE DATA FOR ANALYSIS	EMC Corporation
11804578	8768895	SUBSEGMENTING FOR EFFICIENT STORAGE, RESEMBLANCE DETERMINATION, AND TRANSMISSION	EMC Corporation
11807049	8010543	PROTECTING A FILE SYSTEM ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11807070	7752492	RESPONDING TO A FAILURE OF A STORAGE SYSTEM	EMC Corporation
11807133	8095804	STORING DELETED DATA IN A FILE SYSTEM SNAPSHOT	EMC Corporation
11807134	8205049	TRANSMITTING FILE SYSTEM ACCESS REQUESTS TO MULTIPLE FILE SYSTEMS	EMC Corporation
11807204	7827137	SEEDING REPLICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
11811273	8201156	AUTOMATIC GENERATION OF MESSAGE IDS	EMC Corporation
11811274	8732724	DELAYED RENDERING OF MESSAGES	EMC Corporation
11811363	8707333	MESSAGE ARGUMENT DESCRIPTORS	EMC Corporation
11811676	8477033	INVENTORY CONTROL	EMC Corporation
11818576	8626741	PROCESS FOR CATALOGING DATA OBJECTS BACKED UP FROM A CONTENT ADDRESSED STORAGE SYSTEM	EMC Corporation
11818577	8190834	PROCESS FOR CONTIGUOUSLY STREAMING DATA FROM A CONTENT ADDRESSED STORAGE SYSTEM	EMC Corporation
11819609	8918537	STORAGE ARRAY NETWORK PATH ANALYSIS SERVER FOR ENHANCED PATH SELECTION IN A HOST-BASED I/O MULTI-PATH SYSTEM	EMC Corporation
11819611	7937481	SYSTEM AND METHODS FOR ENTERPRISE PATH MANAGEMENT	EMC Corporation
11819612	8204980	STORAGE ARRAY NETWORK PATH IMPACT ANALYSIS SERVER FOR PATH SELECTION IN A HOST-BASED I/O MULTI-PATH SYSTEM	EMC Corporation
11820574	8082390	TECHNIQUES FOR REPRESENTING AND STORING RAID GROUP CONSISTENCY INFORMATION	EMC Corporation
11820737	7752389	TECHNIQUES FOR DETERMINING PHYSICAL DATA LAYOUT OF RAID DEVICES	EMC Corporation
11821008	7769032	TOPOLOGY SPLIT MANAGER USING GRAPH CONTRACTION	EMC Corporation
11821841	8082227	SESSION SENSITIVE DATA BACKUPS AND RESTORES	EMC Corporation
11823152	7949637	STORAGE MANAGEMENT FOR FINE GRAINED TIERED STORAGE WITH THIN PROVISIONING	EMC Corporation
11823154	7747750	METHOD FOR RESERVING RESOURCES IN A STORAGE AREA NETWORK WITH SELECTIVE CAPABILITIES	EMC Corporation
11823156	8775368	FINE GRAINED TIERED STORAGE WITH THIN PROVISIONING	EMC Corporation
11823157	7899909	METHOD FOR RESERVING RESOURCES IN A STORAGE AREA NETWORK BY RESERVING PORTIONS OF PROPERTIES OF THE RESOURCES	EMC Corporation
11823499	7865761	ACCESSING MULTIPLE NON-VOLATILE SEMICONDUCTOR MEMORY MODULES IN AN UNEVEN MANNER	EMC Corporation
11823619	8028110	NON-DISRUPTIVE DATA MIGRATION AMONG STORAGE DEVICES USING INTEGRATED VIRTUALIZATION ENGINE OF A STORAGE DEVICE	EMC Corporation
11823642	8112398	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR SELECTIVELY MARKING AND RETRIEVING DATA FROM AN EVENT LOG FILE	EMC Corporation
11823683	7856022	NON-DISRUPTIVE DATA MIGRATION WITH EXTERNAL VIRTUALIZATION ENGINE	EMC Corporation
11823930	7746844	METHOD AND APPARATUS FOR ANALYSIS OF VOIP NETWORK PERFORMANCE	EMC Corporation

Application Number	Registration Number	Title	Owner
11823986	8818936	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PROCESSING READ REQUESTS RECEIVED DURING A PROTECTED RESTORE OPERATION	EMC Corporation
11824198	7783620	RELEVANCY SCORING USING QUERY STRUCTURE AND DATA STRUCTURE FOR FEDERATED SEARCH	EMC Corporation
11824238	8711840	METHOD AND APPARATUS FOR MANAGEMENT AND ANALYSIS OF SERVICES IN VOIP NETWORKS	EMC Corporation
11824239	7568051	FLEXIBLE UCB	EMC Corporation
11824254	8924352	AUTOMATED PRIORITY BACKUP AND ARCHIVE	EMC Corporation
11824304	7783630	TUNING OF RELEVANCY RANKING FOR FEDERATED SEARCH	EMC Corporation
11824414	7856563	MANAGING DISK DRIVE POWER STATES	EMC Corporation
11824430	8990527	DATA MIGRATION WITH SOURCE DEVICE REUSE	EMC Corporation
11824433	8205218	DATA STORAGE SYSTEM HAVING COMMON SOFTWARE ENVIRONMENT	EMC Corporation
11824434	8060750	SECURE SEED PROVISIONING	EMC Corporation
11824435	7634567	CONFIGURING DATA STORAGE FOR ELECTRONIC MAIL APPLICATION	EMC Corporation
11824485	8296534	TECHNIQUES FOR USING FLASH-BASED MEMORY IN RECOVERY PROCESSING	EMC Corporation
11824506	7950022	TECHNIQUES FOR USE WITH DEVICE DRIVERS IN A COMMON SOFTWARE ENVIRONMENT	EMC Corporation
11824542	7950025	COMMON SOFTWARE ENVIRONMENT	EMC Corporation
11824577	7793061	TECHNIQUES FOR USING FLASH-BASED MEMORY AS A WRITE CACHE AND A VAULT	EMC Corporation
11824578	7523231	APPLICATION AWARE STORAGE	EMC Corporation
11824592	8005861	CLUSTER STORAGE USING SUBSEGMENTING FOR EFFICIENT STORAGE	EMC Corporation
11829756	7783682	PROBABILISTIC SUMMARY DATA STRUCTURE BASED ENCODING FOR GARBAGE COLLECTION IN BACKUP SYSTEMS	EMC Corporation
11833012	9286595	SYSTEM AND METHOD FOR COLLECTING AND NORMALIZING ENTITLEMENT DATA WITHIN AN ENTERPRISE	EMC Corporation
11834904	8954522	HORIZONTAL SCALING THROUGH UPPER LEVEL PROTOCOL PRE-PROCESSING	EMC Corporation
11836735	8819344	SHARED STORAGE ACCESS LOAD BALANCING FOR A LARGE NUMBER OF HOSTS	EMC Corporation
11839453	7958166	SYSTEM AND METHOD FOR PROVIDING WRITE-ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
11839897	7603515	MIDPLANE-INDEPENDENT IMPLEMENTATIONS OF DATA STORAGE SYSTEM ENCLOSURES	EMC Corporation
11843000	8010698	NETWORK APPLICATION LAYER ROUTING	EMC Corporation
11843287	7487539	CROSS DOMAIN AUTHENTICATION AND SECURITY SERVICES USING PROXIES FOR HTTP ACCESS	EMC Corporation
11846704	8527454	DATA REPLICATION USING A SHARED RESOURCE	EMC Corporation
11851702	8176169	METHOD FOR NETWORK VISUALIZATION	EMC Corporation

Application Number	Registration Number	Title	Owner
11854616	7930487	SYSTEM AND METHOD FOR PROVIDING ACCESS CONTROL TO RAW SHARED DEVICES	EMC Corporation
11854784	8576875	SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS IN A MULTI-PATH ENVIRONMENT	EMC Corporation
11855400	7574558	SECTOR-EDGE CACHE	EMC Corporation
11859100	8006111	INTELLIGENT FILE SYSTEM BASED POWER MANAGEMENT FOR SHARED STORAGE THAT MIGRATES GROUPS OF FILES BASED ON INACTIVITY THRESHOLD	EMC Corporation
11861636	7698491	MODULAR PATCH PANEL WITH PLUGGABLE PERSONALITIES	EMC Corporation
11862253	7684961	LIGHT PATH DIAGNOSTICS	EMC Corporation
11862318		[REDACTED]	EMC Corporation
11862427	7945640	METHODS AND APPARATUS FOR NETWORK PROVISIONING	EMC Corporation
11862491	8447892	PCI-E EXTENDED REACH WITH RECEIVE DETECT CIRCUITRY	EMC Corporation
11862512	8005999	DATA STORAGE SYSTEM WITH PCI-E EXTENDED REACH CAPABILITY	EMC Corporation
11862582	7804793	SAS DIPLEX COMMUNICATIONS	EMC Corporation
11862589	7903683	FAULT TOLERANT DIPLEX COMMUNICATIONS	EMC Corporation
11862761	7445457	TECHNIQUES FOR CONNECTING MIDPLANE CONNECTORS THROUGH A MIDPLANE	EMC Corporation
11862783	7921311	METHOD AND APPARATUS FOR MITIGATING CURRENT DRAIN IN A LOW-POWER HAND-HELD DEVICE	EMC Corporation
11862800	7722359	CONNECTION ASSEMBLY HAVING MIDPLANE WITH ENHANCED CONNECTION AND AIRFLOW FEATURES	EMC Corporation
11863018	8209701	TASK MANAGEMENT USING MULTIPLE PROCESSING THREADS	EMC Corporation
11863042	8209702	TASK EXECUTION USING MULTIPLE POOLS OF PROCESSING THREADS, EACH POOL DEDICATED TO EXECUTE DIFFERENT TYPES OF SUB-TASKS	EMC Corporation
11863392	8438610	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
11863530	8156220	DATA STORAGE SYSTEM	EMC Corporation
11863550	7471512	STORAGE SYSTEM ASSEMBLY EMPLOYING REPEATER AMPLIFIERS IN I/O EXPANSION MODULE	EMC Corporation
11863585	9134916	MANAGING CONTENT IN A DISTRIBUTED SYSTEM	EMC Corporation
11863745	8332613	METHODS AND SYSTEMS FOR MANAGING I/O REQUESTS TO MINIMIZE DISRUPTION REQUIRED FOR DATA ENCAPSULATION AND DE-ENCAPSULATION	EMC Corporation
11863780	8387066	DEPENDENCY-BASED TASK MANAGEMENT	EMC Corporation
11863882	7809964	STORAGE SYSTEM ASSEMBLY WITH DISTRIBUTED ENCLOSURE MANAGEMENT	EMC Corporation
11863885	8621550	INFORMATION TECHNOLOGY RESOURCE COMPLIANCE TEMPLATES	EMC Corporation
11863896	7567398	DETECTION OF FLY HEIGHT CHANGE IN A DISK DRIVE	EMC Corporation

Application Number	Registration Number	Title	Owner
11863940	8024772	APPLICATION SERVICE POLICY COMPLIANCE SERVER	EMC Corporation
11864001	8059814	TECHNIQUES FOR CARRYING OUT SEE OR KEY DERIVATION	EMC Corporation
11864026	8819203	TECHNIQUES FOR PROVIDING AN APPLICATION SERVICE TO AN APPLICATION FROM AN APPLIANCE-STYLE APPLICATION SERVICES PLATFORM	EMC Corporation
11864040	8191084	TECHNIQUES FOR SUPPORTING APPLICATION OPERATION	EMC Corporation
11864054	8594335	KEY VERIFICATION SYSTEM AND METHOD	EMC Corporation
11864094	8589729	DATA PRESERVATION SYSTEM AND METHOD	EMC Corporation
11864115	8103801	MARKING AND FAULTING INPUT/OUTPUT PORTS OF AN ELECTRONICS SYSTEM	EMC Corporation
11864126	7822707	OBJECT SEARCHING AND MANAGEMENT INFORMATION VIEWING IN A STORAGE AREA NETWORK ENVIRONMENT	EMC Corporation
11864140	7934032	INTERFACE FOR ESTABLISHING OPERABILITY BETWEEN A PROCESSOR MODULE AND INPUT/OUTPUT (I/O) MODULES	EMC Corporation
11864457	8494977	IT POLICY VIOLATION VIEWS	EMC Corporation
11864583	8209506	DE-DUPLICATION IN A VIRTUALIZED STORAGE ENVIRONMENT	EMC Corporation
11864596	8868720	DELEGATION OF DISCOVERY FUNCTIONS IN INFORMATION MANAGEMENT SYSTEM	EMC Corporation
11864605	8548964	DELEGATION OF DATA CLASSIFICATION USING COMMON LANGUAGE	EMC Corporation
11864756	8880797	DE-DUPLICATION IN A VIRTUALIZED SERVER ENVIRONMENT	EMC Corporation
11864760	9141658	DATA CLASSIFICATION AND MANAGEMENT FOR RISK MITIGATION	EMC Corporation
11864764	9323901	DATA CLASSIFICATION FOR DIGITAL RIGHTS MANAGEMENT	EMC Corporation
11864770		[REDACTED]	EMC Corporation
11864774	8522248	MONITORING DELEGATED OPERATIONS IN INFORMATION MANAGEMENT SYSTEMS	EMC Corporation
11864783	8719263	SELECTIVE PERSISTENCE OF METATDATA IN INFORMATION MANAGEMENT	EMC Corporation
11864943	8146155	CONTROLLING ACCESS TO CONTENT ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11866133	7885943	IT COMPLIANCE RULES	EMC Corporation
11866168	8024320	QUERY LANGUAGE	EMC Corporation
11867330	7620790	METHODS AND APPARATUS FOR INTERFACING TO A DATA STORAGE SYSTEM	EMC Corporation
11868882	8738669	METHOD AND APPARATUS FOR PROVIDING ACCESS TO DATA OBJECTS WITHIN ANOTHER DATA OBJECT	EMC Corporation
11878290	7774472	SYSTEM AND METHOD FOR CROSS-AUTHORITATIVE CONFIGURATION MANAGEMENT	EMC Corporation
11880325	7730180	RESOLVING MULTIPLE MASTER NODE CONFLICT IN A DDB	EMC Corporation

Application Number	Registration Number	Title	Owner
11880462	7743033	SYSTEM AND METHODS FOR PROVIDING A DISTRIBUTED FILE SYSTEM UTILIZING METADATA TO TRACK INFORMATION ABOUT DATA STORED THROUGHOUT THE SYSTEM	EMC Corporation
11884776	8266295	SYSTEM AND METHOD FOR DETECTING AND MITIGATING DNS SPOOFING TROJANS	EMC Corporation
11886746	8122082	SYSTEM AND METHOD FOR DETECTING A PROXY BETWEEN A CLIENT AND SERVER	EMC Corporation
11890306		[REDACTED]	EMC Corporation
11891237	8712966	BACKUP AND RECOVERY OF DISTRIBUTED STORAGE AREAS	EMC Corporation
11894697	7966289	SYSTEMS AND METHODS FOR READING OBJECTS IN A FILE SYSTEM	EMC Corporation
11894739	7949692	SYSTEMS AND METHODS FOR PORTALS INTO SNAPSHOT DATA	EMC Corporation
11894756	7882068	SYSTEMS AND METHODS FOR ADAPTIVE COPY ON WRITE	EMC Corporation
11897686	7702871	WRITE PACING	EMC Corporation
11900062	8584128	TECHNIQUES FOR ADJUSTING PRIORITIES ASSOCIATED WITH SERVICING REQUESTS	EMC Corporation
11901213	8832163	TECHNIQUES FOR DETERMINING LOGICAL DATA OBJECTS CORRESPONDING TO PHYSICAL STORAGE LOCATIONS	EMC Corporation
11901335	8015327	TECHNIQUES FOR MONITORING AND MANAGING WAIT QUEUES	EMC Corporation
11903869	7822939	DATA DE-DUPLICATION USING THIN PROVISIONING	EMC Corporation
11904129	8433777	COMMUNICATION WITH MULTIPLE STORAGE PROCESSORS VIA DIRECT CONNECTIONS	EMC Corporation
11904199	8819104	COMMUNICATION WITH MULTIPLE STORAGE PROCESSORS USING NETWORK INFRASTRUCTURE.	EMC Corporation
11904302	7930533	PXE BOOTING A STORAGE PROCESSOR FROM A PEER STORAGE PROCESSOR	EMC Corporation
11904359	8775549	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR AUTOMATICALLY ADJUSTING A DATA REPLICATION RATE BASED ON A SPECIFIED QUALITY OF SERVICE (QOS) LEVEL	EMC Corporation
11904360	8190843	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR DYNAMICALLY ALLOCATING MEMORY AMONG A PLURALITY OF PROCESSES	EMC Corporation
11904621	7778244	STORAGE SYSTEM MANAGEMENT WITH DIPLEXING USING USB SIGNAL CONVERSION	EMC Corporation
11904624	8145610	DATA MODEL FOR SERVICE ARCHITECTURE	EMC Corporation
11904671	8060709	CONTROL OF STORAGE VOLUMES IN FILE ARCHIVING	EMC Corporation
11904721	8244781	NETWORK ACCESSED STORAGE FILES SYSTEM QUERY/SET PROXY SERVICE FOR A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
11904756	8380950	SYSTEM AND METHOD FOR DYNAMIC STORAGE DEVICE RECONFIGURATION	EMC Corporation

Application Number	Registration Number	Title	Owner
11904802	8380806	SYSTEM AND METHOD FOR ABSOLUTE PATH DISCOVERY BY A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
11904832	7873851	POWERING DISK DRIVE SPINUP	EMC Corporation
11904868	8239645	MANAGING MIRRORING IN DATA STORAGE SYSTEM HAVING FAST WRITE DEVICE AND SLOW WRITE DEVICE	EMC Corporation
11904880	8819234	SUPPLYING DATA STORAGE SERVICES	EMC Corporation
11904885	8918603	STORAGE OF FILE ARCHIVING METADATA	EMC Corporation
11904889	7895519	TRACKING USE OF INTERFACE AND ONLINE ASSISTANCE	EMC Corporation
11904892	8326805	HIGH-AVAILABILITY FILE ARCHIVING	EMC Corporation
11904972	8341121	IMMINENT FAILURE PRIORITIZED BACKUP	EMC Corporation
11904975	8583601	IMMINENT FAILURE BACKUP	EMC Corporation
11906026	8650615	CROSS DOMAIN DELEGATION BY A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
11906035	7873791	METHODS AND SYSTEMS FOR INCORPORATING IMPROVED TAIL CUTTING IN A PREFETCH STREAM IN TBC MODE FOR DATA STORAGE HAVING A CACHE MEMORY	EMC Corporation
11906127	8601131	ACTIVE ELEMENT MANAGER	EMC Corporation
11906131	8302201	SECURITY AND LICENSING WITH APPLICATION AWARE STORAGE	EMC Corporation
11906134	8150877	ACTIVE ELEMENT MANAGEMENT AND ELECTRONIC COMMERCE	EMC Corporation
11906149	8161083	CREATING USER COMMUNITIES WITH ACTIVE ELEMENT MANAGER	EMC Corporation
11906160	8296414	TECHNIQUES FOR AUTOMATED APPLICATION DISCOVERY	EMC Corporation
11906565	8326969	METHOD AND APPARATUS FOR PROVIDING SCALABILITY IN RESOURCE MANAGEMENT AND ANALYSIS SYSTEM- THREE WAY SPLIT ARCHITECTURE	EMC Corporation
11924576	8903772	DIRECT OR INDIRECT MAPPING POLICY FOR DATA BLOCKS OF A FILE IN A FILE SYSTEM	EMC Corporation
11924744	8250633	TECHNIQUES FOR FLEXIBLE RESOURCE AUTHENTICATION	EMC Corporation
11925628	7613827	DISTRIBUTED TRAFFIC CONTROLLER FOR NETWORK DATA	EMC Corporation
11926784	8438617	USER AUTHENTICATION BASED ON VOUCHER CODES	EMC Corporation
11930738	8413221	METHODS AND APPARATUS FOR DELEGATED AUTHENTICATION	EMC Corporation
11933586	9282005	IT INFRASTRUCTURE POLICY BREACH INVESTIGATION INTERFACE	EMC Corporation
11933686	8135760	DETERMINING THE LINEAGE OF A CONTENT UNIT ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11936572	7447926	DISK DRIVE INPUT SEQUENCING FOR STAGGERED DRIVE SPIN-UP	EMC Corporation

Application Number	Registration Number	Title	Owner
11938965	8665562	METHOD OF RELIABLE USAGE OF DYNAMIC FLY-HEIGHT CONTROL AT ENVIRONMENTAL EXTREMES	EMC Corporation
11939232	8495372	AUTHENTICATION METHODS AND APPARATUS USING PAIRING PROTOCOLS AND OTHER TECHNIQUES	EMC Corporation
11949204	8020203	TECHNIQUES FOR HIGH AVAILABILITY OF VIRTUAL PRIVATE NETWORKS (VPN'S)	EMC Corporation
11954399	8060710	NON-DISRUPTIVE MIGRATION USING DEVICE IDENTITY SPOOFING AND PASSIVE/ACTIVE ORS PULL SESSIONS	EMC Corporation
11959386	8244953	SYSTEM AND METHOD FOR FASTER DATA RETRIEVAL FROM TAPE MEDIA	EMC Corporation
11960073	7516288	METHOD AND APPARATUS FOR COMPUTING FILE STORAGE ELEMENTS FOR BACKUP AND RESTORE	EMC Corporation
11960759	7711869	METHOD FOR COMMUNICATING PLURAL SIGNALS GENERATED AT A SOURCE TO A REMOTE DESTINATION THROUGH A SINGLE WIRE	EMC Corporation
11962499		[REDACTED]	EMC Corporation
11962521	8336089	METHOD AND APPARATUS FOR PROVIDING AUTHENTICATION AND ENCRYPTION SERVICES BY A SOFTWARE AS A SERVICE PLATFORM	EMC Corporation
11962545		[REDACTED]	EMC Corporation
11962687	8706800	CLIENT DEVICE SYSTEMS AND METHODS FOR PROVIDING SECURE ACCESS TO APPLICATION SERVICES AND ASSOCIATED CLIENT DATA HOSTED BY AN INTERNET COUPLED PLATFORM	EMC Corporation
11962802	8539169	MANAGING POWER CONSUMPTION OF A STORAGE SYSTEM	EMC Corporation
11963086	8131919	TECHNIQUES FOR CONTROLLING STORAGE DEVICE USE BY PERFORMING A STORAGE DEVICE LOCATION ASSESSMENT OPERATION BASED ON A CURRENT STORAGE DEVICE IDENTIFIER	EMC Corporation
11963929	7849263	TECHNIQUES FOR CONTROLLING STORAGE CAPACITY OF A DATA STORAGE SYSTEM	EMC Corporation
11963947	7573726	LATCH ASSEMBLY	EMC Corporation
11964364		[REDACTED]	EMC Corporation
11964789	8005227	KEY INFORMATION CONSISTENCY CHECKING IN ENCRYPTING DATA STORAGE SYSTEM	EMC Corporation
11965095	8954443	MULTI-PROTOCOL DATA OBJECT SCANNING BY A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
11965244	8010810	TECHNIQUES FOR PROTECTING DATA USING AN ELECTRONIC ENCRYPTION ENDPOINT DEVICE	EMC Corporation
11965250	8190921	METHODOLOGY FOR VAULTING DATA ENCRYPTION KEYS WITH ENCRYPTED STORAGE	EMC Corporation
11965253	8170213	METHODOLOGY FOR COORDINATING CENTRALIZED KEY MANAGEMENT AND ENCRYPTION KEYS CACHED THROUGH PROXIED ELEMENTS	EMC Corporation
11965429	7612288	TECHNIQUES FOR ATTACHING A LABEL TO AN ELECTRONIC CABLE	EMC Corporation
11965811	7705246	COMPACT DIFFERENTIAL SIGNAL VIA STRUCTURE	EMC Corporation

Application Number	Registration Number	Title	Owner
11965841	7783818	MODULARIZED INTERCONNECT BETWEEN ROOT COMPLEXES AND I/O MODULES	EMC Corporation
11965914	7822895	SCALABLE CPU (CENTRAL PROCESSING UNIT) MODULES FOR ENABLING IN-PLACE UPGRADES OF ELECTRONICS SYSTEMS	EMC Corporation
11966615	7962657	SELECTION OF A DATA PATH BASED ON OPERATION TYPE	EMC Corporation
11966645	8145614	SELECTION OF A DATA PATH BASED ON THE LIKELIHOOD THAT REQUESTED INFORMATION IS IN A CACHE	EMC Corporation
11966662	7688753	SELECTION OF A DATA PATH BASED ON ONE OR MORE PERFORMANCE CHARACTERISTICS OF A COMPUTER SYSTEM	EMC Corporation
11966733	7925627	SYSTEM AND METHOD FOR RECONCILING MULTI-PROTOCOL SCAN RESULTS BY A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
11967471	8127307	METHODS AND APPARATUS FOR STORAGE VIRTUALIZATION SYSTEM HAVING SWITCH LEVEL EVENT PROCESSING	EMC Corporation
11967836	8301853	SYSTEM AND METHOD FOR ASYNCHRONOUSLY MIRRORING DATA	EMC Corporation
11967856	7843866	SYSTEM AND METHOD FOR MIRRORING DATA	EMC Corporation
11967871	8825971	AGE-OUT SELECTION IN HASH CACHES	EMC Corporation
11967875	8832698	EVENT-DRIVEN STATE THREAD ARCHITECTURE	EMC Corporation
11967898	8099549	SYSTEM AND METHOD FOR ERASURE ENCODING	EMC Corporation
11967900	7774314	ACTIVE DIRECTORY CONTAINER RECOVERY	EMC Corporation
11967918	8099550	SYSTEM AND METHOD FOR SINGLE INSTANCE STORAGE	EMC Corporation
11967940	8099554	SYSTEM AND METHOD FOR FLASH-BASED DATA CACHING	EMC Corporation
11968029	8832711	USER INTERFACE FOR EVENT-DRIVEN STATE THREAD ARCHITECTURE	EMC Corporation
11968040	7831787	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
11968045	8621240	USER-SPECIFIC HASH AUTHENTICATION	EMC Corporation
11968048	8190835	GLOBAL DE-DUPLICATION IN SHARED ARCHITECTURES	EMC Corporation
11968050	7783604	DATA DE-DUPLICATION AND OFFSITE SAAS BACKUP AND ARCHIVING	EMC Corporation
11968052	8135918	DATA DE-DUPLICATION FOR ISCSI	EMC Corporation
11968053	7788220	STORAGE OF DATA WITH COMPOSITE HASHES IN BACKUP SYSTEMS	EMC Corporation
11968057	7949630	STORAGE OF DATA ADDRESSES WITH HASHES IN BACKUP SYSTEMS	EMC Corporation
11968061	7797279	MERGING OF INCREMENTAL DATA STREAMS WITH PRIOR BACKED-UP DATA	EMC Corporation
11970728	7984074	METHODS AND APPARATUS PROVIDING AN EXTENSIBLE MANAGEABLE ENTITY MODEL FOR A NETWORK	EMC Corporation
11972157	7818606	METHODS AND APPARATUS FOR SWITCH-INITIATED TRESPASS DECISION MAKING	EMC Corporation
11977446	7836018	SIMULTANEOUSLY ACCESSING FILE OBJECTS THROUGH WEB SERVICES AND FILE SERVICES	EMC Corporation

Application Number	Registration Number	Title	Owner
11978243	9122397	EXPOSING STORAGE RESOURCES WITH DIFFERING CAPABILITIES	EMC Corporation
11980011	7478194	EFFICIENT MOUNTING AND DISMOUNTING OF STORAGE MEDIA	EMC Corporation
11981845	8024535	TECHNIQUES FOR PRODUCING A CONSISTENT COPY OF SOURCE DATA AT A TARGET LOCATION	EMC Corporation
11983774	7558926	CONTINUOUS DATA BACKUP USING DISTRIBUTED JOURNALING	EMC Corporation
11985519	7860828	SYSTEM AND METHOD FOR TRANSFERRING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
11985610		[REDACTED]	EMC Corporation
12/099598	9098432	SYSTEM AND METHOD FOR DATA DEDUPLICATION OF BACKUP IMAGES	EMC Corporation
12/336393	8190906	METHOD AND APPARATUS FOR TESTING AUTHENTICATION TOKENS	EMC Corporation
12/360872	9203620	SYSTEM, METHOD AND APPARATUS FOR SECURE USE OF CRYPTOGRAPHIC CREDENTIALS IN MOBILE DEVICES	EMC Corporation
12/483993	8250640	TRANSPARENT KERBOROS DELEGATION WITH A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
12/494645	8856081	SINGLE RETENTION POLICY	EMC Corporation
12/569280	8498411	USING MULTIPLES ABOVE TWO WITH RUNNING TOTALS AND REFERENCE VALUES OTHER THAN 0 AND 2^ (WINDOW SIZE) IN ELLIPTIC CURVE CRYPTOGRAPHY SCALAR MULTIPLICATION ACCELERATION TABLES	EMC Corporation
12/634116	8452989	PROVIDING SECURITY TO AN ELECTRONIC DEVICE	EMC Corporation
12/636612	9119076	SYSTEM AND METHOD FOR AUTHENTICATION USING A MOBILE COMMUNICATION DEVICE	EMC Corporation
12/892417	8499357	SIGNING A LIBRARY FILE TO VERIFY A CALLBACK FUNCTION	EMC Corporation
12/893594	8335771	STORAGE ARRAY SNAPSHOTS FOR LOGGED ACCESS REPLICATION IN A CONTINUOUS DATA PROTECTION SYSTEM	EMC Corporation
12001149	8387130	AUTHENTICATED SERVICE VIRTUALIZATION	EMC Corporation
12002431	8326794	ACTIVE ELEMENT MANAGEMENT AND SUPPORT	EMC Corporation
12002584	8321854	CLIENT WITH FLEXIBLE GRAMMAR-BASE SYNTAX	EMC Corporation
12002945	7860898	TECHNIQUES FOR NOTIFICATION IN A DATA STORAGE SYSTEM	EMC Corporation
12004167	7912995	MANAGING SAS TOPOLOGY	EMC Corporation
12004300	8667224	TECHNIQUES FOR DATA PREFETCHING	EMC Corporation
12004311	7861123	MANAGING LOOP INTERFACE FAILURE	EMC Corporation
12004391	9262146	SUPPLYING SOFTWARE VIA DATA STORAGE SYSTEM	EMC Corporation
12004735	8315986	RESTORE OPTIMIZATION	EMC Corporation
12004877	8418072	UI DATA MODEL ABSTRACTION	EMC Corporation
12004992	8583865	CACHING WITH FLASH-BASED MEMORY	EMC Corporation
12005011	8095938	MANAGING ALERT GENERATION	EMC Corporation
12005051	8255426	EFFICIENT STORAGE OF NON-SEARCHABLE ATTRIBUTES	EMC Corporation

Application Number	Registration Number	Title	Owner
12005062	8930938	MIGRATION TO A SERVICE-ORIENTED ARCHITECTURE	EMC Corporation
12005140	8171006	RETRIEVAL OF SEARCHABLE AND NON-SEARCHABLE ATTRIBUTES	EMC Corporation
12005142	8150887	IDENTIFIERS FOR NON-SEARCHABLE ATTRIBUTES	EMC Corporation
12005640	8555014	AUTOMATIC ACCESS MANAGEMENT OF CLIENTS TO A STORAGE SYSTEM	EMC Corporation
12005663	8028062	NON-DISRUPTIVE DATA MOBILITY USING VIRTUAL STORAGE AREA NETWORKS WITH SPLIT-PATH VIRTUALIZATION	EMC Corporation
12005679	7930476	APPLICATION AWARE STORAGE RESOURCE PROVISIONING	EMC Corporation
12005717	8082330	APPLICATION AWARE AUTOMATED STORAGE POOL PROVISIONING	EMC Corporation
12005787	7904652	APPLICATION AWARE USE OF ADDED DEVICES	EMC Corporation
12006127	7899996	FULL TRACK READ FOR ADAPTIVE PRE-FETCHING OF DATA	EMC Corporation
12008376	8321378	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
12011984	8156405	EFFICIENT REDUNDANT MEMORY UNIT ARRAY	EMC Corporation
12011989	8266430	SELECTIVE SHREDDING IN A DEDUPLICATION SYSTEM	EMC Corporation
12015073	7810034	BACKUP REPORTING FRAMEWORK GRAPHICAL USER INTERFACE	EMC Corporation
12020609	7913056	METHOD TO PERFORM PARALLEL DATA MIGRATION IN A CLUSTERED STORAGE ENVIRONMENT	EMC Corporation
12022265	8566829	COOPERATIVE MULTI-LEVEL SCHEDULER FOR VIRTUAL ENGINES	EMC Corporation
12022268	8990799	DIRECT MEMORY ACCESS THROUGH VIRTUAL SWITCH IN DEVICE DRIVER	EMC Corporation
12023931	9002777	SYSTEMS AND METHODS FOR HANDLING DATA	EMC Corporation
12027953	7707416	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
12030158		[REDACTED]	EMC Corporation
12034505	8667034	SYSTEM AND METHOD FOR PRESERVING SYMBOLIC LINKS BY A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
12036523	8302161	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
12043728		[REDACTED]	EMC Corporation
12043780	8588425	ENCRYPTION KEY RECOVERY IN THE EVENT OF STORAGE MANAGEMENT FAILURE	EMC Corporation

Application Number	Registration Number	Title	Owner
12043863	8799681	REDUNDANT ARRAY OF ENCRYPTING DISKS	EMC Corporation
12043898	8498417	AUTOMATION OF COORDINATION OF ENCRYPTION KEYS IN A SAN BASED ENVIRONMENT WHERE AN ENCRYPTION ENGINE, DEVICE MANAGEMENT, AND KEY MANAGEMENT ARE NOT CO-LOCATED	EMC Corporation
12052907	7882386	SYSTEM AND METHOD FOR RECOVERING A LOGICAL VOLUME DURING FAILOVER OR REBOOT OF A FILE SERVER IN A DATA STORAGE ENVIRONMENT	EMC Corporation
12057298	7984324	SYSTEMS AND METHODS FOR MANAGING STALLED STORAGE DEVICES	EMC Corporation
12057302	7870345	SYSTEMS AND METHODS FOR MANAGING STALLED STORAGE DEVICES	EMC Corporation
12057303	7949636	SYSTEMS AND METHODS FOR A READ ONLY MODE FOR A PORTION OF A STORAGE SYSTEM	EMC Corporation
12057321	7953709	SYSTEMS AND METHODS FOR A READ ONLY MODE FOR A PORTION OF A STORAGE SYSTEM	EMC Corporation
12057675	8032557	MODEL DRIVEN COMPLIANCE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
12058240	8392370	MANAGING DATA ON DATA STORAGE SYSTEMS	EMC Corporation
12058834	8031634	SYSTEM AND METHOD FOR MANAGING A VIRTUAL DOMAIN ENVIRONMENT TO ENABLE ROOT CAUSE AND IMPACT ANALYSIS	EMC Corporation
12058854	8175987	METHOD AND APPARATUS FOR COMPUTING A CHANGE PLAN	EMC Corporation
12058966	8151048	MANAGING STORAGE POOL PROVISIONING	EMC Corporation
12058981	7873619	MANAGING METADATA	EMC Corporation
12059071	7890664	METHODS AND APPARATUS FOR NON-DISRUPTIVE UPGRADE BY REDIRECTING I/O OPERATIONS	EMC Corporation
12059127	8031722	TECHNIQUES FOR CONTROLLING A NETWORK SWITCH OF A DATA STORAGE SYSTEM	EMC Corporation
12059330	8131930	SYSTEM AND METHOD FOR IMPROVING CACHE EFFICIENCY	EMC Corporation
12059343	8713254	SYSTEM AND METHOD FOR IMPROVING CACHE EFFICIENCY	EMC Corporation
12059410	8275879	GENERALIZED VIRTUALIZER IO PATH MODEL AND GENERAL VIRTUAL TRANSFORMATION MODEL FOR STORAGE ASSETS	EMC Corporation
12059416	7836156	METHOD AND APPARATUS FOR ANALYZING NETWORK INFRASTRUCTURE	EMC Corporation
12059688	8095726	ASSOCIATING AN IDENTIFIER WITH A CONTENT UNIT	EMC Corporation
12059911	9002906	SYSTEM AND METHOD FOR HANDLING LARGE TRANSACTIONS IN A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
12060137	8847761	ANONYMOUS TRANSACTION TOKENS	EMC Corporation
12060152	7911346	INVENTORY CONTROL USING ANONYMOUS TRANSACTION TOKENS	EMC Corporation
12079234	7890459	NON-DISRUPTIVE MODIFICATION OF DATA IN-PLACE	EMC Corporation
12079436	8122209	DISKLESS STORAGE DEVICE	EMC Corporation

Application Number	Registration Number	Title	Owner
12079476	8589645	REMOTE READ FOR STORAGE DEVICES	EMC Corporation
12079546	8135929	CASCADED REMOTE DATA FACILITY SYSTEM HAVING DISKLESS INTERMEDIATE RDF SITE PROVIDING LOGICAL STORAGE DEVICE FUNCTIONALITY	EMC Corporation
12079648	8387075	COMMON SCHEDULING AND SYNCHRONIZATION PRIMITIVES	EMC Corporation
12079759	8359603	TECHNIQUES FOR INTER-USER-SPACE COMMUNICATION	EMC Corporation
12079822	8209704	TECHNIQUES FOR USER SPACE AND KERNEL SPACE COMMUNICATION	EMC Corporation
12079919	8429351	TECHNIQUES FOR DETERMINING AN AMOUNT OF DATA TO PREFETCH	EMC Corporation
12079939	7822731	TECHNIQUES FOR MANAGEMENT OF INFORMATION REGARDING A SEQUENTIAL STREAM	EMC Corporation
12080027	8335899	ACTIVE/ACTIVE REMOTE MIRRORING	EMC Corporation
12081540	8185488	SYSTEM AND METHOD FOR CORRELATING EVENTS IN A PLUGGABLE CORRELATION ARCHITECTURE	EMC Corporation
12082244	7962520	CLUSTER STORAGE USING DELTA COMPRESSION	EMC Corporation
12082247	8166012	CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
12089523	8311907	SYSTEM AND METHOD FOR DETECTING FRAUDULENT TRANSACTIONS	EMC Corporation
12098338		[REDACTED]	EMC Corporation
12098342	8805820	SYSTEMS AND METHODS FOR FACILITATING SEARCHES INVOLVING MULTIPLE INDICES	EMC Corporation
12100514	8886909	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIUM FOR ALLOCATING PORTIONS OF PHYSICAL STORAGE IN A STORAGE ARRAY BASED ON CURRENT OR ANTICIPATED UTILIZATION OF STORAGE ARRAY RESOURCES	EMC Corporation
12106228	7996511	ENTERPRISE-SCALABLE SCANNING USING GRID-BASED ARCHITECTURE WITH REMOTE AGENTS	EMC Corporation
12107326	7973607	RTC CIRCUIT WITH TIME VALUE ADJUSTMENT	EMC Corporation
12112407	8600941	SYSTEM AND METHOD FOR AUTOMATIC CONFIGURATION OF NETWORKED INFORMATION TECHNOLOGY ASSETS FOR A BACKUP, RECOVERY AND ARCHIVING APPLICATION	EMC Corporation
12113530	8301602	DETECTION OF INCONSISTENCIES IN A FILE SYSTEM	EMC Corporation
12113878	8230484	CONTROL OF RESOURCE ACCESS PRIVILEGES VIA AGENT AUTHENTICATION	EMC Corporation
12114245	8307210	METHOD AND APPARATUS FOR SECURE VALIDATION OF TOKENS	EMC Corporation
12115145	8381062	PROOF OF RETRIEVABILITY FOR ARCHIVED FILES	EMC Corporation
12115617	8407448	SHARED STORAGE I/O ELIMINATION THROUGH MAPPING CLIENT INTEGRATION INTO A HYPERVISOR	EMC Corporation
12119555		MANAGING COMPLEX DEPENDENCIES IN A FILE-BASED TEAM ENVIRONMENT	EMC Corporation
12121843	8301876	TECHNIQUES FOR SECURE NETWORK COMMUNICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
12129605	8074289	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
12131544	7890795	AUTO-ADAPTING CACHE MEMORY SYSTEM AND MEMORY	EMC Corporation
12135979	7962779	SYSTEMS AND METHODS FOR A DISTRIBUTED FILE SYSTEM WITH DATA RECOVERY	EMC Corporation
12137814	8051378	GENERIC MECHANISM FOR REPORTING ON BACKUPS	EMC Corporation
12141289		[REDACTED]	EMC Corporation
12144711	9146734	HANDLING MANAGED OBJECT DATA	EMC Corporation
12145769	8255803	FACILITATING STORAGE POOL PROVISIONING	EMC Corporation
12146550	8589358	MECHANISMS TO SHARE ATTRIBUTES BETWEEN OBJECTS	EMC Corporation
12147513	7572147	LINE CORD FILTER	EMC Corporation
12163006		[REDACTED]	EMC Corporation
12164336	8151077	APPLICATION AWARE CACHE MANAGEMENT	EMC Corporation
12164407	9262039	DISPLAYING DATA STORAGE SYSTEM INFORMATION	EMC Corporation
12164595		[REDACTED]	EMC Corporation
12164738	9009098	METHODS AND APPARATUS FOR CREATING A CENTRALIZED DATA STORE	EMC Corporation
12164817	8615678	AUTO-ADAPTING MULTI-TIER CACHE	EMC Corporation
12164959	8443369	METHOD AND SYSTEM FOR DYNAMICALLY SELECTING A BEST RESOURCE FROM EACH RESOURCE COLLECTION BASED ON RESOURCES DEPENDENCIES, PRIOR SELECTIONS AND STATISTICS TO IMPLEMENT AN ALLOCATION POLICY	EMC Corporation
12165001	8719812	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR DYNAMICALLY MODIFYING AND UTILIZING A SOFTWARE PACKAGE DESCRIPTION FOR SOFTWARE INSTALLATION	EMC Corporation
12165032	8296530	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR OPTIMIZING THE NUMBER OF CLIENT WRITE REQUESTS TO VIRTUALLY PROVISIONED LOGICAL UNITS OF A PHYSICAL DATA STORAGE ARRAY	EMC Corporation
12165220	7988063	METHOD FOR CONTROLLING COOLING IN A DATA STORAGE SYSTEM	EMC Corporation
12165612		[REDACTED]	EMC Corporation
12176211	7849504	METHODS AND APPARATUS PROVIDING A CATEGORICAL APPROACH TO ASPECT-ORIENTED PROGRAMMING	EMC Corporation
12177976	8073922	SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
12184420	8571990	SYSTEM AND METHOD FOR EXPRESSING AND EVALUATING SIGNED REPUTATION ASSERTIONS	EMC Corporation
12186143	8229974	MECHANISMS TO SUPPORT FINE-GRAIN NAMESPACING	EMC Corporation
12186166	8341190	MECHANISMS TO SUPPORT MULTIPLE NAME SPACE AWARE PROJECTS	EMC Corporation
12188686	8031875	KEY DISTRIBUTION IN UNIDIRECTIONAL CHANNELS WITH APPLICATIONS TO RFID	EMC Corporation

Application Number	Registration Number	Title	Owner
12190071	8112586	PREDICTING AND OPTIMIZING I/O PERFORMANCE CHARACTERISTICS IN A MULTI-LEVEL CACHING SYSTEM	EMC Corporation
12193520	8688773	SYSTEM AND METHOD FOR DYNAMICALLY ENABLING AN APPLICATION FOR BUSINESS CONTINUITY	EMC Corporation
12198021	8316064	METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
12201957	8260792	SYSTEM AND METHOD FOR COMMITTING DATA OBJECTS TO BE IMMUTABLE	EMC Corporation
12214667	7840595	TECHNIQUES FOR DETERMINING AN IMPLEMENTED DATA PROTECTION POLICY	EMC Corporation
12215150	8533604	TECHNIQUES FOR USER INTERFACE SELECTION	EMC Corporation
12215430	8185795	SIDE CHANNEL FOR FORWARD ERROR CORRECTION USED WITH LONG-HAUL IP LINKS	EMC Corporation
12215432	8010738	TECHNIQUES FOR OBTAINING A SPECIFIED LIFETIME FOR A DATA STORAGE DEVICE	EMC Corporation
12215904	8752057	TECHNIQUES FOR SYNCHRONIZING PROCESSING OF AT LEAST TWO CODE THREADS	EMC Corporation
12215917		[REDACTED]	EMC Corporation
12215984	9170904	I/O FAULT INJECTION USING SIMULATED COMPUTING ENVIRONMENTS	EMC Corporation
12215985	8112451	USING INTENTIONAL CATEGORY ASSIGNMENT FOR A CONFIGURATION MANAGEMENT DATABASE	EMC Corporation
12217005	8291490	TENNANT LIFE CYCLE MANAGEMENT FOR A SOFTWARE AS A SERVICE PLATFORM	EMC Corporation
12217061	7856525	CONTENT ADDRESSED STORAGE DEVICE CONFIGURED TO MAINTAIN CONTENT ADDRESS MAPPING	EMC Corporation
12221210	8190948	HANDLING OUT OF ORDER I/O USING TEMPORAL RELATIONSHIPS OF TRANSMITTED DATA	EMC Corporation
12228171	8397027	METHODS AND SYSTEMS FOR MULTI-CACHING	EMC Corporation
12228647	8046551	TECHNIQUES FOR PROCESSING I/O REQUESTS	EMC Corporation
12231477	8707252	TECHNIQUES FOR AUTOMATIC GENERATION OF PARSING CODE	EMC Corporation
12233619	8375249	METHOD FOR TESTING BATTERY BACKUP UNITS	EMC Corporation
12236466	9152628	CREATING COPIES OF SPACE-REDUCED FILES IN A FILE SERVER HAVING A REDUNDANT DATA ELIMINATION STORE	EMC Corporation
12236997	7937453	SCALABLE GLOBAL NAMESPACE THROUGH REFERRAL REDIRECTION AT THE MAPPING LAYER	EMC Corporation
12238034	8255914	INFORMATION RETRIEVAL TECHNIQUES INVOLVING THE USE OF PRIORITIZED OBJECT REQUESTS	EMC Corporation
12238756	8327422	AUTHENTICATING A SERVER DEVICE USING DYNAMICALLY GENERATED REPRESENTATIONS	EMC Corporation
12238926	8413114	METHOD TO SIMPLIFY DEVELOPING SOFTWARE HAVING LOCALIZATION	EMC Corporation
12239178	8799571	AUTO-EXPANDING CACHE MEMORY SYSTEM AND METHOD	EMC Corporation
12239284	7883344	ELECTRICAL CONNECTOR	EMC Corporation

Application Number	Registration Number	Title	Owner
12240076	8924876	FILE-DRIVEN DRAG & DROP	EMC Corporation
12240100	8130554	SECURELY ERASING FLASH-BASED MEMORY	EMC Corporation
12240666	8250033	REPLICATION OF A DATA SET USING DIFFERENTIAL SNAPSHOTS	EMC Corporation
12241166	8756666	GENERATING AUTHENTICATION CODES	EMC Corporation
12241200	8504857	PROGRAMMABLE AVAILABILITY FOR A HIGH AVAILABILITY SYSTEM	EMC Corporation
12241417	8346735	CONTROLLING MULTI-STEP STORAGE MANAGEMENT OPERATIONS	EMC Corporation
12241505	8549542	CORRELATING INFORMATION FROM MODELED AND NON-MODELED DOMAINS	EMC Corporation
12241531		[REDACTED]	EMC Corporation
12241578	7890794	HANDLING SAS TOPOLOGY PROBLEMS	EMC Corporation
12241658	8010741	METHODS AND APPARATUS FOR CONTROLLING MIGRATION OF CONTENT	EMC Corporation
12241708	8161316	MANAGING LOOP INTERFACE INSTABILITY	EMC Corporation
12241715	8117160	METHODS AND APPARATUS FOR CREATING POINT IN TIME COPIES IN A FILE SYSTEM USING REFERENCE COUNTS	EMC Corporation
12241743	8250035	METHODS AND APPARATUS FOR CREATING A BRANCH FILE IN A FILE SYSTEM	EMC Corporation
12241783	8909875	METHODS AND APPARATUS FOR STORING A NEW VERSION OF AN OBJECT ON A CONTENT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
12241829	8473593	METHOD FOR DYNAMICALLY GENERATING INFORMATION OBJECTS BASED ON A RESTFUL SUBSCRIPTION REQUEST	EMC Corporation
12241855	8667509	PROVIDING CONTEXT INFORMATION FOR EVENTS TO AN EVENT HANDLING COMPONENT	EMC Corporation
12241893	8239880	ORCHESTRATING FLOW OF EVENT INFORMATION TO SEVERAL EVENT HANDLING COMPONENTS	EMC Corporation
12241939	8763015	EFFICIENT MULTI-NODE SYSTEM FOR PROVIDING EVENT INFORMATION TO EVENT HANDLING COMPONENTS	EMC Corporation
12242030	8812455	EFFICIENT DATA BACKUP	EMC Corporation
12242070	8090689	EFFICIENT DATA RECOVERY	EMC Corporation
12242259	8990161	SYSTEM AND METHOD FOR SINGLE SEGMENT BACKUP	EMC Corporation
12242390	8600937	SYSTEM AND METHOD FOR FAST VOLUME CLONING	EMC Corporation
12242418	9244927	SYSTEM AND METHOD FOR RECORD LEVEL MULTIPLEXING OF BACKUP DATA TO STORAGE MEDIA	EMC Corporation
12242483	8077414	SYSTEM AND METHOD FOR ANALYZING MAGNETIC MEDIA SURFACES FOR THERMAL ERASURES AND OTHER CHARACTERISTICS	EMC Corporation
12242618	8086585	ACCESS CONTROL TO BLOCK STORAGE DEVICES FOR A SHARED DISK BASED FILE SYSTEM	EMC Corporation
12242638	8261068	SYSTEMS AND METHODS FOR SELECTIVE ENCRYPTION OF OPERATING SYSTEM METADATA FOR HOST-BASED ENCRYPTION OF DATA AT REST ON A LOGICAL UNIT	EMC Corporation

Application Number	Registration Number	Title	Owner
12242690	8416954	SYSTEMS AND METHODS FOR ACCESSING STORAGE OR NETWORK BASED REPLICAS OF ENCRYPTED VOLUMES WITH NO ADDITIONAL KEY MANAGEMENT	EMC Corporation
12242694	8099572	EFFICIENT BACKUP AND RESTORE OF STORAGE OBJECTS IN A VERSION SET	EMC Corporation
12242725	8316196	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR IMPROVING SYNCHRONIZATION PERFORMANCE AFTER PARTIALLY COMPLETED WRITES	EMC Corporation
12242866	8347388	SYSTEM AND METHOD FOR ORCHESTRATING SERVICES	EMC Corporation
12242874		[REDACTED]	EMC Corporation
12248297	8707438	SYSTEM AND METHOD FOR PROVIDING STORAGE FOR ELECTRONIC RECORDS	EMC Corporation
12257710	8719233	GENERIC METHOD AND APPARATUS FOR DATABASE SANITIZING	EMC Corporation
12262316		[REDACTED]	EMC Corporation
12264125	7725672	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND RECOVERY PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
12268112	8028009	INCREMENTAL GARBAGE COLLECTION OF DATA IN SECONDARY STORAGE	EMC Corporation
12268328	8275748	SEMANTIC DATA MIGRATION	EMC Corporation
12270447	8683325	INDEXED APPROACH FOR DELIVERING MULTIPLE VIEWS OF AN XML DOCUMENT FROM A SINGLE XSLT FILE	EMC Corporation
12286226	8117235	TECHNIQUES FOR BINDING RESOURCES FOR USE BY A CONSUMER TIER	EMC Corporation
12286296	8327324	MESSAGE LOGGING SYSTEM	EMC Corporation
12286374	8185505	TECHNIQUES FOR PROCESSING RECOVERY POINTS	EMC Corporation
12286427	8234380	SINGLE COMMUNICATION CONNECTION FOR MANAGING A SYSTEM WITH MULTIPLE SERVICE PROCESSORS	EMC Corporation
12286433	8555297	TECHNIQUES FOR PERFORMING A REMOTE PROCEDURE CALL USING REMOTE PROCEDURE CALL CONFIGURATION INFORMATION	EMC Corporation
12286434	8645375	CONTROLLING INFORMATION ABOUT DATA STORAGE SYSTEM RETURNED TO AN END USER	EMC Corporation
12286442	8112489	CLIENT PROCESSING IN RESPONSE TO MANAGED SYSTEM STATE CHANGES	EMC Corporation
12286454	7885276	ISOLATING NETWORK TRAFFIC IN MULTI-TENNANT VIRTUALIZATION ENVIRONMENTS	EMC Corporation
12286493	8271996	EVENT QUEUES	EMC Corporation
12290306	8151069	MULTIPROTECTION FOR SNAPSHOTS	EMC Corporation
12291989	8447740	STREAM LOCALITY DELTA COMPRESSION	EMC Corporation
12291997	8849772	DATA REPLICATION WITH DELTA COMPRESSION	EMC Corporation
12291998	8751462	DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
12315373	8140599	GARBAGE COLLECTION FOR MERGED COLLECTIONS	EMC Corporation

Application Number	Registration Number	Title	Owner
12315374	8126852	MERGED COLLECTIONS	EMC Corporation
12316816	9003043	TECHNIQUES FOR CLIENT AND SERVER COMMUNICATION	EMC Corporation
12317158	7912051	TECHNIQUES FOR PORT VIRTUALIZATION	EMC Corporation
12317910	8335904	IDENTIFYING ACTIVE AND INACTIVE DATA IN STORAGE SYSTEMS	EMC Corporation
12319122	8566549	SYNCHRONIZING PERFORMANCE REQUIREMENTS ACROSS MULTIPLE STORAGE PLATFORMS	EMC Corporation
12324002	8478628	COMPONENT BASED RISK SYSTEM	EMC Corporation
12325438		METHOD AND APPARATUS PROVIDING A FRAMEWORK FOR SECURE INFORMATION LIFECYCLE	EMC Corporation
12333271	8095764	DYNAMIC APPLICATION AWARE STORAGE CONFIGURATION	EMC Corporation
12335883		[REDACTED]	EMC Corporation
12336381	8006842	PACKAGING FOR AUTHENTICATION TOKENS	EMC Corporation
12338766	8032261	COOLING SYSTEM WITH ADAPTIVE PROTOCOL COOLING UNIT	EMC Corporation
12339265	8176336	SOFTWARE TRUSTED COMPUTING BASE	EMC Corporation
12339528	8280930	OBTAINING CONFIGURATION INFORMATION FROM HOST DEVICES WHICH STORE DATA INTO AND LOAD DATA FROM A DATA STORAGE ARRAY	EMC Corporation
12340284	8560716	TIME AND BANDWIDTH EFFICIENT RECOVERIES OF SPACE REDUCED DATA	EMC Corporation
12340320	8725690	TIME AND BANDWIDTH EFFICIENT BACKUPS OF SPACE REDUCED DATA	EMC Corporation
12341017	9110790	MANAGING MEMORY IN DISPLAYING DATA STORAGE SYSTEM INFORMATION	EMC Corporation
12341023	8234648	MANAGING THREADS IN DISPLAYING DATA STORAGE SYSTEM INFORMATION	EMC Corporation
12341504		[REDACTED]	EMC Corporation
12343517	8374731	COOLING SYSTEM	EMC Corporation
12343531	7953109	SYSTEM FOR CONTROLLING OPTICAL TRANSCEIVER	EMC Corporation
12344107	8527465	SYSTEM AND METHOD FOR MODELING DATA CHANGE OVER TIME	EMC Corporation
12344117	9069797	SYSTEM AND METHOD FOR FILE SYSTEM SIMULATION	EMC Corporation
12345957	8255550	MULTI-PROTOCOL GLOBAL NAMESPACE MECHANISM FOR NETWORK ATTACHED STORAGE	EMC Corporation
12346412	8166314	SELECTIVE I/O TO LOGICAL UNIT WHEN ENCRYPTED, BUT KEY IS NOT AVAILABLE OR WHEN ENCRYPTION STATUS IS UNKNOWN	EMC Corporation
12347447	8200923	METHOD AND APPARATUS FOR BLOCK LEVEL DATA DE-DUPLICATION	EMC Corporation
12347933	8788462	MULTI-FACTOR PROBE TRIGGERS	EMC Corporation
12347936	8589354	PROBE BASED GROUP SELECTION	EMC Corporation
12348866	9213721	FILE SERVER SYSTEM HAVING TIERED STORAGE INCLUDING SOLID-STATE DRIVE PRIMARY STORAGE AND MAGNETIC DISK DRIVE SECONDARY STORAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
12349182	8515911	METHODS AND APPARATUS FOR MANAGING MULTIPLE POINT IN TIME COPIES IN A FILE SYSTEM	EMC Corporation
12352917	8572093	SYSTEM AND METHOD FOR PROVIDING A LICENSE DESCRIPTION SYNTAX IN A SOFTWARE DUE DILIGENCE SYSTEM	EMC Corporation
12357210	7751538	POLICY BASED INFORMATION LIFECYCLE MANAGEMENT	EMC Corporation
12378412	7912799	SMART CONTAINERS	EMC Corporation
12378819	8209283	SYSTEM AND METHOD FOR HIGHLY RELIABLE DATA REPLICATION	EMC Corporation
12381888	7984255	OPTIMIZING RECLAMATION OF DATA SPACE	EMC Corporation
12384210	8325724	DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
12388658	8468347	SECURE NETWORK COMMUNICATIONS	EMC Corporation
12409377	8082379	SYSTEMS AND METHODS FOR MANAGING SEMANTIC LOCKS	EMC Corporation
12410971	8990911	SYSTEM AND METHOD FOR SINGLE SIGN-ON TO RESOURCES ACROSS A NETWORK	EMC Corporation
12410992	8418238	SYSTEM, METHOD, AND APPARATUS FOR MANAGING ACCESS TO RESOURCES ACROSS A NETWORK	EMC Corporation
12411017	8291404	UPDATING SYSTEM STATUS	EMC Corporation
12411561	8819362	MANAGING REPLICATION AND RESERVATIONS	EMC Corporation
12411802		[REDACTED]	EMC Corporation
12413806	8082337	SYSTEM FOR ASSESSMENT OF POLICY COMPLIANCE OF AN ARBITRARY INFORMATION TOPOLOGY	EMC Corporation
12414845	8631486	ADAPTIVE IDENTITY CLASSIFICATION	EMC Corporation
12415234	8929369	SYSTEM AND METHOD FOR STRIPING/MIRRORING DATA	EMC Corporation
12415447	8311960	INTERACTIVE SEMI-SUPERVISED MACHINE LEARNING FOR CLASSIFICATION	EMC Corporation
12415989	9195755	RELEVANCY RADAR	EMC Corporation
12416004	8688711	CUSTOMIZABLE RELEVANCY CRITERIA	EMC Corporation
12416019	8719275	COLOR CODED RADARS	EMC Corporation
12416139		[REDACTED]	EMC Corporation
12416144		[REDACTED]	EMC Corporation
12416145		[REDACTED]	EMC Corporation
12416147	8656057	OPPORTUNISTIC RESTORE	EMC Corporation
12455951	8762348	SEGMENT DEDUPLICATION SYSTEM WITH COMPRESSION OF SEGMENTS	EMC Corporation
12455953	8401181	SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION OF SEGMENTS	EMC Corporation
12455956	8731190	SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION AND COMPRESSION OF SEGMENTS	EMC Corporation
12456835	8484616	UNIVERSAL MODULE MODEL	EMC Corporation
12459194	8296511	METHOD AND SYSTEM OF PROVIDING OBJECT LOCATION METADATA COOKIES IN A FEDERATED CONTENT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
12459201	8635184	SYSTEM AND METHOD FOR PROVIDING LONG-TERM STORAGE FOR DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
12459411	8010505	EFFICIENT BACKUP DATA RETRIEVAL	EMC Corporation
12459467		[REDACTED]	EMC Corporation
12459473	8457018	MERKLE TREE REFERENCE COUNTS	EMC Corporation
12459474	8706959	VIRTUAL STORAGE MACHINE	EMC Corporation
12460677	9128953	ASYNCHRONOUS MULTI-NODE FILE SYSTEM COORDINATED REPLICATION	EMC Corporation
12460766	8028138	REPLICATION OF DEDUPLICATED STORAGE SYSTEM	EMC Corporation
12466265	7958095	METHODS AND APPARATUS FOR COLLECTING AND PROCESSING FILE SYSTEM DATA	EMC Corporation
12473524		METHOD FOR DATA DISASTER RECOVERY ASSESSMENT AND PLANNING	EMC Corporation
12484905	8054765	SYSTEMS AND METHODS FOR PROVIDING VARIABLE PROTECTION	EMC Corporation
12488147	8527703	CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
12488170	8452924	CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
12490481		[REDACTED]	EMC Corporation
12490875	9148349	DYNAMIC GRAPHICAL DISPLAY OF COMPONENTS IN A DATA STORAGE SYSTEM	EMC Corporation
12493139	8863287	COMMONALITY FACTORING PATTERN DETECTION	EMC Corporation
12493144	8667591	COMMONALITY FACTORING REMEDIATION	EMC Corporation
12493148	8938806	PARTIAL PATTERN DETECTION WITH COMMONALITY FACTORING	EMC Corporation
12493295	8352941	SCALABLE AND SECURE HIGH-LEVEL STORAGE ACCESS FOR CLOUD COMPUTING PLATFORMS	EMC Corporation
12493541	8601531	SYSTEM AUTHORIZATION BASED UPON CONTENT SENSITIVITY	EMC Corporation
12493876	8171046	CONVERTING CQL QUERY RESULTS INTO USER-CONTROLLABLE OBJECTS	EMC Corporation
12493883	8131743	OBJECT SEARCHING IN DATA STORAGE SYSTEMS	EMC Corporation
12494115	8032498	DELEGATED REFERENCE COUNT BASE FILE VERSIONING	EMC Corporation
12494407	8149841	SYSTEM AND METHOD FOR END-USER CUSTOM PARSING DEFINITIONS	EMC Corporation
12494442	8245959	POWERED CARD AND METHOD OF DISPOSING OF THE SAME	EMC Corporation
12494467	8407527	DIAGNOSING HARDWARE FAULTS IN A DATA STORAGE SYSTEM	EMC Corporation
12494515	8281069	DISTRIBUTED DATA STORAGE SYSTEM USING LOCAL COPY OPERATIONS FOR RAID-1 VOLUMES	EMC Corporation
12494622	9274941	FACILITATING DATA MIGRATION BETWEEN TIERS	EMC Corporation
12494688	8285967	METHOD FOR ON-DEMAND BLOCK MAP GENERATION FOR DIRECT MAPPED LUN	EMC Corporation
12494912	8426733	CONDUIT MANAGEMENT DEVICE	EMC Corporation
12495189	8132073	DISTRIBUTED STORAGE SYSTEM WITH ENHANCED SECURITY	EMC Corporation
12495215	8812452	CONTEXT-DRIVEN MODEL TRANSFORMATION FOR QUERY PROCESSING	EMC Corporation

Application Number	Registration Number	Title	Owner
12495296	8413164	PRESENTING AN INTERFACE TO A COMPUTER SYSTEM FOR USE IN CONDUCTING DIAGNOSTIC TESTS	EMC Corporation
12495447	8458483	TECHNIQUES FOR MESSAGE-PASSING USING SHARED MEMORY OF AN RF TAG	EMC Corporation
12495468	8539282	MANAGING QUALITY TESTING	EMC Corporation
12495473	9229850	MAPPING DATA STORAGE AND VIRTUAL MACHINES	EMC Corporation
12495491	8365247	IDENTIFYING WHETHER ELECTRONIC DATA UNDER TEST INCLUDES PARTICULAR INFORMATION FROM A DATABASE	EMC Corporation
12495698	8386409	SYSLOG MESSAGE ROUTING SYSTEMS AND METHODS	EMC Corporation
12500190	7941632	STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
12533298	8627015	DATA PROCESSING SYSTEM USING CACHE-AWARE MULTIPATH DISTRIBUTION OF STORAGE COMMANDS AMONG CACHING STORAGE CONTROLLERS	EMC Corporation
12544046	9256598	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR COPY-ON-DEMAND OPTIMIZATION FOR LARGE WRITES	EMC Corporation
12554752	8027984	SYSTEMS AND METHODS OF REVERSE LOOKUP	EMC Corporation
12561367	8856481	DATA PROCESSING SYSTEM HAVING HOST-CONTROLLED PROVISIONING OF DATA STORAGE RESOURCES	EMC Corporation
12562000	7739288	SYSTEMS AND METHODS OF DIRECTORY ENTRY ENCODINGS	EMC Corporation
12566846	8122158	METHOD FOR IMPROVING IO PERFORMANCE OF HOST SYSTEMS USING EXTERNAL STORAGE SYSTEMS	EMC Corporation
12567031	8326882	ENVIRONMENT MANAGEMENT INTERFACE FOR MANAGEMENT OF A HETEROGENEOUS STORAGE ENVIRONMENT	EMC Corporation
12567988	8190584	UTILIZING RECURSIVE APPLICATION OF A REVERSIBLE TRANSFORM WHICH INVOLVES LEXICOGRAPHIC ORDERING	EMC Corporation
12568203	8214612	ENSURING CONSISTENCY OF REPLICATED VOLUMES	EMC Corporation
12568722	8510566	AUTHENTIC TIME-STAMPING FOR ARCHIVAL STORAGE	EMC Corporation
12568978	8462495	DISK DRIVE CARRIER AND DISK DRIVE ENCLOSURE COOLING SYSTEM	EMC Corporation
12569284	8345864	ELLIPTIC CURVE CRYPTOGRAPHY SCALAR MULTIPLICATION WITH ON-DEMAND ACCELERATION TABLE GENERATION	EMC Corporation
12569683	8806123	EXPANDABLE DATA STORAGE SYSTEM	EMC Corporation
12569969		[REDACTED]	EMC Corporation
12570136	9170737	PROCESSING DATA STORAGE SYSTEM CONFIGURATION INFORMATION	EMC Corporation
12570526		[REDACTED]	EMC Corporation
12570580	8285302	SYSTEM AND METHOD FOR LOCATING DEVICES WITHIN A DATA CENTER	EMC Corporation

Application Number	Registration Number	Title	Owner
12570685	8776158	ASYNCHRONOUS SHIFTING WINDOWS CACHING FOR FORWARD AND BACKWARD VIDEO STREAMING	EMC Corporation
12570716	8473905	MANAGING USER INTERFACE CHARACTERISTICS IN DISPLAYING DATA STORAGE SYSTEMS INFORMATION	EMC Corporation
12570720	8527696	SYSTEM AND METHOD FOR OUT-OF-BAND CACHE COHERENCY	EMC Corporation
12570836		[REDACTED]	EMC Corporation
12571007	8190850	VIRTUAL BLOCK MAPPING FOR RELOCATING COMPRESSED AND/OR ENCRYPTED FILE DATA BLOCK BLOCKS	EMC Corporation
12571082		[REDACTED]	EMC Corporation
12571324	8209474	SYSTEM AND METHOD FOR SUPERBLOCK DATA WRITES	EMC Corporation
12571377	8676761	PREPARATION OF A SYSTEM IMAGE FOR RAPID RESTORE	EMC Corporation
12571380	8959061	RAPID RESTORE FROM A PREPARED SYSTEM IMAGE	EMC Corporation
12571384	9135258	REDUNDANT BACKUP ELIMINATION	EMC Corporation
12571423	8474038	METHODS AND APPARATUS RELATED TO MIGRATION OF CUSTOMER RESOURCES TO VIRTUAL RESOURCES WITHIN A DATA CENTER ENVIRONMENT	EMC Corporation
12571424	8701193	MALWARE DETECTION VIA SIGNATURE INDICES	EMC Corporation
12571428	8340933	METHOD AND SYSTEM FOR PERFORMING POWER SUPPLY SELF DIAGNOSTICS IN REDUNDANT POWER ARCHITECTURES	EMC Corporation
12571432	8655844	FILE VERSION TRACKING VIA SIGNATURE INDICES	EMC Corporation
12580799		[REDACTED]	EMC Corporation
12586097	8307271	FAST VERIFICATION OF DATA BLOCK CYCLIC REDUNDANCY CHECKS	EMC Corporation
12586765	7962672	TECHNIQUES FOR DATA STORAGE CONFIGURATION	EMC Corporation
12586766	8290906	INTELLIGENT RESOURCE SYNCHRONIZATION	EMC Corporation
12586837		[REDACTED]	EMC Corporation
12586845		[REDACTED]	EMC Corporation
12586925	8706960	TECHNIQUES FOR PERFORMING DATA MIGRATION	EMC Corporation
12586939	8627446	FEDERATING DATA BETWEEN GROUPS OF SERVERS	EMC Corporation
12592215	7925858	LINEAR SPACE ALLOCATION MECHANISMS IN DATA SPACE	EMC Corporation
12592988	8364858	NORMALIZING CAPACITY UTILIZATION WITHIN VIRTUAL STORAGE POOLS	EMC Corporation
12609681	8073821	METHOD AND APPARATUS FOR MANAGING AND ARCHIVING PERFORMANCE INFORMATION RELATING TO STORAGE SYSTEM	EMC Corporation
12619178	8078905	RESTORING CONFIGURATIONS OF DATA STORAGE SYSTEMS	EMC Corporation
12628473	8583885	ENERGY EFFICIENT SYNC AND ASYNC REPLICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
12629952	8782036	ASSOCIATIVE MEMORY BASED DESKTOP SEARCH TECHNOLOGY	EMC Corporation
12633395	8428252	USING MULTIPLES ABOVE TWO WITH RUNNING TOTALS IN ELLIPTIC CURVE CRYPTOGRAPHY SCALAR MULTIPLICATION ACCELERATION TABLES	EMC Corporation
12633400	8411855	SIZE OPTIMIZATION FOR LARGE ELLIPTIC CURVE CRYPTOGRAPHY SCALAR MULTIPLICATION ACCELERATION TABLES	EMC Corporation
12633717	7987204	MULTI-EPOCH METHOD FOR SAVING AND EXPORTING FILE SYSTEM EVENTS	EMC Corporation
12633837	8296329	CONTROLLER WITH HEURISTIC BUNDLE OPTIMIZER FOR DATA CENTER MIGRATION OR OTHER TYPE OF TRANSITION	EMC Corporation
12634814	8327378	METHOD FOR GRACEFULLY STOPPING A MULTI-THREADED APPLICATION	EMC Corporation
12637063	8495153	DISTRIBUTION OF MESSAGES IN NODES CONNECTED BY A GRID ARCHITECTURE	EMC Corporation
12638067	9135261	SYSTEMS AND METHODS FOR FACILITATING DATA DISCOVERY	EMC Corporation
12638137	8959192	USER-CONTEXT MANAGEMENT	EMC Corporation
12638262	9046582	SYSTEM AND METHOD FOR TESTING A BATTERY	EMC Corporation
12638295	8593827	COMPRESSIBLE ENGAGEMENT ASSEMBLY	EMC Corporation
12638617	8551263	METHOD FOR REDUCING WHISKER GROWTH	EMC Corporation
12638673	8783333	COOLING SYSTEM	EMC Corporation
12639292	8849947	IT DISCOVERY OF VIRTUALIZED ENVIRONMENTS BY SCANNING VM FILES AND IMAGES	EMC Corporation
12639469	8549224	MIGRATION ANALYZER FOR HARDWARE-BASED STORAGE TIERING	EMC Corporation
12639668	8443157	DATA STORAGE SYSTEM HAVING ASSOCIATED SITUATIONAL ANALYSIS FRAMEWORK FOR AUTOMATIC RESPONSE TO MOVEMENT IN A STATE SPACE	EMC Corporation
12640254	8566483	MEASURING DATA ACCESS ACTIVITY	EMC Corporation
12640292	8380928	APPLYING DATA ACCESS ACTIVITY MEASUREMENTS	EMC Corporation
12640732	8311764	SYSTEM AND METHOD FOR APPROXIMATING AMBIENT TEMPERATURE	EMC Corporation
12642071	8140821	EFFICIENT READ/WRITE ALGORITHMS AND ASSOCIATED MAPPING FOR BLOCK-LEVEL DATA REDUCTION PROCESS	EMC Corporation
12642109	8156306	SYSTEMS AND METHODS FOR USING THIN PROVISIONING TO RECLAIM SPACE IDENTIFIED BY DATA REDUCTION PROCESSES	EMC Corporation
12643109	8606751	SYSTEM AND METHOD FOR BACKUP BY INODE NUMBER	EMC Corporation
12643199	8458780	PLUGGABLE LOGIN ARCHITECTURE AND DYNAMIC RESOURCE RECOGNITION	EMC Corporation
12644033	8749966	DATA STORAGE DRIVE CARRIER	EMC Corporation
12644195	8826033	DATA PROTECTION USING VIRTUAL-MACHINE-SPECIFIC STABLE SYSTEM VALUES	EMC Corporation
12644237	8326919	NETWORK ADDRESS TRANSLATION AUTO-DISCOVERY IN DATA STORAGE NETWORKS	EMC Corporation

Application Number	Registration Number	Title	Owner
12644849	9323758	EFFICIENT MIGRATION OF REPLICATED FILES FROM A FILE SERVER HAVING A FILE DE-DUPLICATION FACILITY	EMC Corporation
12644921	8327189	DIAGNOSING AN INCIDENT ON A COMPUTER SYSTEM USING A DIAGNOSTICS ANALYZER DATABASE	EMC Corporation
12645857	8555342	PROVIDING SECURE ACCESS TO A SET OF CREDENTIALS WITHIN A DATA SECURITY MECHANISM OF A DATA STORAGE SYSTEM	EMC Corporation
12646294	8510409	APPLICATION-SPECIFIC OUTBOUND SOURCE ROUTING FROM A HOST IN A DATA NETWORK	EMC Corporation
12646457	8180973	SERVICING INTERRUPTS AND SCHEDULING CODE THREAD EXECUTION IN A MULTI-CPU NETWORK FILE SERVER	EMC Corporation
12647450	8271441	VIRTUALIZED CG	EMC Corporation
12647857	8074003	HOST-BASED STORAGE CONTROLLER PROVIDING BLOCK DEVICES IN GEOGRAPHICALLY DISTRIBUTED STORAGE	EMC Corporation
12647867	8429346	AUTOMATED DATA RELOCATION AMONG STORAGE TIERS BASED ON STORAGE LOAD	EMC Corporation
12649113	8478936	SPIN DOWN OF STORAGE RESOURCES IN AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
12649373	9213367	KIT FOR SHIPPING AN ELECTRICAL CABINET	EMC Corporation
12653107	8260749	TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
12653162	8438342	AUTOMATED APPLICATION-BASED STORAGE PROVISIONING	EMC Corporation
12653313	8751448	STATE-BASED DIRECTING OF SEGMENTS IN A MULTINODE DEDUPLICATED STORAGE SYSTEM	EMC Corporation
12653505	8335820	TECHNIQUES FOR PERSISTENCE OF CONNECTIONS	EMC Corporation
12653790	8700669	TECHNIQUES FOR DATA STORAGE SYSTEMS MANAGEMENT	EMC Corporation
12653909	8028140	SAVE SET BUNDLING FOR STAGING	EMC Corporation
12653981	8307362	RESOURCE ALLOCATION IN A VIRTUALIZED ENVIRONMENT	EMC Corporation
12658561	8560786	EFFICIENT USE OF MEMORY AND ACCESSING OF STORED RECORDS	EMC Corporation
12658635		[REDACTED]	EMC Corporation
12661142	8396873	INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
12661493	7937372	SNAPSHOT INDEXING	EMC Corporation
12661894	8352431	FINE-GRAIN POLICY-BASED SNAPSHOTS	EMC Corporation
12661911	8504787	TECHNIQUES FOR DETERMINING DATA PROTECTION STORAGE REQUIREMENTS	EMC Corporation
12688018	8291183	ASSISTED MAINFRAME DATA DE-DUPLICATION	EMC Corporation
12695250	8762642	SYSTEM AND METHOD FOR SECURE AND RELIABLE MULTI-CLOUD DATA REPLICATION	EMC Corporation
12700085	8285673	METHODS AND APPARATUS FOR PROCESSING PARTITIONED CHANGES	EMC Corporation
12704285	9058334	PARALLEL FILE SYSTEM PROCESSING	EMC Corporation
12713553	8055861	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
12716110	8181065	SYSTEMS AND METHODS FOR PROVIDING NONLINEAR JOURNALING	EMC Corporation
12717840	8010493	SYSTEMS AND METHODS FOR A SNAPSHOT OF DATA	EMC Corporation
12717869	8015156	SYSTEMS AND METHODS FOR A SNAPSHOT OF DATA	EMC Corporation
12728081	8706755	SYSTEM AND METHODS FOR PROVIDING A DISTRIBUTED FILE SYSTEM UTILIZING METADATA TO TRACK INFORMATION ABOUT DATA STORED THROUGHOUT THE SYSTEM	EMC Corporation
12730275	8352661	DATA STORAGE SYSTEMS HAVING SEAMLESS SOFTWARE UPGRADES	EMC Corporation
12730529		[REDACTED]	EMC Corporation
12731945	8959054	METHODS AND APPARATUS FOR OPTIMAL JOURNALING FOR CONTINUOUS DATA REPLICATION	EMC Corporation
12732330	8627138	DATA PROTECTION SYSTEM AND METHOD	EMC Corporation
12748492	8560788	METHOD OF PERFORMING BACKUPS USING MULTIPLE STREAMS	EMC Corporation
12748493	8166348	METHOD OF DEBUGGING A SOFTWARE SYSTEM	EMC Corporation
12748538		[REDACTED]	EMC Corporation
12748566		[REDACTED]	EMC Corporation
12748619	8452980	DEFEATING REAL-TIME TROJAN LOGIN ATTACK WITH DELAYED INTERACTION WITH FRAUDSTER	EMC Corporation
12748690	8601552	PERSONAL IDENTIFICATION PAIRS	EMC Corporation
12750382	8370592	MULTI-MACHINE ATOMIC SEAMLESS MIGRATION	EMC Corporation
12750388	8301811	TECHNIQUES FOR PERFORMING ONLINE DATA MIGRATION WHILE EFFECTIVELY MIGRATING SCSI RESERVATIONS BETWEEN SOURCE AND TARGET ARRAYS	EMC Corporation
12750391	8392753	AUTOMATIC FAILOVER DURING ONLINE DATA MIGRATION	EMC Corporation
12750758	8412928	ONE-TIME PASSWORD AUTHENTICATION EMPLOYING LOCAL TESTING OF CANDIDATE PASSWORDS FROM ONE-TIME PASSWORD SERVER	EMC Corporation
12750919	8452816	MANAGING DATABASE ACCESS	EMC Corporation
12751008	8407720	INTER-PROCESS COMMUNICATION MANAGEMENT	EMC Corporation
12751010	8347219	OBJECT LEVEL DISPLAY BUILDING	EMC Corporation
12751057	8370389	TECHNIQUES FOR AUTHENTICATING USERS OF MASSIVE MULTIPLAYER ONLINE ROLE PLAYING GAMES USING ADAPTIVE AUTHENTICATION	EMC Corporation
12751058		[REDACTED]	EMC Corporation
12751093	8539124	STORAGE INTEGRATION PLUGIN FOR VIRTUAL SERVERS	EMC Corporation
12751124	9317820	SYSTEM AND METHOD FOR CONFIGURING A CLOUD COMPUTING SPACE	EMC Corporation
12751155	8151021	UPGRADING SOFTWARE ON A CLUSTER OF COMPUTERIZED DEVICES	EMC Corporation
12751243		[REDACTED]	EMC Corporation
12751405	8762374	TASK DRIVEN CONTEXT-AWARE SEARCH	EMC Corporation
12751455	8478731	MANAGING COMPRESSION IN DATA STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
12751665	8407445	METHOD FOR TRIGGERING AND COORDINATING POOL STORAGE RECLAMATION	EMC Corporation
12751685	8924681	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR AN ADAPTIVE BLOCK ALLOCATION MECHANISM	EMC Corporation
12751707	8751740	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR PERFORMANCE OPTIMIZATION OF STORAGE ALLOCATION TO VIRTUAL LOGICAL UNITS	EMC Corporation
12751748	8103937	CAS COMMAND NETWORK REPLICATION	EMC Corporation
12751783	8380926	HANDLING SECTOR EDGES	EMC Corporation
12751799	8751715	SYSTEM AND METHOD FOR CONTROLLING DEVICE ACCESS	EMC Corporation
12751831	8086638	FILE HANDLE BANKING TO PROVIDE NON-DISRUPTIVE MIGRATION OF FILES	EMC Corporation
12751934	8510265	CONFIGURATION UTILITY FOR A DATA STORAGE SYSTEM USING A FILE MAPPING PROTOCOL FOR ACCESS TO DISTRIBUTED FILE SYSTEMS	EMC Corporation
12752031	8037345	DETERMINISTIC RECOVERY OF A FILE SYSTEM BUILT ON A THINLY PROVISIONED LOGICAL VOLUME HAVING REDUNDANT METADATA	EMC Corporation
12752052	8655966	MOBILE DEVICE DATA PROTECTION	EMC Corporation
12752059	9152650	MOBILE DEVICE DATA RECOVERY	EMC Corporation
12752064	8694597	MOBILE DEVICE GROUP-BASED DATA SHARING	EMC Corporation
12752066		[REDACTED]	EMC Corporation
12752068	8683005	CACHE-BASED MOBILE DEVICE NETWORK RESOURCE OPTIMIZATION	EMC Corporation
12752069	8694744	MOBILE DEVICE SNAPSHOT BACKUP	EMC Corporation
12752072		[REDACTED]	EMC Corporation
12761751	8549649	SYSTEMS AND METHODS FOR SENSITIVE DATA REMEDIATION	EMC Corporation
12762769	8024538	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
12775743	8028191	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
12780001	7958305	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
12787297	8112395	SYSTEM AND METHODS FOR PROVIDING A DISTRIBUTED FILE SYSTEM UTILIZING METADATA TO TRACK INFORMATION ABOUT DATA STORED THROUGHOUT THE SYSTEM	EMC Corporation
12789393	8005865	SYSTEMS AND METHODS FOR NOTIFYING LISTENERS OF EVENTS	EMC Corporation
12794492	7844617	SYSTEMS AND METHODS OF DIRECTORY ENTRY ENCODINGS	EMC Corporation
12798034	8862832	TECHNIQUES FOR GLOBAL MEMORY MANAGEMENT AND REQUEST PROCESSING	EMC Corporation
12798035	8375174	TECHNIQUES FOR USE WITH MEMORY PARTITIONING AND MANAGEMENT	EMC Corporation
12798036		[REDACTED]	EMC Corporation
12798097	8433848	ANALYSIS TOOL FOR A MULTI-TIER STORAGE ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
12798234	8725767	MULTI-DIMENSIONAL OBJECT MODEL FOR STORAGE MANAGEMENT	EMC Corporation
12798597		SYSTEM AND METHOD FOR SECURING TENANT DATA ON A LOCAL APPLIANCE PRIOR TO DELIVERY TO A SAAS DATA CENTER HOSTED APPLICATION SERVICE	EMC Corporation
12798730	8086255	DATA MESSAGE PROCESSING	EMC Corporation
12799513		[REDACTED]	EMC Corporation
12800399	9135016	SAFE OBJECT REPLICATION AND RESTORE IN A FEDERATION OF OBJECT STORAGE	EMC Corporation
12800448		[REDACTED]	EMC Corporation
12802072	8037013	COOPERATIVE LOCKING BETWEEN MULTIPLE INDEPENDENT OWNERS OF DATA SPACE	EMC Corporation
12803393	8396839	REPRESENTING DE-DUPLICATED FILE DATA	EMC Corporation
12803470		[REDACTED]	EMC Corporation
12803497	8812423	OBJECT QUALIFIERS FOR MULTI-DIMENSIONAL OBJECT MODEL	EMC Corporation
12803498	8281033	TECHNIQUES FOR PATH SELECTION	EMC Corporation
12803570	9003157	TECHNIQUES FOR DYNAMIC DATA STORAGE CONFIGURATION IN ACCORDANCE WITH AN ALLOCATION POLICY	EMC Corporation
12803571	8566553	TECHNIQUES FOR AUTOMATED EVALUATION AND MOVEMENT OF DATA BETWEEN STORAGE TIERS	EMC Corporation
12803592	8874726	AUTOMATED LOAD BALANCING	EMC Corporation
12803604	8321487	RECOVERY OF DIRECTORY INFORMATION	EMC Corporation
12804349	8489559	METHODS AND APPARATUS FOR CONVERSION OF CONTENT	EMC Corporation
12804877	8447923	WRITE INTERCEPTOR FOR TRACKING CHANGES TO A DISK IMAGE	EMC Corporation
12807943	8467281	TECHNIQUES FOR IDENTIFYING DEVICES HAVING SLOW RESPONSE TIMES	EMC Corporation
12818577	8402226	RATE PROPORTIONAL CACHE WRITE-BACK IN A STORAGE SYSTEM	EMC Corporation
12819767	8862560	COMPRESSION SYSTEM PAUSE AND AUTO-RESUME	EMC Corporation
12820829	8433914	MULTI-CHANNEL TRANSACTION SIGNING	EMC Corporation
12821418	8332687	SPLITTER USED IN A CONTINUOUS DATA PROTECTION ENVIRONMENT	EMC Corporation
12821695	8504684	CONTROL OF DATA STORAGE SYSTEM MANAGEMENT APPLICATION ACTIVATION	EMC Corporation
12822173	9330105	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR LAZY COMPRESSION OF DATA INCOMING TO A DATA STORAGE ENTITY	EMC Corporation
12823636	8751827	APPARATUS FOR CONTROLLING EMBEDDED SECURITY ON A STORAGE PLATFORM	EMC Corporation
12824380	8327103	SCHEDULING DATA RELOCATION ACTIVITIES USING CONFIGURABLE FAIRNESS CRITERIA	EMC Corporation
12824816	8443163	METHODS, SYSTEMS AND COMPUTER READABLE MEDIUM FOR TIER-BASED DATA STORAGE RESOURCE ALLOCATION AND DATA RELOCATION IN A DATA STORAGE ARRAY	EMC Corporation

Application Number	Registration Number	Title	Owner
12824966	8479046	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR TRACKING POOL STORAGE SPACE RESERVATIONS	EMC Corporation
12825907		[REDACTED]	EMC Corporation
12825930	9047106	MANAGING APPLICATION FEATURES	EMC Corporation
12826131	8407191	PRIORITY BASED DATA SCRUBBING ON A DEDUPLICATED DATA STORE	EMC Corporation
12826185	9043533	SIZING VOLATILE MEMORY CACHE BASED ON FLASH-BASED CACHE USAGE	EMC Corporation
12826203	8456832	DATA STORAGE DRIVE CARRIER	EMC Corporation
12826385	9311002	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR COMPRESSING DATA AT A VIRTUALLY PROVISIONED STORAGE ENTITY	EMC Corporation
12826434	8473678	MANAGING MULTI-TIERED STORAGE POOL PROVISIONING	EMC Corporation
12826466	8452965	SELF-IDENTIFICATION OF TOKENS	EMC Corporation
12826481	8601553	TECHNIQUES OF IMPOSING ACCESS CONTROL POLICIES	EMC Corporation
12826491	8655787	AUTOMATED DETECTION OF DEFINED INPUT VALUES AND TRANSFORMATION TO TOKENS	EMC Corporation
12826534		[REDACTED]	EMC Corporation
12826749	8429307	APPLICATION AWARE INTELLIGENT STORAGE SYSTEM	EMC Corporation
12826833		[REDACTED]	EMC Corporation
12826935	8560837	AUTOMATICALLY ESTIMATING CLOCK OFFSET	EMC Corporation
12826994	8973021	METHOD AND SYSTEM OF FACILITATING JAVA COMMUNICATION	EMC Corporation
12827025	8713160	AUTOMATED TOP-DOWN MULTI-ABSTRACTION INFRASTRUCTURE PERFORMANCE ANALYTICS - NETWORK INFRASTRUCTURE-AS-A-SERVICE PERSPECTIVE	EMC Corporation
12827045	8627424	DEVICE BOUND OTP GENERATION	EMC Corporation
12827092	8381213	METHOD FOR DYNAMIC MANAGEMENT OF SYSTEM RESOURCES THROUGH APPLICATION HINTS	EMC Corporation
12827097	8984384	DISTRIBUTED STORAGE SYSTEM WITH EFFICIENT HANDLING OF FILE UPDATES	EMC Corporation
12827400	8683495	SYNC POINT COORDINATION PROVIDING HIGH THROUGHPUT JOB PROCESSING ACROSS DISTRIBUTED VIRTUAL INFRASTRUCTURE	EMC Corporation
12828034	8595749	SYSTEM AND METHOD FOR CATALOGING DATA	EMC Corporation
12828111	8612680	DATA CACHING SYSTEM AND METHOD	EMC Corporation
12828198	9367561	PRIORITIZED BACKUP SEGMENTING	EMC Corporation
12828205	9235585	DYNAMIC PRIORITIZED RECOVERY	EMC Corporation
12828213		DATA ACCESS DURING DATA RECOVERY	EMC Corporation
12828218	8438420	POST ACCESS DATA PRESERVATION	EMC Corporation
12828279	9239860	AUGMENTING VIRTUAL DIRECTORIES	EMC Corporation
12828284	9244969	VIRTUAL DISK RECOVERY	EMC Corporation
12828609	7992038	FAILURE PROTECTION IN AN ENVIRONMENT INCLUDING VIRTUALIZATION OF NETWORKED STORAGE RESOURCES	EMC Corporation
12832658		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
12832904	8015216	SYSTEMS AND METHODS FOR PROVIDING POSSIBLE VALUE RANGES	EMC Corporation
12834535	8244680	ACTIVE DIRECTORY CONTAINER RECOVERY	EMC Corporation
12834705	8131705	RELEVANCY SCORING USING QUERY STRUCTURE AND DATA STRUCTURE FOR FEDERATED SEARCH	EMC Corporation
12834710	8131716	TUNING OF RELEVANCY RANKING FOR FEDERATED SEARCH	EMC Corporation
12837439	8214334	SYSTEMS AND METHODS FOR DISTRIBUTED SYSTEM SCANNING	EMC Corporation
12838167		[REDACTED]	EMC Corporation
12847559	9336111	SYSTEM AND METHOD FOR STORING DATA	EMC Corporation
12850239	8185554	STORAGE OF DATA WITH COMPOSITE HASHES IN BACKUP SYSTEMS	EMC Corporation
12854641	8370899	DISPOSABLE BROWSER FOR COMMERCIAL BANKING	EMC Corporation
12857703	8255477	SYSTEMS AND METHODS FOR IMPLEMENTING CONTENT SENSITIVE ROUTING OVER A WIDE AREA NETWORK (WAN)	EMC Corporation
12862060	8214400	SYSTEMS AND METHODS FOR MAINTAINING DISTRIBUTED DATA	EMC Corporation
12880307	8082465	AUTO-ADAPTING CACHE MEMORY SYSTEM AND METHOD	EMC Corporation
12882081	8635423	METHODS AND APPARATUS FOR INTERFACING TO A DATA STORAGE SYSTEM	EMC Corporation
12882234	8693212	CHASSIS COVER HAVING OPTICAL OPEN-CLOSE DETECTOR	EMC Corporation
12884577	8667478	BACKWARD-COMPATIBILITY USING A PLUGIN ARCHITECTURE	EMC Corporation
12887402	8677052	SNAPSHOTTING OF A PERFORMANCE STORAGE SYSTEM IN A SYSTEM FOR PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	EMC Corporation
12887404	9141300	PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM USING A PERFORMANCE SEGMENT STORAGE SYSTEM AND A SEGMENT STORAGE SYSTEM	EMC Corporation
12887414	8447726	PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM USING A PERFORMANCE SEGMENT STORAGE SYSTEM INCLUDING A DETERMINER	EMC Corporation
12888943	8756370	NON-DISRUPTIVE DRIVE FIRMWARE UPGRADES	EMC Corporation
12889477	9292216	MANAGING POOL ALLOCATION	EMC Corporation
12890688	8527455	SEEDING REPLICATION	EMC Corporation
12892069		[REDACTED]	EMC Corporation
12892081	8327080	WRITE-BACK CACHE PROTECTION	EMC Corporation
12892333	8381027	DETERMINING ALTERNATE PATHS IN FAULTED SYSTEMS	EMC Corporation
12892812	8204871	EXTENDED FILE MAPPING CACHE FOR FAST INPUT-OUTPUT	EMC Corporation
12893034	8527626	MANAGING SYSTEM POLLING	EMC Corporation
12893347	8635707	MANAGING OBJECT ACCESS	EMC Corporation

Application Number	Registration Number	Title	Owner
12893600	8694700	USING I/O TRACK INFORMATION FOR CONTINUOUS PUSH WITH SPLITTER FOR STORAGE DEVICE	EMC Corporation
12893684	8499157	DEVICE-BASED PASSWORD MANAGEMENT	EMC Corporation
12893697	8984031	MANAGING DATA STORAGE FOR DATABASES BASED ON APPLICATION AWARENESS	EMC Corporation
12893716	8219724	FLEXIBLY MANAGING I\O OPERATIONS BASED ON APPLICATION AWARENESS	EMC Corporation
12893854	8683153	ITERATING FOR DEDUPLICATION	EMC Corporation
12893865	8775388	SELECTING ITERATION SCHEMES FOR DEDUPLICATION	EMC Corporation
12894267	8370862	COMMUNICATING BETWEEN SOFTWARE ENVIRONMENTS	EMC Corporation
12894282	8910144	MANAGING SOFTWARE ENVIRONMENT INSTALLATION	EMC Corporation
12894406		[REDACTED]	EMC Corporation
12894502	8453232	VIRTUAL SMART CARD THROUGH A PC/SC INTERFACE	EMC Corporation
12894506	8751537	INTEGRATED AND UNIFIED ONLINE HELP	EMC Corporation
12894515	8799375	UNALTERABLE NOTIFICATION SERVICE	EMC Corporation
12894660	8756441	DATA CENTER ENERGY MANAGER FOR MONITORING POWER USAGE IN A DATA STORAGE ENVIRONMENT HAVING A POWER MONITOR AND A MONITOR MODULE FOR CORRELATING ASSOCIATIVE INFORMATION ASSOCIATED WITH POWER CONSUMPTION	EMC Corporation
12894763	9116905	SYSTEM AND METHOD FOR CATALOGING DATA	EMC Corporation
12895021	8683167	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
12895053	8595438	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
12895130	8312519	AGILE OTP GENERATION	EMC Corporation
12895174	8959173	NON-DISRUPTIVE LOAD-BALANCING OF VIRTUAL MACHINES BETWEEN DATA CENTERS	EMC Corporation
12895184	8725848	MULTIPATH DISTRIBUTION	EMC Corporation
12895198	8458509	MULTIPATH FAILOVER	EMC Corporation
12895219		[REDACTED]	EMC Corporation
12895232	9047128	EFFICIENT INTERFACE ADDITION	EMC Corporation
12895619	8356150	SYSTEMS AND METHODS FOR PROVIDING NONLINEAR JOURNALING	EMC Corporation
12895667	7984253	ARCHITECTURE FOR VIRTUALIZATION OF NETWORKED STORAGE RESOURCES	EMC Corporation
12895827	9235593	TRANSMITTING FILESYSTEM CHANGES OVER A NETWORK BACKGROUND OF THE INVENTION	EMC Corporation
12895836	8504870	OPTIMIZED RECOVERY	EMC Corporation
12895838	9195549	UNIFIED RECOVERY	EMC Corporation
12895840	8549350	MULTI-TIER RECOVERY	EMC Corporation
12895841	8484505	SELF RECOVERY	EMC Corporation
12907625	8618913	RADIO FREQUENCY INDENTIFICATION ENABLED MOBILE DEVICE	EMC Corporation
12908379	8605590	SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS	EMC Corporation

Application Number	Registration Number	Title	Owner
12908811		[REDACTED]	EMC Corporation
12909089	8739285	DIFFERENTIAL VIRUS SCAN	EMC Corporation
12910758	8527568	EFFICIENT COMPUTATION OF SKETCHES	EMC Corporation
12917180	8625464	SYSTEMS AND METHODS FOR PROVIDING A QUIESCING PROTOCOL	EMC Corporation
12917910	8095577	MANAGING METADATA	EMC Corporation
12924345	8924675	SELECTIVE MIGRATION OF PHYSICAL DATA	EMC Corporation
12924361	8868798	TECHNIQUES FOR MODELING DISK PERFORMANCE	EMC Corporation
12924388		[REDACTED]	EMC Corporation
12924396	8583838	TECHNIQUES FOR STATISTICS COLLECTION IN CONNECTION WITH DATA STORAGE PERFORMANCE.	EMC Corporation
12924430	8566546	TECHNIQUES FOR ENFORCING CAPACITY RESTRICTIONS OF AN ALLOCATION POLICY	EMC Corporation
12924474	9176677	VIRTUAL PROVISIONING SPACE RESERVATION	EMC Corporation
12924544	8707003	RATE CONTROL FOR ASYNCHRONOUS DATA REPLICATION	EMC Corporation
12924568	8479204	TECHNIQUES FOR DETERMINING TRANSACTION PROGRESS	EMC Corporation
12924571	8850453	TECHNIQUES FOR EVENT FILTERING	EMC Corporation
12924572	8316161	TECHNIQUES FOR INDICATING A PASSIVE PATH STATE FOR A DEVICE	EMC Corporation
12924588	8438315	TECHNIQUES FOR NON-DISRUPTIVE UPGRADE	EMC Corporation
12925040	8041684	TECHNIQUES FOR DETERMINING AN IMPLEMENTED DATA PROTECTION POLICY	EMC Corporation
12925709	8732364	TRANSFER OF DATA STORAGE DEVICE FEATURES	EMC Corporation
12928283	8250257	TECHNIQUES FOR BALANCING SYSTEM I/O LOAD	EMC Corporation
12928649	8595535	TECHNIQUES FOR MANAGING DATA STORAGE SYSTEMS USING ENERGY INFORMATION	EMC Corporation
12928653	8447729	TECHNIQUES FOR PERFORMING INDICATION MANAGEMENT	EMC Corporation
12928661	8239584	TECHNIQUES FOR AUTOMATED STORAGE MANAGEMENT	EMC Corporation
12930101	8935490	DISK ACCESS QUALITY OF SERVICE	EMC Corporation
12930102	8670453	ISOLATING NETWORK TRAFFIC IN MULTI-TENNANT VIRTUALIZATION ENVIRONMENTS	EMC Corporation
12930121	8578204	WITNESS FACILITY FOR DISTRIBUTED STORAGE SYSTEM	EMC Corporation
12930247		[REDACTED]	EMC Corporation
12930249	8682955	FULLY AUTOMATED CLOUD TIERING CONTROLLED BY AN ORCHESTRATION LAYER BASED ON DYNAMIC INFORMATION	EMC Corporation
12930251	8468180	PORTING STORAGE METADATA	EMC Corporation
12931386	8321921	METHOD AND APPARATUS FOR PROVIDING AUTHENTICATION AND ENCRYPTION SERVICES BY A SOFTWARE AS A SERVICE PLATFORM	EMC Corporation
12932080	9110693	VM MOBILITY OVER DISTANCE	EMC Corporation
12932827		[REDACTED]	EMC Corporation
12943042	8935560	SYSTEM AND METHOD OF FILE LOCKING WITHIN A NETWORK FILE SYSTEM FEDERATED NAMESPACE	EMC Corporation

Application Number	Registration Number	Title	Owner
12945915	9104326	SCALABLE BLOCK DATA STORAGE USING CONTENT ADDRESSING	EMC Corporation
12946665	8060521	SYSTEMS AND METHODS OF DIRECTORY ENTRY ENCODINGS	EMC Corporation
12950996	8407265	HIERARCHICAL MAPPING OF FREE BLOCKS OF CYLINDER GROUPS OF FILE SYSTEMS BUILT ON SLICES OF STORAGE AND LINKING OF THE FREE BLOCKS	EMC Corporation
12955533	8527638	SYSTEM MANAGEMENT VIA SESSION INITIATION PROTOCOL	EMC Corporation
12959575	9009404	VIEWING COMPRESSION AND MIGRATION STATUS	EMC Corporation
12960793	8959249	COOPERATIVE CLOUD I/O SCHEDULER	EMC Corporation
12962819	8214406	BACKUP OF INCREMENTAL METADATA IN BLOCK BASED BACKUP SYSTEMS	EMC Corporation
12965748	8176013	SYSTEMS AND METHODS FOR ACCESSING AND UPDATING DISTRIBUTED DATA	EMC Corporation
12966284	8296855	PRIVILEGED ACCESS TO ENCRYPTED DATA	EMC Corporation
12966415	8700832	AUTOMATED ADDITION OF FILE BASED HARDWARE AND FILE BASED ACCESS SERVICES IN A DATA STORAGE SYSTEM	EMC Corporation
12967239	8934940	PROVIDING ENHANCED SECURITY FOR WIRELESS TELECOMMUNICATIONS DEVICES	EMC Corporation
12968854	8626484	LIGHT-WEIGHT AND FLEXIBLE FEATURE SIMULATOR	EMC Corporation
12969888	8850143	POINT IN TIME ACCESS IN A REPLICATION ENVIRONMENT WITH LUN RESIZING	EMC Corporation
12969893	8447782	DATA ACCESS LAYER HAVING A MAPPING MODULE FOR TRANSFORMATION OF DATA INTO COMMON INFORMATION MODEL COMPLIANT OBJECTS	EMC Corporation
12969903	8725691	DYNAMIC LUN RESIZING IN A REPLICATION ENVIRONMENT	EMC Corporation
12969920		[REDACTED]	EMC Corporation
12969944	8725692	REPLICATION OF XCOPY COMMAND	EMC Corporation
12970795	7971021	SYSTEMS AND METHODS FOR MANAGING STALLED STORAGE DEVICES	EMC Corporation
12971041	8874696	COMMON CACHE SERVICE	EMC Corporation
12971792	8516149	SYSTEM FOR OPERATING NFSV2 AND NFSV3 CLIENTS WITH FEDERATED NAMESPACE	EMC Corporation
12972260	8356013	SYSTEMS AND METHODS FOR A SNAPSHOT OF DATA	EMC Corporation
12973284		[REDACTED]	EMC Corporation
12973599		[REDACTED]	EMC Corporation
12974013		[REDACTED]	EMC Corporation
12974732	8528049	TECHNIQUES OF PROVIDING AUTHENTICATION FROM COMPUTER POINTER INTERACTIONS	EMC Corporation
12974756	8683452	DYNAMICALLY OBFUSCATED JAVASCRIPT	EMC Corporation
12974768		[REDACTED]	EMC Corporation
12975048	8126844	MULTI-THREAD REPLICATION ACROSS A NETWORK	EMC Corporation
12975474		[REDACTED]	EMC Corporation
12975716	9081771	ENCRYPTING IN DEDUPLICATION SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
12976229	8774530	AUTOMATED DIAGNOSTIC ANALYSIS OF IMAGE DATA	EMC Corporation
12976575	9306741	UPDATING KEYS FOR USE IN AUTHENTICATION	EMC Corporation
12976632	8539148	DEDUPLICATION EFFICIENCY	EMC Corporation
12977251	8706700	CREATING CONSISTENT SNAPSHOTS ACROSS SEVERAL STORAGE ARRAYS OR FILE SYSTEMS	EMC Corporation
12977295	8738681	HIERARCHICAL COOPERATIVE STORAGE SERVICES	EMC Corporation
12977604	9075668	METHOD, APPARATUS AND SYSTEM FOR INTEGRATING DYNAMIC RECOGNITION OF COMPLEX EVENTS WITH CASE-BASED PROCESSING	EMC Corporation
12977616		[REDACTED]	EMC Corporation
12977651	8495304	MULTI SOURCE WIRE DEDUPLICATION	EMC Corporation
12977680		[REDACTED]	EMC Corporation
12977789	8751828	SHARING ENCRYPTION-RELATED METADATA BETWEEN MULTIPLE LAYERS IN A STORAGE I/O STACK	EMC Corporation
12977906		[REDACTED]	EMC Corporation
12977962	8566637	ANALYZING DRIVE ERRORS IN DATA STORAGE SYSTEMS	EMC Corporation
12977971	8798262	PRESERVING LBA INFORMATION BETWEEN LAYERS OF A STORAGE I/O STACK FOR LBA-DEPENDENT ENCRYPTION	EMC Corporation
12978017	8726405	TECHNIQUES FOR PROVIDING SECURITY USING A MOBILE WIRELESS COMMUNICATIONS DEVICE HAVING DATA LOSS PREVENTION CIRCUITRY	EMC Corporation
12978055	8635447	MANAGING CERTIFICATES BETWEEN SOFTWARE ENVIRONMENTS	EMC Corporation
12978096	8782782	COMPUTER SYSTEM WITH RISK-BASED ASSESSMENT AND PROTECTION AGAINST HARMFUL USER ACTIVITY	EMC Corporation
12978332		[REDACTED]	EMC Corporation
12978887	8260974	TECHNIQUES FOR ACCELERATING THE PROCESSING OF ENCLOSURES IN SAS DISK STORAGE ARRAYS	EMC Corporation
12979402	7992713	DISK DRIVE PACKAGE	EMC Corporation
12979450	9037512	INFORMATION TECHNOLOGY RESOURCE ALLOCATION AND UTILIZATION TRACKING IN A CLOUD-BASED SYSTEM	EMC Corporation
12980421	8620882	TOKENIZATION OF MULTIPLE-FIELD RECORDS	EMC Corporation
12980567	8856954	AUTHENTICATING USING ORGANIZATION BASED INFORMATION	EMC Corporation
12980621	9323819	FACILITATING VALID DATA ENTRY	EMC Corporation
12980853		[REDACTED]	EMC Corporation
12980932	8683260	MANAGING OWNERSHIP OF LOGICAL VOLUMES	EMC Corporation
12980958		[REDACTED]	EMC Corporation
12981050	8484635	UNIFIED INSTALLATION FOR HETEROGENEOUS STORAGE SYSTEMS	EMC Corporation
12981072	8479276	MALWARE DETECTION USING RISK ANALYSIS BASED ON FILE SYSTEM AND NETWORK ACTIVITY	EMC Corporation

Application Number	Registration Number	Title	Owner
12981766	9009426	METHODS, COMPUTER READABLE MEDIA, AND SYSTEMS FOR OPTIMIZING CACHE UTILIZATION	EMC Corporation
12981772		[REDACTED]	EMC Corporation
12981803		[REDACTED]	EMC Corporation
12981978	8452900	DYNAMIC COMPRESSION OF AN I/O DATA BLOCK	EMC Corporation
12982139	8930738	BATTERY BACK UP SYSTEM	EMC Corporation
12982288		[REDACTED]	EMC Corporation
12982378	9104863	METHOD AND APPARATUS TO HARDEN A SOFTWARE EXECUTION IN RANDOM ACCESS MEMORY	EMC Corporation
12982724	8818966	CONTINUOUS FILE DEFRAGMENTATION DURING FILE OVER-WRITES	EMC Corporation
12982993		[REDACTED]	EMC Corporation
12983151	8713364	UNIFIED RECOVERY	EMC Corporation
12983165	8782007	EFFICIENT DATA MOVEMENT	EMC Corporation
12983172	8799393	DYNAMIC DATA MOVEMENT	EMC Corporation
12983213	8458418	REPLICATION OF DEDUPLICATED DATA BETWEEN MULTI-CONTROLLER SYSTEMS	EMC Corporation
12983246	8799915	DECOMMISSIONING VIRTUAL APPLIANCES	EMC Corporation
12983249	8601472	INSTANTIATING VIRTUAL APPLIANCES	EMC Corporation
12983281	9280550	EFFICIENT STORAGE TIERING	EMC Corporation
12983282		[REDACTED]	EMC Corporation
12983285	8886901	POLICY BASED STORAGE TIERING	EMC Corporation
12989601	8589539	MULTIPEER	EMC Corporation
13/155306	9052830	TECHNIQUES FOR AUTOMATED EVALUATION AND MOVEMENT OF DATA BETWEEN STORAGE TIERS FOR THIN DEVICES	EMC Corporation
13/249957	8788817	METHODS AND APPARATUS FOR SECURE AND RELIABLE TRANSMISSION OF MESSAGES OVER A SILENT ALARM CHANNEL	EMC Corporation
13/323004	9047323	SYSTEM AND METHOD FOR REVIEWING ROLE DEFINITIONS	EMC Corporation
13/404737	9118661	METHODS AND APPARATUS FOR AUTHENTICATING A USER USING MULTI-SERVER ONE-TIME PASSCODE VERIFICATION	EMC Corporation
13/436884	9064210	SEMANTICALLY-AWARE BEHAVIORAL SECURITY ANALYSIS SYSTEM FOR SECURITY INFORMATION AND EVENT MANAGEMENT	EMC Corporation
13/472999	8925053	INTERNET-ACCESSIBLE SERVICE FOR DYNAMIC AUTHENTICATION AND CONTINUOUS ASSERTION OF TRUST LEVEL IN IDENTITIES	EMC Corporation
13/537506	9092782	METHODS AND APPARATUS FOR RISK EVALUATION OF COMPROMISED CREDENTIALS	EMC Corporation
13/537981	9160539	METHODS AND APPARATUS FOR SECURE, STEALTHY AND RELIABLE TRANSMISSION OF ALERT MESSAGES FROM A SECURITY ALERTING SYSTEM	EMC Corporation
13/538048	9081898	AUTOMATIC CAPTURE OF MINIMAL PORTABLE EXECUTABLE BUG REPROS	EMC Corporation
13/538102	8955069	EVENT-BASED BIOMETRIC AUTHENTICATION USING MOBILE DEVICE	EMC Corporation

Application Number	Registration Number	Title	Owner
13/600676	9292671	MULTI-SERVER AUTHENTICATION USING PERSONALIZED PROACTIVIZATION	EMC Corporation
13/630242	9213727	METHODS AND APPARATUS FOR OBTAINING DATABASE PERFORMANCE SNAPSHOTS	EMC Corporation
13/708343	9323909	SHARING A CRYPTOGRAPHIC DEVICE BY PARTITIONING CHALLENGE-RESPONSE SPACE	EMC Corporation
13/713306	9154481	DECRYPTION OF A PROTECTED RESOURCE ON A CRYPTOGRAPHIC DEVICE USING WIRELESS COMMUNICATION	EMC Corporation
13/724752	9098803	HYPOTHESES AGGREGATION IN DATA ANALYTICS	EMC Corporation
13/725726	9270786	SYSTEM AND METHOD FOR PROXYING TCP CONNECTIONS OVER A SCSI-BASED TRANSPORT	EMC Corporation
13/725860	9232000	METHOD AND SYSTEM FOR BALANCING LOAD ACROSS TARGET ENDPOINTS ON A SERVER AND INITIATOR ENDPOINTS ACCESSING THE SERVER	EMC Corporation
13/728271	9083515	FORWARD SECURE PSEUDORANDOM NUMBER GENERATION RESILIENT TO FORWARD CLOCK ATTACKS	EMC Corporation
13/730017	9280469	ACCELERATING SYNCHRONIZATION OF CERTAIN TYPES OF CACHED DATA	EMC Corporation
13/730112	9110695	REQUEST QUEUES FOR INTERACTIVE CLIENTS IN A SHARED FILE SYSTEM OF A PARALLEL COMPUTING SYSTEM	EMC Corporation
13/730192	9164949	SYSTEM AND METHOD FOR LUN AND CACHE MANAGEMENT	EMC Corporation
13/730343	8954728	GENERATION OF EXFILTRATION-RESILIENT CRYPTOGRAPHIC KEYS	EMC Corporation
13/731443	8904482	TECHNIQUES FOR SECURING A ONE-TIME PASSCODE WITH AN ALTERATION CODE	EMC Corporation
13/758698	8984536	HETEROGENEOUS DATA FROM MULTIPLE SOURCES	EMC Corporation
13/795025	9049226	DEFENDING AGAINST A CYBER ATTACK VIA ASSET OVERLAY MAPPING	EMC Corporation
13/795619	9171171	GENERATING A HEAT MAP TO IDENTIFY VULNERABLE DATA USERS WITHIN AN ORGANIZATION	EMC Corporation
13/799725	9195670	TRACKING WRITE OPERATIONS FOR INCREMENTAL BACKUPS OF DATA	EMC Corporation
13/803377	9348519	SYSTEM AND METHODS FOR OPTIMIZING MULTIPLE DATA STREAMS THROUGHPUT TO MAXIMIZE OVERALL THROUGHPUT OF A BACKUP APPLICATION	EMC Corporation
13/804663	9143318	USING A TOKEN CODE TO CONTROL ACCESS TO DATA AND APPLICATIONS IN A MOBILE PLATFORM	EMC Corporation
13/804663	9154304	USING A TOKEN CODE TO CONTROL ACCESS TO DATA AND APPLICATIONS IN A MOBILE PLATFORM	EMC Corporation
13/826924	9225717	EVENT-BASED DATA SIGNING VIA TIME-BASED ONE-TIME AUTHENTICATION PASSCODES	EMC Corporation
13/837063	9317419	SYSTEM AND METHOD FOR THIN PROVISIONING	EMC Corporation

Application Number	Registration Number	Title	Owner
13/837259	9270655	CONFIGURABLE ONE-TIME AUTHENTICATION TOKENS WITH IMPROVED RESILIENCE TO ATTACKS	EMC Corporation
13/910380	9342795	ASSISTED LEARNING FOR DOCUMENT CLASSIFICATION	EMC Corporation
13/927559	9356919	AUTOMATED DISCOVERY OF KNOWLEDGE-BASED AUTHENTICATION COMPONENTS	EMC Corporation
13/931151	9160726	AUTHENTICATION SYSTEM WITH SELECTIVE AUTHENTICATION METHOD BASED ON RISK REASONING	EMC Corporation
13/931167	9118487	ASYMMETRIC ENCRYPTION SCHEME WITH EXPIRING REVOCABLE CERTIFICATES HAVING A PREDEFINED VALIDITY PERIOD	EMC Corporation
13/931188	9288049	CRYPTOGRAPHICALLY LINKING DATA AND AUTHENTICATION IDENTIFIERS WITHOUT EXPLICIT STORAGE OF LINKAGE	EMC Corporation
13/931453	9317224	QUANTIFYING UTILIZATION OF A DATA STORAGE SYSTEM BY A VIRTUAL STORAGE UNIT	EMC Corporation
13/931830	9130985	DATA DRIVEN DEVICE DETECTION	EMC Corporation
13006195	8195905	SYSTEMS AND METHODS OF QUOTA ACCOUNTING	EMC Corporation
13007498	8200632	SYSTEMS AND METHODS FOR ADAPTIVE COPY ON WRITE	EMC Corporation
13009586	8117270	METHOD AND APPARATUS FOR DEFINING MESSAGING IDENTITIES	EMC Corporation
13013279	8819386	MEMORY EFFICIENT USE OF DYNAMIC DATA STRUCTURES USED TO MANAGE SPARSELY ACCESSED DATA	EMC Corporation
13014668	9021583	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
13017158	8549595	COUNTING DISTINCT OCCURRENCES OF A FACT USING MOVING STATISTICS WINDOW	EMC Corporation
13022946	8805951	VIRTUAL MACHINES AND CLOUD STORAGE CACHING FOR CLOUD COMPUTING APPLICATIONS	EMC Corporation
13025032	8266084	SMART CONTAINERS	EMC Corporation
13025967	8346926	GRANTING ACCESS TO A CONTENT UNTI STORED ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
13030971	8069214	METHOD AND APPARATUS FOR MANAGING MESSAGING IDENTITIES	EMC Corporation
13035831	8380689	SYSTEMS AND METHODS FOR PROVIDING NONLINEAR JOURNALING	EMC Corporation
13036174	8479302	ACCESS CONTROL VIA ORGANIZATION CHARTS	EMC Corporation
13038280	8627479	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
13042548	8458289	METHODS AND APPARATUS FOR PROVIDING CONTENT	EMC Corporation
13044774		[REDACTED]	EMC Corporation
13050905	8352435	CONTINUOUS DATA REDUCTION FOR HIGHLY AVAILABLE SYNCHRONOUS MIRRORS	EMC Corporation
13051980		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13051986		MEMORY QUOTA	EMC Corporation
13051995	9104663	DYNAMIC ALLOCATION OF MEMORY FOR MEMORY INTENSIVE OPERATORS	EMC Corporation
13065014	8380956	TECHNIQUES FOR STORING DATA TO DEVICE MIRRORS	EMC Corporation
13065016	8713261	CACHING TECHNIQUES	EMC Corporation
13065549	8301812	TECHNIQUES FOR PERFORMING HOST PATH DETECTION VERIFICATION	EMC Corporation
13065631	8380757	TECHNIQUES FOR PROVIDING A CONSOLIDATED SYSTEM CONFIGURATION VIEW USING DATABASE CHANGE TRACKING AND CONFIGURATION FILES	EMC Corporation
13065735	8346788	TECHNIQUES FOR MAPPING DATA MODELS USING AN INTERMEDIATE PROCESSING LAYER	EMC Corporation
13065738	8914404	TECHNIQUES FOR PERFORMING VIEW INDICATION MANAGEMENT	EMC Corporation
13065748	8910031	DIF-CRC BASED FAST HASHING	EMC Corporation
13065806	8843714	WRITE PACING SIMULATION TOOL	EMC Corporation
13065849	8898402	ASSIGNING STORAGE RESOURCES IN A VIRTUALIZATION ENVIRONMENT	EMC Corporation
13065851	8751739	DATA DEVICE SPARES	EMC Corporation
13069492	8655823	EVENT MANAGEMENT SYSTEM BASED ON MACHINE LOGIC	EMC Corporation
13069593	9292523	MANAGING DATA STORAGE	EMC Corporation
13069952	8601175	MANAGING ON-SITE ACCESS TO ECOSYSTEM FEATURES	EMC Corporation
13070777	8499355	AUTHORIZATION SYSTEM HAVING A BLOOM FILTERED AUTHENTICATION LIST FOR FRAUD DETECTION	EMC Corporation
13070780	8498995	OPTIMIZING DATA RETRIEVAL DURING EVENT DATA QUERY PROCESSING	EMC Corporation
13071926		[REDACTED]	EMC Corporation
13072458	8346728	SNAPSHOT INDEXING	EMC Corporation
13072463	9135122	DATA MOVER DISCOVERY OF OBJECT EXTENT	EMC Corporation
13073215	8996461	METHOD AND APPARATUS FOR REPLICATING THE PUNCH COMMAND	EMC Corporation
13073261	8601085	TECHNIQUES FOR PREFERRED PATH DETERMINATION	EMC Corporation
13073391		[REDACTED]	EMC Corporation
13073868	8538933	DEDUPLICATING RANGE OF DATA BLOCKS	EMC Corporation
13074164		[REDACTED]	EMC Corporation
13074250	9069930	SECURITY INFORMATION AND EVENT MANAGEMENT SYSTEM EMPLOYING SECURITY BUSINESS OBJECTS AND WORKFLOWS	EMC Corporation
13075073	8924355	CHECKPOINT RESTART	EMC Corporation
13075487	8977812	ITERATING IN PARALLEL FOR DEDUPLICATION	EMC Corporation
13075502	9390093	MANAGING DATA OBJECTS	EMC Corporation
13075602		[REDACTED]	EMC Corporation
13075628	8572407	GPU ASSIST FOR STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
13075639	9043793	VERIFICATION OF CONTROLS IN INFORMATION TECHNOLOGY INFRASTRUCTURE VIA OBLIGATION ASSERTION	EMC Corporation
13075661	8442952	RECOVERING IN DEDUPLICATION SYSTEMS	EMC Corporation
13075707		[REDACTED]	EMC Corporation
13075756	8566595	MANAGING SECURE COMMUNICATIONS WITH SOFTWARE ENVIRONMENTS	EMC Corporation
13075848	8346742	REMOTE VERIFICATION OF FILE PROTECTIONS OF CLOUD DATA STORAGE	EMC Corporation
13076010	8826041	IN-BAND DETECTION MECHANISM FOR DETECTING INTERMEDIATE LAYER IN A STORAGE I/O DRIVER STACK	EMC Corporation
13076056	8190784	IN-BAND TRANSPORT MECHANISM FOR CARRYING COMMUNICATIONS AMONG FUNCTIONAL COMPONENTS OF A STORAGE I/O INTERFACT STACK	EMC Corporation
13076490		[REDACTED]	EMC Corporation
13076534	8792862	PROVIDING ENHANCED SECURITY FOR WIRELESS TELECOMMUNICATIONS DEVICES	EMC Corporation
13076594		[REDACTED]	EMC Corporation
13076619	8656455	MANAGING DATA LOSS PREVENTION POLICIES	EMC Corporation
13076747		[REDACTED]	EMC Corporation
13076869	8832812	METHODS AND APPARATUS FOR AUTHENTICATING A USER MULTIPLE TIMES DURING A SESSION	EMC Corporation
13076911		[REDACTED]	EMC Corporation
13076925		[REDACTED]	EMC Corporation
13077076	8875244	METHODS AND APPARATUS FOR AUTHENTICATING A USER USING DYNAMIC CLIENT-SIDE STORAGE VALUES	EMC Corporation
13077103	8782174	UPLOADING AND DOWNLOADING UNSECURED FILES VIA A VIRTUAL MACHINE ENVIRONMENT	EMC Corporation
13077153	8621649	PROVIDING A SECURITY-SENSITIVE ENVIRONMENT	EMC Corporation
13077175	9354769	ELECTRONICALLY CONTROLLING COMMITMENT OF A CHANGE TO STORED	EMC Corporation
13077213	8924966	CAPTURE/REVERT MODULE FOR COMPLEX ASSETS OF DISTRIBUTED INFORMATION TECHNOLOGY INFRASTRUCTURE	EMC Corporation
13077230	8694993	VIRTUALIZATION PLATFORM FOR SECURED COMMUNICATIONS BETWEEN A USER DEVICE AND AN APPLICATION SERVER	EMC Corporation
13077246	8429362	JOURNAL BASED REPLICATION WITH A VIRTUAL SERVICE LAYER	EMC Corporation
13077256		[REDACTED]	EMC Corporation
13077262		[REDACTED]	EMC Corporation
13077266	9063994	NETWORKED BASED REPLICATION OF DISTRIBUTED VOLUMES	EMC Corporation
13077271	8726066	JOURNAL BASED REPLICATION WITH ENHANCE FAILOVER	EMC Corporation
13077280		[REDACTED]	EMC Corporation
13077376	8468241	ADAPTIVE OPTIMIZATION ACROSSINFORMATION TECHNOLOGY INFRASTRUCTURE	EMC Corporation

Application Number	Registration Number	Title	Owner
13077429	8868845	DYNAMIC SINGLE/MULTI-READER, SINGLE-WRITER SPINLOCKS	EMC Corporation
13077553	9323671	MANAGING ENHANCED WRITE CACHING	EMC Corporation
13077615	8775775	DYNAMIC PREFETCH THROTTLING FOR MULTI-CONTROLLER SYSTEMS	EMC Corporation
13077679	8713282	LARGE SCALE DATA STORAGE SYSTEM WITH FAULT TOLERANCE	EMC Corporation
13077726	9026499	SYSTEM AND METHOD FOR RECOVERING FILE SYSTEMS BY RESTORING PARTITIONS	EMC Corporation
13077743		[REDACTED]	EMC Corporation
13077764		[REDACTED]	EMC Corporation
13077775		TIME-BASED DATA PARTITIONING	EMC Corporation
13077779		RESOURCE EFFICIENT SCALE-OUT FILE SYSTEMS	EMC Corporation
13077780		[REDACTED]	EMC Corporation
13077781		[REDACTED]	EMC Corporation
13077784		SYSTEM AND METHOD FOR VERIFYING CONSISTENT POINTS IN FILE SYSTEMS	EMC Corporation
13077790		SYSTEM AND METHOD FOR MAINTAINING CONSISTENT POINTS IN FILE SYSTEMS USING A PRIME DEPENDENCY LIST	EMC Corporation
13077795	8832394	SYSTEM AND METHOD FOR MAINTAINING CONSISTENT POINTS IN FILE SYSTEMS	EMC Corporation
13077820	8595416	WEAR-LEVELING SYSTEM AND METHOD	EMC Corporation
13077837	8938569	BMC-BASED COMMUNICATION SYSTEM	EMC Corporation
13077844	8725923	BMC-BASED COMMUNICATION SYSTEM	EMC Corporation
13077860		[REDACTED]	EMC Corporation
13077863	8732342	I/O SCHEDULING SYSTEM AND METHOD	EMC Corporation
13077873	8639861	PSEUDO WRITING SYSTEM AND METHOD	EMC Corporation
13077935	8818954	CHANGE TRACKING	EMC Corporation
13077939	8938429	RESYNCHRONIZATION OF NONACTIVE AND ACTIVE SEGMENTS	EMC Corporation
13077942		[REDACTED]	EMC Corporation
13077961	9323581	SPACE INHERITANCE	EMC Corporation
13077965	8667140	DISTINGUISHING TENANTS IN A MULTI-TENANT CLOUD ENVIRONMENT	EMC Corporation
13079121	8140484	TECHNIQUES FOR DETERMINING AN IMPLEMENTED DATA PROTECTION POLICY	EMC Corporation
13079409	8140728	DATA PACKET ARBITRATION SYSTEM	EMC Corporation
13081009	8775356	QUERY ENHANCEMENT OF SEMANTIC WIKI FOR IMPROVED SEARCHING OF UNSTRUCTURED DATA	EMC Corporation
13085377	8825720	SCALING ASYNCHRONOUS RECLAMATION OF FREE SPACE IN DE-DUPLICATED MULTI-CONTROLLER STORAGE SYSTEMS	EMC Corporation
13086332	8145863	EFFICIENT DATA STORAGE USING TWO LEVEL DELTA RESEMBLANCE	EMC Corporation
13090166	8312006	CLUSTER STORAGE USING DELTA COMPRESSION	EMC Corporation
13096397	8705538	METHODS AND SYSTEMS FOR DYNAMIC DIVISION OF PATH CAPACITY	EMC Corporation
13100361	8397001	TECHNIQUES FOR DATA STORAGE CONFIGURATION	EMC Corporation

Application Number	Registration Number	Title	Owner
13101959	8756684	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
13103644	8290947	FEDERATED SEARCH	EMC Corporation
13105500	8868980	MONITORING CIRCUIT	EMC Corporation
13105544	8536454	HOUSING SYSTEM FOR RECEPTACLES	EMC Corporation
13107769	8745003	SYNCHRONIZATION OF STORAGE USING COMPARISONS OF FINGERPRINTS OF BLOCKS	EMC Corporation
13107791	8782003	SYNCHRONIZATION OF STORAGE USING LOG FILES AND SNAPSHOTS	EMC Corporation
13111285	8296340	MANAGING FILE OBJECTS IN A DATA STORAGE SYSTEM	EMC Corporation
13116913	8554809	CALCULATING QUOTA USAGE WITHOUT IMPACTING FILE SYSTEM SERVICES	EMC Corporation
13134728	8819374	TECHNIQUES FOR PERFORMING DATA MIGRATION	EMC Corporation
13134875	9009437	TECHNIQUES FOR SHARED DATA STORAGE PROVISIONING WITH THIN DEVICES	EMC Corporation
13135080	9223822	TECHNIQUES FOR PERFORMING INDICATION MANAGEMENT	EMC Corporation
13135156		[REDACTED]	EMC Corporation
13135261		[REDACTED]	EMC Corporation
13135265	9323655	LOCATION OF DATA AMONG STORAGE TIERS	EMC Corporation
13135266	9137336	DATA COMPRESSION TECHNIQUES	EMC Corporation
13135311	8601209	MAINTAINING DASD AND TAPE CONTINUOUS AVAILABILITY	EMC Corporation
13135315	8593918	MAINTAINING TAPE EMULATION CONSISTENCY	EMC Corporation
13136342	8726083	SYNCHRONIZED TAKING OF SNAPSHOT MEMORY IMAGES OF VIRTUAL MACHINES AND STORAGE SNAPSHOTS	EMC Corporation
13136359	8667490	ACTIVE/ACTIVE STORAGE AND VIRTUAL MACHINE MOBILITY OVER ASYNCHRONOUS DISTANCES	EMC Corporation
13136367	8689054	INCREASED DISTANCE OF VIRTUAL MACHINE MOBILITY OVER ASYNCHRONOUS DISTANCES	EMC Corporation
13136379	8726067	UTILIZING BOTH APPLICATION AND STORAGE NETWORKS FOR DISTRIBUTED STORAGE OVER ASYNCHRONOUS DISTANCES	EMC Corporation
13146342	8725789	METHOD AND APPARATUS FOR PROCESSING DISTRIBUTED DATA	EMC Corporation
13152110	8234413	PARTITIONING A DATA STREAM USING EMBEDDED ANCHORS	EMC Corporation
13155273	8200721	SYSTEM AND METHOD FOR PROVIDING WRITE-ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
13155648	9075991	LOOTING DETECTION AND REMEDIATION	EMC Corporation
13155734		[REDACTED]	EMC Corporation
13158498	9383928	REPLICATION TECHNIQUES WITH CONTENT ADDRESSABLE STORAGE	EMC Corporation
13159780		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13161587	9229638	ADAPTIVE FLOW CONTROL FOR NETWORKED STORAGE	EMC Corporation
13161666	8903828	METHOD AND SYSTEM FOR CONFIGURING A MULTI-PATH INDEX	EMC Corporation
13161683		[REDACTED]	EMC Corporation
13163019		[REDACTED]	EMC Corporation
13166096	8856589	FAILURE PROTECTION IN AN ENVIRONMENT INCLUDING VIRTUALIZATION OF NETWORKED STORAGE RESOURCES	EMC Corporation
13166128	8972361	PROVIDING SYSTEM MANAGEMENT SERVICES	EMC Corporation
13168163	8850208	CERTIFICATE CROSSCHECKING BY MULTIPLE CERTIFICATE AUTHORITIES	EMC Corporation
13168182	8521691	SEAMLESS MIGRATION BETWEEN REPLICATION TECHNOLOGIES	EMC Corporation
13168299	8521694	LEVERAGING ARRAY SNAPSHOTS FOR IMMEDIATE CONTINUOUS DATA PROTECTION	EMC Corporation
13168329	8745327	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIUM FOR CONTROLLING PRIORITIZATION OF TIERING AND SPIN DOWN FEATURES IN A DATA STORAGE SYSTEM	EMC Corporation
13168391	8805786	REPLICATING SELECTED SNAPSHOTS FROM ONE STORAGE ARRAY TO ANOTHER, WITH MINIMAL DATA TRANSMISSION	EMC Corporation
13168479	8745004	REVERTING AN OLD SNAPSHOT ON A PRODUCTION VOLUME WITHOUT A FULL SWEEP	EMC Corporation
13168593	8762662	METHOD AND APPARATUS FOR APPLICATION MIGRATION VALIDATION	EMC Corporation
13169167	8752172	PROCESSING EMAIL MESSAGES BASED ON AUTHENTICITY ANALYSIS	EMC Corporation
13169179	8856531	MESSAGE BUS KEY AGREEMENT SCHEME	EMC Corporation
13169272	8719522	VIRTUAL DESKTOP BACKUP AND RESTORE	EMC Corporation
13169668		[REDACTED]	EMC Corporation
13169679	8805796	DEDUPLICATING RANGE OF DATA BLOCKS	EMC Corporation
13170242	8924726	ROBUST MESSAGE ENCRYPTION	EMC Corporation
13170345	9235971	SERVICE WINDOW OPTIMIZED SYSTEM ALERT ENGINE	EMC Corporation
13170732		[REDACTED]	EMC Corporation
13171100		[REDACTED]	EMC Corporation
13171759	8813234	GRAPH-BASED APPROACH TO DETERRING PERSISTENT SECURITY THREATS	EMC Corporation
13171869	9020987	MANAGING UPDATING OF METADATA OF FILE SYSTEMS	EMC Corporation
13172074	9239908	MANAGING ORGANIZATION BASED SECURITY RISKS	EMC Corporation
13172106	9298493	MANAGING SYSTEM I/O LOAD	EMC Corporation
13172144	8447873	MANAGING OBJECT MODEL COMMUNICATIONS	EMC Corporation
13172157	8601108	CREDENTIAL AUTHENTICATION AND AUTHORIZATION IN A SERVER DEVICE	EMC Corporation
13172172		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13172517	8645654	SELECTING PHYSICAL STORAGE IN DATA STORAGE SYSTEMS	EMC Corporation
13172610	9026737	ENHANCING MEMORY BUFFERING BY USING SECONDARY STORAGE	EMC Corporation
13172687	8484356	SYSTEM AND METHOD FOR ALLOCATING A STORAGE UNIT FOR BACKUP IN A STORAGE SYSTEM WITH LOAD BALANCING	EMC Corporation
13172692		[REDACTED]	EMC Corporation
13172979	8904531	DETECTING ADVANCED PERSISTENT THREATS	EMC Corporation
13172999	9282114	GENERATION OF ALERTS IN AN EVENT MANAGEMENT SYSTEM BASED UPON RISK	EMC Corporation
13173056	9037548	DYNAMICALLY UPDATED DATA MANAGEMENT PROCESSING PLANS GENERATED OUTSIDE A STORAGE ARRAY	EMC Corporation
13173410		[REDACTED]	EMC Corporation
13173422		[REDACTED]	EMC Corporation
13173455		[REDACTED]	EMC Corporation
13173524	8832030	SHAREPOINT GRANULAR LEVEL RECOVERIES	EMC Corporation
13173553	8843450	WRITE CAPABLE EXCHANGE GRANULAR LEVEL RECOVERIES	EMC Corporation
13173607	8650405	AUTHENTICATION USING DYNAMIC, CLIENT INFORMATION BASED PIN	EMC Corporation
13173622	8938425	MANAGING LOGICAL VIEWS OF STORAGE	EMC Corporation
13173726	8601588	METHOD AND SYSTEM FOR DETECTION OF CLONE AUTHENTICATOR	EMC Corporation
13173741	8843781	MANAGING DRIVE ERROR INFORMATION IN DATA STORAGE SYSTEMS	EMC Corporation
13173874	8621237	PROTECTING AGAINST CRYPTOGRAPHIC KEY EXPOSURE IN SOURCE CODE	EMC Corporation
13173877	8505097	REFRESH-AND-ROTATION PROCESS FOR MINIMIZING RESOURCE VULNERABILITY TO PERSISTENT SECURITY THREATS	EMC Corporation
13174047		[REDACTED]	EMC Corporation
13174263		[REDACTED]	EMC Corporation
13174305		[REDACTED]	EMC Corporation
13174326		[REDACTED]	EMC Corporation
13174341	9015432	ESTABLISHING A MAPPING TO A VIRTUAL DISK	EMC Corporation
13174384	9003138	READ SIGNATURE COMMAND	EMC Corporation
13174402	8862546	VIRTUAL ACCESS ROLL	EMC Corporation
13174427		[REDACTED]	EMC Corporation
13174444	8380885	HANDLING ABORT COMMANDS IN REPLICATION	EMC Corporation
13174452	8706701	SCALABLE CLOUD FILE SYSTEM WITH EFFICIENT INTEGRITY CHECKS	EMC Corporation
13174499	8595198	COMPRESSION FORECASTING FOR A DEDUPLICATING STORAGE SYSTEM	EMC Corporation
13174504	8751463	CAPACITY FORECASTING FOR A DEDUPLICATING STORAGE SYSTEM	EMC Corporation
13174639	8626991	MULTI-LUN SSD OPTIMIZATION SYSTEM AND METHOD	EMC Corporation
13174666	8843443	EFFICIENT BACKUP OF VIRTUAL DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
13174675	8671075	CHANGE TRACKING INDICES IN VIRTUAL MACHINES	EMC Corporation
13174677	8849769	VIRTUAL MACHINE FILE LEVEL RECOVERY	EMC Corporation
13174681	8949829	VIRTUAL MACHINE DISASTER RECOVERY	EMC Corporation
13174740	8819077	DYNAMIC DATA STRUCTURES	EMC Corporation
13174751	8719305	OBJECT TYPE DEFINITIONS	EMC Corporation
13177968		[REDACTED]	EMC Corporation
13179164	8694554	CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
13180341	8800884	METHOD FOR CONTROLLING COOLING IN A DATA STORAGE SYSTEM	EMC Corporation
13181060	9106460	RUNNING DISPARITY COMPUTATION PREDICTOR	EMC Corporation
13181277	8707080	SIMPLE CIRCULAR ASYNCHRONOUS CLOCK DOMAIN CROSSING TECHNIQUE FOR DIGITAL DATA	EMC Corporation
13182669		SYSTEM AND METHOD FOR DATA DEDUPLICATION FOR DISK STORAGE SUBSYSTEMS	EMC Corporation
13184430		SYSTEM AND METHOD FOR AUTOMATIC DETECTION OF ANOMALOUS RECURRENT BEHAVIOR	EMC Corporation
13192352	8271456	EFFICIENT BACKUP DATA RETRIEVAL	EMC Corporation
13192947	8751878	AUTOMATIC FAILOVER DURING ONLINE DATA MIGRATION	EMC Corporation
13198812	8452773	MAPPING TERMS BETWEEN MULTIPLE TAXONOMIES	EMC Corporation
13200139	8868593	USER INTERFACE CONTENT VIEW SEARCHING	EMC Corporation
13200288	8621178	TECHNIQUES FOR DATA STORAGE ARRAY VIRTUALIZATION	EMC Corporation
13200569	8825964	ADAPTIVE INTEGRATION OF CLOUD DATA SERVICES WITH A DATA STORAGE SYSTEM	EMC Corporation
13200658	8880801	TECHNIQUES FOR RELIABILITY AND AVAILABILITY ASSESSMENT OF DATA STORAGE CONFIGURATIONS	EMC Corporation
13200662	8601025	TECHNIQUES USING A BIDIRECTIONAL GRAPH FOR REPORTING TO CLIENTS	EMC Corporation
13200675	8418192	TECHNIQUES USING AN API FOR ASPECT WEAVING	EMC Corporation
13200777		[REDACTED]	EMC Corporation
13206211	8375451	SECURITY FOR SCANNING OBJECTS	EMC Corporation
13209533	8176276	TECHNIQUES FOR PRODUCING A CONSISTENT COPY OF SOURCE DATA AT A TARGET LOCATION	EMC Corporation
13211047	8800023	REMOTE ACCESS ARCHITECTURE ENABLING A CLIENT TO PERFORM AN OPERATION	EMC Corporation
13213196		[REDACTED]	EMC Corporation
13214019	8554918	DATA MIGRATION WITH LOAD BALANCING AND OPTIMIZATION	EMC Corporation
13214988	8234475	SAVE SET BUNDLING FOR STAGING	EMC Corporation
13216013	8756249	METHOD AND APPARATUS FOR EFFICIENTLY SEARCHING DATA IN A STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
13216020	8825626	METHOD AND SYSTEM FOR DETECTING UNWANTED CONTENT OF FILES	EMC Corporation
13216025	8195614	INCREMENTAL GARBAGE COLLECTION OF DATA IN SECONDARY STORAGE	EMC Corporation
13216066	8560525	QUERY TRANSLATION FOR SEARCHING COMPLEX STRUCTURES OF OBJECTS	EMC Corporation
13216558	8176277	REPLICATION OF DEDUPLICATED STORAGE SYSTEM	EMC Corporation
13217400	8656100	SYSTEM AND METHOD FOR MANAGING PROVISIONING OF STORAGE RESOURCES IN A NETWORK WITH VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
13220775	8689355	SECURE RECOVERY OF CREDENTIALS	EMC Corporation
13222036	8244777	MODEL DRIVEN COMPLIANCE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
13222057	8570903	SYSTEM AND METHOD FOR MANAGING A VIRTUAL DOMAIN ENVIRONMENT TO ENABLE ROOT CAUSE AND IMPACT ANALYSIS	EMC Corporation
13222321	8924665	VIRTUAL ORDERED WRITES TRANSFER LOG	EMC Corporation
13225224	8412688	DELEGATED REFERENCE COUNT BASE FILE VERSIONING	EMC Corporation
13225356	8713356	ERROR DETECTION AND RECOVERY TOOL FOR LOGICAL VOLUME MANAGEMENT IN A DATA STORAGE SYSTEM	EMC Corporation
13225912	8694724	MANAGING DATA STORAGE BY PROVISIONING CACHE AS A VIRTUAL DEVICE	EMC Corporation
13226546	8898112	WRITE SIGNATURE COMMAND	EMC Corporation
13226878	8564453	INDICATING ERRORS IN CONNECTION WITH DEVICES	EMC Corporation
13231695	8706679	COOPERATIVE LOCKING BETWEEN MULTIPLE INDEPENDENT OWNERS OF DATA SPACE	EMC Corporation
13233920	8972352	PROBE BASED BACKUP	EMC Corporation
13234435		[REDACTED]	EMC Corporation
13238426	8719497	USING DEVICE SPOOFING TO IMPROVE RECOVERY TIME IN A CONTINUOUS DATA PROTECTION ENVIRONMENT	EMC Corporation
13238646	8782633	UPGRADING FIRMWARE TO A POWER SUPPLY	EMC Corporation
13239863	8683568	USING PACKET INTERCEPTION TO INTEGRATE RISK-BASED USER AUTHENTICATION INTO ONLINE SERVICES	EMC Corporation
13240006		[REDACTED]	EMC Corporation
13240869	8689048	NON-LOGGING RESUMABLE DISTRIBUTED CLUSTER UPGRADE	EMC Corporation
13240923	8862606	EXECUTING CORRELATED AND MULTI-ROW SUBQUERIES IN A MPP DATABASE	EMC Corporation
13245926	8904524	DETECTION OF FAST FLUX NETWORKS	EMC Corporation
13245962		[REDACTED]	EMC Corporation
13245966	9122546	RAPID PROCESSING OF EVENT NOTIFICATIONS	EMC Corporation
13246023	8701174	CONTROLLING ACCESS TO A PROTECTED RESOURCE USING VIRTUAL DESKTOP AND ONGOING AUTHENTICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
13246025	8548459	REPLACING FIELD HARDWARD INVOLVING UTILIZATION OF A SMART PHONE	EMC Corporation
13246126		[REDACTED]	EMC Corporation
13246374		[REDACTED]	EMC Corporation
13246457	8677472	MULTI-POINT COLLECTION OF BEHAVIORAL DATA RELATING TO A VIRTUALIZED BROWSING SESSION WITH A SECURE SERVER	EMC Corporation
13246535	8331546	ENHANCED SERVICES PROVIDED USING COMMUNICATION REDIRECTION AND PROCESSING	EMC Corporation
13246937	8621586	USING BASELINE PROFILES IN ADAPTIVE AUTHENTICATION	EMC Corporation
13247034	8645681	TECHNIQUES FOR DISTRIBUTING SECURE COMMUNICATION SECRETS	EMC Corporation
13247167	9239916	USING SPATIAL DIVERSITY WITH SECRETS	EMC Corporation
13247181		[REDACTED]	EMC Corporation
13247205		[REDACTED]	EMC Corporation
13247364	8495251	HARDWARE METHOD FOR DETECTING TIMEOUT CONDITIONS IN A LARGE NUMBER OF DATA CONNECTIONS	EMC Corporation
13247505		[REDACTED]	EMC Corporation
13247623		[REDACTED]	EMC Corporation
13247753	9213717	MANAGING CONCURRENT I/OS IN FILE SYSTEMS	EMC Corporation
13247859	8661062	MANAGING ANALYSIS OF ACTIVITY DATA	EMC Corporation
13248068	8812899	MANAGING READ CACHING	EMC Corporation
13248127		[REDACTED]	EMC Corporation
13248178	9256381	MANAGING DEGRADED STORAGE ELEMENTS IN DATA STORAGE SYSTEMS	EMC Corporation
13248219	9298636	MANAGING DATA STORAGE	EMC Corporation
13248223	9128943	METHOD AND SYSTEM FOR TRACKING RE-SIZING AND RE-CREATION OF VOLUMES CREATED FOR MAKING INCREMENTAL BACKUPS	EMC Corporation
13248306	8949526	RESERVING STORAGE SPACE IN DATA STORAGE SYSTEMS	EMC Corporation
13248389	9135116	CLOUD ENABLED FILESYSTEMS	EMC Corporation
13248408		[REDACTED]	EMC Corporation
13248477	8918621	BLOCK ADDRESS ISOLATION FOR FILE SYSTEMS	EMC Corporation
13248572	8739290	GENERATING ALERTS IN EVENT MANAGEMENT SYSTEMS	EMC Corporation
13248573		[REDACTED]	EMC Corporation
13248589	9104500	LOCK-FREE JOB SCHEDULER FOR MULTI-PROCESSOR SYSTEMS	EMC Corporation
13248752		[REDACTED]	EMC Corporation
13248918	8914595	SNAPSHOTS IN DEDUPLICATION	EMC Corporation
13248926	8543609	SNAPSHOTS IN DEDUPLICATION	EMC Corporation
13248939	8935498	SPLITTER BASED HOT MIGRATION	EMC Corporation
13248978	8806161	MIRRORING SPLITTER META DATA	EMC Corporation
13249008	8661068	MANAGING GLOBAL METADATA CACHES IN DATA STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
13249170	8886995	FAULT TOLERANT STATE MACHINE FOR CONFIGURING SOFTWARE IN A DIGITAL COMPUTER	EMC Corporation
13249300	9037793	MANAGING DATA STORAGE	EMC Corporation
13249302	9081594	MANAGING DATA STORAGE SYSTEMS IN VIRTUAL SYSTEMS BASED ON STORAGE AWARENESS	EMC Corporation
13249323	8959287	MANAGING CACHES FOR REPORTING STORAGE SYSTEM INFORMATION	EMC Corporation
13249330	9361320	MODELING BIG DATA	EMC Corporation
13249335	9031992	ANALYZING BIG DATA	EMC Corporation
13249343	8886751	METHODS AND APPARATUS FOR A DATA DRIVEN SYSTEM IMPLEMENTATION USING MODEL COMPONENTS	EMC Corporation
13249365	8813026	METHODS AND APPARATUS FOR STORING INFORMATION FOR COMPONENTS OF A SYSTEM IN MODEL COMPONENT FILES TO PROVIDE A WORLD VIEW OF THE SYSTEM	EMC Corporation
13249370	9275063	REPLICATION OPTIMIZATED IO	EMC Corporation
13249372		[REDACTED]	EMC Corporation
13249422	9075642	CONTROLLING ACCESS TO RESOURCES USING INDEPENDENT AND NESTED HYPERVISORS IN A STORAGE SYSTEM ENVIRONMENT	EMC Corporation
13249424		[REDACTED]	EMC Corporation
13249453	9003019	METHODS AND SYSTEMS FOR UTILIZATION TRACKING AND NOTIFICATION OF CLOUD RESOURCES	EMC Corporation
13249481	8726337	COMPUTING WITH PRESENTATION LAYER FOR MULTIPLE VIRTUAL MACHINES	EMC Corporation
13249484	8683548	COMPUTING WITH POLICY ENGINE FOR MULTIPLE VIRTUAL MACHINES	EMC Corporation
13249506	8898351	DYNAMIC COMPRESSION OF AN I/O DATA BLOCK	EMC Corporation
13249559	9367452	SYSTEM AND METHOD FOR APPORTIONING STORAGE	EMC Corporation
13249585	9367453	SYSTEM AND METHOD FOR MIGRATING CACHE DATA	EMC Corporation
13249634		[REDACTED]	EMC Corporation
13249980	8627421	METHODS AND APPARATUS FOR AUTHENTICATING A USER BASED ON IMPLICIT USER MEMORY	EMC Corporation
13250225	8699713	KEY UPDATE WITH COMPROMISE DETECTION	EMC Corporation
13250256		[REDACTED]	EMC Corporation
13250303	8990162	METADATA GENERATION FOR INCREMENTAL BACKUP	EMC Corporation
13250310	8725869	CLASSIFYING SITUATIONS FOR SYSTEM MANAGEMENT	EMC Corporation
13250314	8984220	STORAGE PATH MANAGEMENT HOST VIEW	EMC Corporation
13250327	8713359	AUTONOMOUS PRIMARY-MIRROR SYNCHRONIZED RESET	EMC Corporation
13250507	8732282	MODEL FRAMEWORK TO FACILITATE ROBUST PROGRAMMING OF DISTRIBUTED WORKFLOWS	EMC Corporation
13250512	8520533	STORAGE PATH MANAGEMENT BUS VIEW	EMC Corporation
13250557	8849878	EFFICIENT DATA REHYDRATION	EMC Corporation

Application Number	Registration Number	Title	Owner
13250583	8751698	STORAGE PATH MANAGEMENT HOST AGENT	EMC Corporation
13250593	8898407	INCREMENTAL BLOCK BASED BACKUP	EMC Corporation
13250620	8769224	DISCOVERING NEW PHYSICAL MACHINES FOR PHYSICAL TO VIRTUAL CONVERSION	EMC Corporation
13250637	8738870	BLOCK BASED BACKUP	EMC Corporation
13250670	8949208	SYSTEM AND METHOD FOR BULK DATA MOVEMENT BETWEEN STORAGE TIERS	EMC Corporation
13250678		[REDACTED]	EMC Corporation
13250684	8943032	SYSTEM AND METHOD FOR DATA MIGRATION USING HYBRID MODES	EMC Corporation
13250692		[REDACTED]	EMC Corporation
13250732	9026496	EFFICIENT BUILDING OF RESTORE LIST	EMC Corporation
13250769	8730678	CABLE MANAGMENT APPARATUS	EMC Corporation
13251151	9037838	MULTIPROCESSOR MESSAGING SYSTEM	EMC Corporation
13251155		[REDACTED]	EMC Corporation
13251159	8814424	POWER MEASUREMENT TRANSDUCER	EMC Corporation
13251163		[REDACTED]	EMC Corporation
13251166	9069039	POWER MEASUREMENT TRANSDUCER	EMC Corporation
13251170	8814425	POWER MEASUREMENT TRANSDUCER	EMC Corporation
13251184	9229951	KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
13251186	9311327	UPDATING KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
13251188	9158632	EFFICIENT FILE BROWSING USING KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
13251189	8849777	FILE DELETION DETECTION IN KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
13275706		TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
13281574	8756695	ANALYSIS OF BINARY CODE	EMC Corporation
13282376	8903877	EXTENT OF DATA BLOCKS AS AN ALLOCATION UNIT IN A UNIX- BASED FILE SYSTEM	EMC Corporation
13284075	8498968	METHOD AND APPARATUS FOR MANAGING AND ARCHIVING PERFORMANCE INFORMATION RELATING TO STORAGE SYSTEM	EMC Corporation
13287866	8671414	ACCELERATING DATA INTENSIVE COMPUTING APPLICATIONS BY REDUCING OVERHEAD ASSOCIATED WITH COMMUNICATION PROTOCOLS	EMC Corporation
13287901		[REDACTED]	EMC Corporation
13290838		[REDACTED]	EMC Corporation
13290858	9275059	GENOME BIG DATA INDEXING	EMC Corporation
13296334	8990495	SECURE DATA STORAGE IN RAID MEMORY DEVICES	EMC Corporation
13297911	8793371	COMMON CONFIGURATION WAREHOUSE FOR A STORAGE SYSTEM	EMC Corporation
13301323	8335890	ASSOCIATING AN IDENTIFIER WITH A CONTENT UNIT	EMC Corporation
13301722	8417689	PROGRAMMING MODEL FOR TRANSPARENT PARALLELIZATION OF COMBINATORIAL OPTIMIZATION	EMC Corporation

Application Number	Registration Number	Title	Owner
13303069	8238953	DATA MESSAGE PROCESSING	EMC Corporation
13308193		[REDACTED]	EMC Corporation
13308262	8738857	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13308305	9208098	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13308345	8738858	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13308366	8725939	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13308378		[REDACTED]	EMC Corporation
13308402		[REDACTED]	EMC Corporation
13308877	8712962	SNAPSHOTS IN DEDUPLICATION	EMC Corporation
13310486	8972353	SYSTEM AND METHOD OF ENHANCED BACKUP AND RECOVERY CONFIGURATION	EMC Corporation
13311590	8949560	VALIDATING AN ABILITY TO ROLL BACK DATA TO AN EARLIER POINT IN TIME FOR DATA ASSOCIATED WITH A VIRTUAL STORE	EMC Corporation
13313070	8478303	DETERMINING A CURRENT LOCATION OF A DATA STORAGE SYSTEM	EMC Corporation
13314849	8838849	LINK SHARING FOR MULTIPLE REPLICATION MODES	EMC Corporation
13315573	8971916	LOCATING A DATA STORAGE SYSTEM	EMC Corporation
13316946		SYSTEM AND METHOD FOR REVIEWING ROLE DEFINITIONS	EMC Corporation
13317792	8600943	PORTING REPLICATION RELATIONSHIPS	EMC Corporation
13324806	8732418	SHADOW REGISTRY	EMC Corporation
13325131	8752144	TARGETED BIOMETRIC CHALLENGES	EMC Corporation
13329072	9026505	STORING DIFFERENCES BETWEEN PRECOMPRESSED AND RECOMPRESSED DATA FILES	EMC Corporation
13329377	8478688	RAPID TRANSACTION PROCESSING	EMC Corporation
13329469	9158828	TECHNIQUES USING ASSOCIATED OBJECT PROPERTIES	EMC Corporation
13329685	8375385	TECHNIQUES FOR PARALLEL DRIVE UPGRADE WHILE MAINTAINING HOST ACCESSIBILITY	EMC Corporation
13329725	8464101	CAS COMMAND NETWORK REPLICATION	EMC Corporation
13329758	8966211	TECHNIQUES FOR DYNAMIC BINDING OF DEVICE IDENTIFIERS TO DATA STORAGE DEVICES.	EMC Corporation
13329954		[REDACTED]	EMC Corporation
13331010	9047017	TECHNIQUES FOR AUTOMATED EVALUATION AND MOVEMENT OF DATA BETWEEN STORAGE TIERS	EMC Corporation
13331478	8930568	METHOD AND APPARATUS FOR ENABLING ACCESS TO STORAGE	EMC Corporation
13332132	9367397	RECOVERING DATA LOST IN DATA DE-DUPLICATION SYSTEM	EMC Corporation
13332291	8850133	USING DYNAMIC BLOCK SIZES IN DATA TRANSFER OPERATIONS	EMC Corporation
13332474	8972678	EFFICIENT BACKUP REPLICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
13332563	9053027	TECHNIQUES FOR MAINTAINING AND RESTORING DIRTY CACHES ACROSS CPU RESETS	EMC Corporation
13332889		[REDACTED]	EMC Corporation
13332936	8631475	ORDERING INPUTS FOR ORDER DEPENDENT PROCESSING	EMC Corporation
13332953		[REDACTED]	EMC Corporation
13333233	8601544	COMPUTER SYSTEM EMPLOYING DUAL-BAND AUTHENTICATION USING FILE OPERATIONS BY TRUSTED AND UNTRUSTED MECHANISMS	EMC Corporation
13333307	8700678	DATA PROVENANCE IN COMPUTING INFRASTRUCTURE	EMC Corporation
13333887		[REDACTED]	EMC Corporation
13334479	8688927	CAPACITY FORECASTING FOR BACKUP STORAGE	EMC Corporation
13334499	9026752	EFFICIENTLY ESTIMATING COMPRESSION RATIO IN A DEDUPLICATING FILE SYSTEM	EMC Corporation
13334506	8903991	CLUSTERED COMPUTER SYSTEM USING ARP PROTOCOL TO IDENTIFY CONNECTIVITY ISSUES	EMC Corporation
13334636	8782465	MANAGING DRIVE PROBLEMS IN DATA STORAGE SYSTEMS BY TRACKING OVERALL RETRY TIME	EMC Corporation
13334665	8838858	MANAGING COMMAND LINE INTERFACE COMMANDS	EMC Corporation
13334702	9087322	ADAPTING SERVICE PROVIDER PRODUCTS FOR MULTI-TENANCY USING TENANT-SPECIFIC SERVICE COMPOSITION FUNCTIONS	EMC Corporation
13334709	9008303	METHODS AND APPARATUS FOR GENERATING FORWARD SECURE PSEUDORANDOM NUMBERS	EMC Corporation
13334723	8712963	METHOD AND APPARATUS FOR CONTENT-AWARE RESIZING OF DATA CHUNKS FOR REPLICATION	EMC Corporation
13334732	8639669	METHOD AND APPARATUS FOR DETERMINING OPTIMAL CHUNK SIZES OF A DEDUPLICATED STORAGE SYSTEM	EMC Corporation
13334749	8782218	ACTIVITY STREAM BASED ALERT PROCESSING FOR INFORMATION TECHNOLOGY INFRASTRUCTURE	EMC Corporation
13334853	8688703	METADATA CACHE SUPPORTING MULTIPLE HETEROGENEOUS SYSTEMS	EMC Corporation
13334884	8898444	TECHNIQUES FOR PROVIDING A FIRST COMPUTER SYSTEM ACCESS TO STORAGE DEVICES INDIRECTLY THROUGH A SECOND COMPUTER SYSTEM	EMC Corporation
13335252	9367687	METHOD FOR MALWARE DETECTION USING DEEP INSPECTION AND DATA DISCOVERY AGENTS	EMC Corporation
13335265		[REDACTED]	EMC Corporation
13335298		[REDACTED]	EMC Corporation
13335316	8825919	PATH PERFORMANCE DATA COLLECTION	EMC Corporation
13335416	8914338	OUT-OF-CORE SIMILARITY MATCHING	EMC Corporation
13335459	9286303	UNIFIED CATALOG SERVICE	EMC Corporation
13335746	8631052	EFFICIENT CONTENT META-DATA COLLECTION AND TRACE GENERATION FROM DEDUPLICATED STORAGE	EMC Corporation
13335750	8667032	EFFICIENT CONTENT META-DATA COLLECTION AND TRACE GENERATION FROM DEDUPLICATED STORAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
13336043		[REDACTED]	EMC Corporation
13336056		[REDACTED]	EMC Corporation
13336236	8707050	INTEGRITY SELF-CHECK OF SECURE CODE WITHIN A VM ENVIRONMENT USING NATIVE VM CODE	EMC Corporation
13336380	8924668	METHOD AND APPARATUS FOR AN APPLICATION- AND OBJECT-LEVEL I/O SPLITTER	EMC Corporation
13336410	8966293	METHOD AND APPARATUS FOR ALLOCATION OF POWER CONSUMPTION OF A COMPUTER STORAGE SYSTEM TO ITS TENANTS	EMC Corporation
13336545	8839028	MANAGING DATA AVAILABILITY IN STORAGE SYSTEMS	EMC Corporation
13336570	8701199	ESTABLISHING A TRUSTED SESSION FROM A NON-WEB CLIENT USING ADAPTIVE AUTHENTICATION	EMC Corporation
13336573	8902045	AUTHENTICATION USING PULSE DATA	EMC Corporation
13336613	8838556	MANAGING DATA SETS BY REASONING OVER CAPTURED METADATA	EMC Corporation
13336704		[REDACTED]	EMC Corporation
13336849	8774410	SECRET SHARING IN CRYPTOGRAPHIC DEVICES VIA CONTROLLED RELEASE OF PLAINTEXT INFORMATION	EMC Corporation
13336894	9158804	METHOD AND SYSTEM FOR EFFICIENT FILE-BASED BACKUPS BY REVERSE MAPPING CHANGED SECTORS/BLOCKS ON AN NTFS VOLUME TO FILES	EMC Corporation
13336898		[REDACTED]	EMC Corporation
13337442	9154556	MANAGING ACCESS TO A LIMITED NUMBER OF COMPUTERIZED SESSIONS	EMC Corporation
13337605	8738813	METHOD AND APPARATUS FOR ROUND TRIP SYNCHRONOUS REPLICATION USING SCSI READS	EMC Corporation
13337651	8769336	METHOD AND APPARATUS FOR PREVENTING JOURNAL LOSS ON FAILOVER IN SYMMETRIC CONTINUOUS DATA PROTECTION REPLICATION	EMC Corporation
13337678	8996827	CREATING AND MAINTAINING CLONES IN CONTINUOUS DATA PROTECTION	EMC Corporation
13337817	9021271	INJECTING CODE DECRYPTED BY A HARDWARE DECRYPTION MODULE INTO JAVA APPLICATIONS	EMC Corporation
13338131	8578093	MANAGING INDICATIONS IN DATA STORAGE SYSTEMS	EMC Corporation
13338140		[REDACTED]	EMC Corporation
13338413	8528085	METHOD AND SYSTEM FOR PREVENTING DE-DUPLICATION SIDE-CHANNEL ATTACKS IN CLOUD STORAGE SYSTEMS	EMC Corporation
13338543	9164864	MINIMIZING FALSE NEGATIVE AND DUPLICATE HEALTH MONITORING ALERTS IN A DUAL MASTER SHARED NOTHING DATABASE APPLIANCE	EMC Corporation
13338616		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13338619		[REDACTED]	EMC Corporation
13338719		[REDACTED]	EMC Corporation
13338788	8977826	EXTENT COMMANDS IN REPLICATION	EMC Corporation
13338808	9031913	FILE REPLICATION	EMC Corporation
13338864	8706683	KNOWLEDGE MANAGEMENT ACROSS DISTRIBUTED ENTITY	EMC Corporation
13338886	9361269	KNOWLEDGE MANAGEMENT ACROSS DISTRIBUTED ENTITY USING PREDICTIVE ANALYSIS	EMC Corporation
13339289	8996490	MANAGING LOGICAL VIEWS OF DIRECTORIES	EMC Corporation
13339309	9135123	MANAGING GLOBAL DATA CACHES FOR FILE SYSTEM	EMC Corporation
13339570	8880027	AUTHENTICATING TO A COMPUTING DEVICE WITH A NEAR-FIELD COMMUNICATIONS CARD	EMC Corporation
13339585	9152818	TECHNIQUES FOR MANAGING CONSUMER AUTHENTICATION	EMC Corporation
13339669	8799608	TECHNIQUES INVOLVING FLAKY PATH DETECTION	EMC Corporation
13339693	8819307	IDENTIFICATION AND USE OF PREFERRED PATH GROUPS IN HOST COMPUTER BASED ON DIFFERENTIAL PERFORMANCE	EMC Corporation
13339768	8799334	REMOTE VERIFICATION OF FILE PROTECTIONS FOR CLOUD DATA STORAGE	EMC Corporation
13339780	9032160	CONTINUOUS DATA REPLICATION	EMC Corporation
13339857	8818951	DISTRIBUTED FILE SYSTEM HAVING SEPARATE DATA AND METADATA AND PROVIDING A CONSISTENT SNAPSHOT THEREOF	EMC Corporation
13340007	8832224	DATA TRACKING FOR PROVENANCE AND CHAIN OF CUSTODY GENERATION	EMC Corporation
13340104	8996690	TIME-BASED ANALYSIS OF DATA STREAMS	EMC Corporation
13340768	8850575	GEOLOCATION ERROR TRACKING IN TRANSACTION PROCESSING	EMC Corporation
13340829		[REDACTED]	EMC Corporation
13340912	9330009	MANAGING DATA STORAGE	EMC Corporation
13340945		[REDACTED]	EMC Corporation
13340958	9128901	CONTINUOUS PROTECTION OF DATA AND STORAGE MANAGEMENT CONFIGURATION	EMC Corporation
13341006		[REDACTED]	EMC Corporation
13341112		[REDACTED]	EMC Corporation
13341160	8752145	BIOMETRIC AUTHENTICATION WITH SMART MOBILE DEVICE	EMC Corporation
13341167	9367195	DISPLAYING CURRENT LOCATION OF COMPONENTS IN A DATA STORAGE SYSTEM	EMC Corporation
13341174	8683592	ASSOCIATING NETWORK AND STORAGE ACTIVITIES FOR FORENSIC ANALYSIS	EMC Corporation
13341193	8904061	MANAGING STORAGE OPERATIONS IN A SERVER CACHE	EMC Corporation
13341332	9104529	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13341343	8452901	ORDERED KERNEL QUEUE FOR MULTIPATHING EVENTS	EMC Corporation

Application Number	Registration Number	Title	Owner
13341345	8627012	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13341348	8751757	ACQUISITION AND KERNEL MEMORY STORAGE OF I/O METRICS	EMC Corporation
13341354	8627275	TECHNIQUE FOR ACQUIRING DATA STORAGE METRICS	EMC Corporation
13341408	9009416	SYSTEM AND METHOD FOR MANAGING CACHE SYSTEM CONTENT DIRECTORIES	EMC Corporation
13341422	9053033	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13341439	9235524	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13341463	8930947	SYSTEM AND METHOD FOR LIVE MIGRATION OF A VIRTUAL MACHINE WITH DEDICATED CACHE	EMC Corporation
13341663	8675672	HIERARCHICAL CLUSTER TREE OVERLAY NETWORK	EMC Corporation
13342008	9075754	MANAGING CACHE BACKUP AND RESTORE	EMC Corporation
13342009		[REDACTED]	EMC Corporation
13342010		[REDACTED]	EMC Corporation
13342011		[REDACTED]	EMC Corporation
13344536	8732141	PASSING INFORMATION BETWEEN SERVER AND CLIENT USING A DATA PACKAGE	EMC Corporation
13348508	8516022	AUTOMATICALLY COMMITTING FILES TO BE WRITE-ONCE-READ-MANY IN A FILE SYSTEM	EMC Corporation
13348558	8275808	IDENTIFIERS FOR NON-SEARCHABLE ATTRIBUTES	EMC Corporation
13349224	8489816	PREDICTING AND OPTIMIZING I/O PERFORMANCE CHARACTERISTICS IN A MULTI-LEVEL CACHING SYSTEM	EMC Corporation
13358859	8370311	USING VERSIONING TO BACK UP MULTIPLE VERSIONS OF A STORED OBJECT	EMC Corporation
13363237	8516309	METHOD OF DEBUGGING A SOFTWARE SYSTEM	EMC Corporation
13363893		[REDACTED]	EMC Corporation
13365768	9021264	METHOD AND SYSTEM FOR CLOUD BASED STORAGE	EMC Corporation
13370260	9009202	GARBAGE COLLECTION FOR MERGED COLLECTIONS	EMC Corporation
13371337	8738569	SYSTEMATIC VERIFICATION OF DATABASE METADATA UPGRADE	EMC Corporation
13398163	9032061	POLICY-BASED INTELLIGENT DATA PLACEMENT	EMC Corporation
13400992		[REDACTED]	EMC Corporation
13402324	8788913	SELECTION OF ERASURE CODE PARAMETERS FOR NO DATA REPAIR	EMC Corporation
13402329	8977660	MULTI-LEVEL DISTRIBUTED HASH TABLE FOR DATA STORAGE IN A HIERARCHICALLY ARRANGED NETWORK	EMC Corporation
13402331	9204103	TECHNIQUE FOR PARALLEL, DISTRIBUTED VIDEO PROCESSING	EMC Corporation

Application Number	Registration Number	Title	Owner
13404129		HYPERVISOR VIRTUAL SERVER SYSTEM, HAS VIRTUAL DATA SERVICES APPLIANCE RECEIVING INTERCEPTED INPUT/OUTPUT REQUESTS FROM TAPPING DRIVER	EMC Corporation
13404780	8984609	METHODS AND APPARATUS FOR EMBEDDING AUXILIARY INFORMATION IN ONE-TIME PASSCODES	EMC Corporation
13404839		[REDACTED]	EMC Corporation
13407980	8861527	NETWORK-ASSISTED ROUTING FOR TOPOLOGY-AWARE OVERLAY NETWORKS	EMC Corporation
13409413		[REDACTED]	EMC Corporation
13411606	8365043	EFFICIENT REDUNDANT MEMORY UNIT ARRAY	EMC Corporation
13411936	8332612	SYSTEMS AND METHODS FOR USING THIN PROVISIONING TO RECLAIM SPACE IDENTIFIED BY DATA REDUCTION PROCESSES	EMC Corporation
13414896	8776086	AGENT MANAGEMENT FRAMEWORK	EMC Corporation
13418536	8892947	METHOD AND SYSTEM FOR AUTOMATION FRAMEWORK FOR MULTI-NODE ENVIRONMENTS	EMC Corporation
13419647		[REDACTED]	EMC Corporation
13419651	9323789	AUTOMATED APPLICATION PROTECTION AND REUSE USING A WORKFLOW COMPONENT	EMC Corporation
13419910	8880952	GENERIC AND EXTENSIBLE PROVIDER DEBUG INTERFACE	EMC Corporation
13420633	8799705	DATA PROTECTION IN A RANDOM ACCESS DISK ARRAY	EMC Corporation
13421227	8799927	TECHNIQUES FOR USE WITH REPETITIVE EVENT OCCURRENCES	EMC Corporation
13421759	8861193	HARD DRIVE CARRIER WITH VIBRATION ISOLATION	EMC Corporation
13424542	8868505	SYSTEMS AND METHODS FOR PROTECTING DATA IN A NETWORK HOST ENVIRONMENT	EMC Corporation
13424589	9047018	METHOD AND SYSTEM FOR ZERO-COPY DISK IO USING SECTOR UNALIGNED BUFFERS	EMC Corporation
13424955	8825848	ORDERING OF EVENT RECORDS IN AN ELECTRONIC SYSTEM FOR FORENSIC ANALYSIS	EMC Corporation
13425528	9197522	NATIVE STORAGE DATA COLLECTION USING MULTIPLE DATA COLLECTION PLUG-INS INSTALLED IN A COMPONENT SEPARATE FROM DATA SOURCES OF ONE OR MORE STORAGE AREA NETWORKS	EMC Corporation
13427023		[REDACTED]	EMC Corporation
13427805		[REDACTED]	EMC Corporation
13428110	9122857	AUTHENTICATING A USER IN AN AUTHENTICATION SYSTEM	EMC Corporation
13429498	9026492	MULTISITE REPLICATION WITH UNCOORDINATED CYCLE SWITCHING	EMC Corporation
13429504	8732124	MULTISITE REPLICATION WITH COORDINATED CYCLE SWITCHING	EMC Corporation
13429524	9195631	PROVIDING HISTORICAL DATA TO AN EVENT-BASED ANALYSIS ENGINE	EMC Corporation
13429622	8972694	DYNAMIC STORAGE ALLOCATION WITH VIRTUALLY PROVISIONED DEVICES	EMC Corporation

Application Number	Registration Number	Title	Owner
13429669	8862837	TECHNIQUES FOR AUTOMATED DATA COMPRESSION AND DECOMPRESSION	EMC Corporation
13429883		[REDACTED]	EMC Corporation
13429919	9026667	TECHNIQUES FOR RESOURCE VALIDATION	EMC Corporation
13430152	9128625	SYSTEMS AND METHODS FOR PHYSICAL MEMORY RESERVATION FOR USER-SPACE PROGRAMS	EMC Corporation
13431011		[REDACTED]	EMC Corporation
13431071	9335948	METHOD AND APPARATUS FOR ENABLING ACCESS TO TIERED SHARED STORAGE USING DYNAMIC TIER PARTITIONING	EMC Corporation
13431193	8699715	ON-DEMAND PROACTIVE EPOCH CONTROL FOR CRYPTOGRAPHIC DEVICES	EMC Corporation
13431214		[REDACTED]	EMC Corporation
13431224		[REDACTED]	EMC Corporation
13431231	9015231	DISTRIBUTED ANONYMIZED COMMUNICATIONS	EMC Corporation
13431264	8839043	MANAGING A PORT FAILOVER IN A DATA STORAGE SYSTEM	EMC Corporation
13431297		[REDACTED]	EMC Corporation
13431409	9218252	TECHNIQUES FOR PERFORMING DATA VALIDATION	EMC Corporation
13431501		[REDACTED]	EMC Corporation
13431621	8375015	RETRIEVAL OF SEARCHABLE AND NON-SEARCHABLE ATTRIBUTES	EMC Corporation
13432184		[REDACTED]	EMC Corporation
13432276	8583607	MANAGING DEDUPLICATION DENSITY	EMC Corporation
13432312	8712976	MANAGING DEDUPLICATION DENSITY	EMC Corporation
13432457	8739257	MANAGING AUTHENTICATION OF VIRTUAL CLIENTS	EMC Corporation
13432491	8832640	COMPONENT MAPPED SOFTWARE DEVELOPMENT WORKFLOW	EMC Corporation
13432522	9009352	TRANSFORMATION OF COMMON INFORMATION MODEL MESSAGES	EMC Corporation
13432543	9112870	PROCESSING DEVICE HAVING SESSION COMPONENT WITH INTEGRATED SUPPORT FOR MESSAGE QUEUING PROTOCOL	EMC Corporation
13432550	8700861	MANAGING A DYNAMIC LIST OF ENTRIES FOR CACHE PAGE CLEANING	EMC Corporation
13432577	8635465	COUNTER-BASED ENCRYPTION OF STORED DATA BLOCKS	EMC Corporation
13432686	9122564	EVALUATING A SYSTEM EVENT	EMC Corporation
13432732	9119539	PERFORMING AN AUTHENTICATION OPERATION DURING USER ACCESS TO A COMPUTERIZED RESOURCE	EMC Corporation
13433477	8775756	METHOD OF VERIFYING INTEGRITY OF DATA WRITTEN BY A MAINFRAME TO A VIRTUAL TAPE AND PROVIDING FEEDBACK OF ERRORS	EMC Corporation

Application Number	Registration Number	Title	Owner
13433602	8515904	PROVIDING FILE SYSTEM QUOTA SUPPORT FOR A FILE SYSTEM HAVING SEPARATED DATA AND METADATA	EMC Corporation
13433633	8880441	CLICK STREAM ANALYSIS FOR FRAUD DETECTION	EMC Corporation
13433636	8943282	MANAGING SNAPSHOT IN CACHE-BASED STORAGE SYSTEMS	EMC Corporation
13433885	8682852	ASYMMETRIC ASYNCHRONOUS MIRRORING FOR HIGH AVAILABILITY	EMC Corporation
13433995		[REDACTED]	EMC Corporation
13434087		[REDACTED]	EMC Corporation
13434257	8925058	AUTHENTICATION INVOLVING AUTHENTICATION OPERATIONS WHICH CROSS REFERENCE AUTHENTICATION FACTORS	EMC Corporation
13434264	9100343	STORAGE DESCRIPTORS AND SERVICE CATALOGS IN A CLOUD ENVIRONMENT	EMC Corporation
13434272	8875263	CONTROLLING A SOFT TOKEN RUNNING WITHIN AN ELECTRONIC APPARATUS	EMC Corporation
13434280	8752146	PROVIDING AUTHENTICATION CODES WHICH INCLUDE TOKEN CODES AND BIOMETRIC FACTORS	EMC Corporation
13434348	9116915	INCREMENTAL SCAN	EMC Corporation
13434447	8600945	CONTINUOUS DATA REPLICATION	EMC Corporation
13434448	8615500	PARTIAL BLOCK ALLOCATION FOR FILE SYSTEM BLOCK COMPRESSION USING VIRTUAL BLOCK METADATA	EMC Corporation
13434517		[REDACTED]	EMC Corporation
13434543	8850144	ACTIVE REPLICATION SWITCH	EMC Corporation
13434620	9037818	ACTIVE REPLICATION SWITCH	EMC Corporation
13434983	9183595	USING LINK STRENGTH IN KNOWLEDGE-BASED AUTHENTICATION	EMC Corporation
13434991	9131374	KNOWLEDGE-BASED AUTHENTICATION FOR RESTRICTING ACCESS TO MOBILE DEVICES	EMC Corporation
13434993	8776195	COMMON DATA FORMAT IN KNOWLEDGE-BASED AUTHENTICATION	EMC Corporation
13435009		[REDACTED]	EMC Corporation
13435017	9170951	METHOD AND APPARATUS FOR EVENT/ALERT ENRICHMENT	EMC Corporation
13435049	8725878	METHOD AND APPARATUS FOR TOPOLOGY DRIVEN ZONING	EMC Corporation
13435104	8694781	TECHNIQUES FOR PROVIDING HARDWARE SECURITY MODULE OPERABILITY	EMC Corporation
13435146		[REDACTED]	EMC Corporation
13435183	8812542	ON-THE-FLY DETERMINING OF ALERT RELATIONSHIPS IN A DISTRIBUTED SYSTEM	EMC Corporation
13435206	9207877	DETECTION AND AVOIDANCE OF STALLED FILESYSTEMS TO PREVENT STALLING OF VIRTUAL TAPE DRIVES DURING TAPE MOUNTS	EMC Corporation
13435294	8997120	LIGHTWEIGHT COMMUNICATION CHANNEL FOR CONTROL OF DEVICE DRIVER COMPONENTS	EMC Corporation
13435307	9152550	STORAGE SYSTEM WITH DYNAMIC TRANSFER OF BLOCK FILE SYSTEM OWNERSHIP FOR LOAD BUILDING	EMC Corporation

Application Number	Registration Number	Title	Owner
13435317	9158734	METHOD AND APPARATUS FOR ELASTIC PROVISIONING	EMC Corporation
13435328	8990520	GLOBAL MEMORY AS NON-VOLATILE RANDOM ACCESS MEMORY FOR GUEST OPERATING SYSTEMS	EMC Corporation
13435360	8838887	DRIVE PARTITIONING FOR AUTOMATED STORAGE TIERING	EMC Corporation
13435397		[REDACTED]	EMC Corporation
13435415	8838931	TECHNIQUES FOR AUTOMATED DISCOVERY AND PERFORMING STORAGE OPTIMIZATIONS ON A COMPONENT EXTERNAL TO A DATA STORAGE SYSTEM	EMC Corporation
13435462	8868797	TECHNIQUES FOR AUTOMATED DISCOVERY OF STORAGE DEVICES AND THEIR PERFORMANCE CHARACTERISTICS	EMC Corporation
13435480	9336340	EVALUATING MANAGEMENT OPERATIONS	EMC Corporation
13435519	9047169	RESIZING SNAPSHOT MOUNT POINTS	EMC Corporation
13435555	8793452	METHOD OF GUARANTEEING REPLICATION OF DATA WRITTEN BY A MAINFRAME TO A VIRTUAL TAPE	EMC Corporation
13435606	8819769	MANAGING USER ACCESS WITH MOBILE DEVICE POSTURE	EMC Corporation
13435611	8683570	SCHEDULING SOFT TOKEN DATA TRANSMISSION	EMC Corporation
13435616	8683563	SOFT TOKEN POSTURE ASSESSMENT	EMC Corporation
13435737	8996671	METHOD OF PROVIDING SERVICE-PROVIDER-SPECIFIC SUPPORT LINK DATA TO A CLIENT IN A STORAGE CONTEXT	EMC Corporation
13435832	9218138	RESTORING SNAPSHOTS TO CONSISTENCY GROUPS OF MOUNT POINTS	EMC Corporation
13435848	8752156	DETECTING SOFT TOKEN COPIES	EMC Corporation
13435907	8977825	TECHNIQUES FOR ABSTRACT PROFILE DEFINITION TO SUPPORT INFORMATION HIDING	EMC Corporation
13435917	9003129	TECHNIQUES FOR INTER-STORAGE-PROCESSOR CACHE COMMUNICATION USING TOKENS	EMC Corporation
13435951	8904496	AUTHENTICATING BASED ON A CURRENT LOCATION OF A COMMUNICATIONS DEVICE ASSOCIATED WITH AN ENTITY	EMC Corporation
13436020	8782795	SECURE TENANT ASSESSMENT OF INFORMATION TECHNOLOGY INFRASTRUCTURE	EMC Corporation
13436080	9009844	METHODS AND APPARATUS FOR KNOWLEDGE-BASED AUTHENTICATION USING HISTORICALLY-AWARE QUESTIONNAIRES	EMC Corporation
13436117	8850145	MANAGING CONSISTENCY GROUPS IN STORAGE SYSTEMS	EMC Corporation
13436125	9021553	METHODS AND APPARATUS FOR FRAUD DETECTION AND REMEDIATION IN KNOWLEDGE-BASED AUTHENTICATION	EMC Corporation
13436419	8838634	CUSTOM USER PARALLEL DATA IMPORT AND EXPORT	EMC Corporation
13436449	8738571	EXTENDED RECYCLE BIN	EMC Corporation

Application Number	Registration Number	Title	Owner
13436454	8719286	SYSTEM AND METHOD FOR BLOCK-BASED SUBTREE VIRTUAL MACHINE BACKUP	EMC Corporation
13436460	8751515	SYSTEM AND METHOD FOR FILE-BASED VIRTUAL MACHINE INCREMENTAL BACKUP	EMC Corporation
13436495		[REDACTED]	EMC Corporation
13436533		[REDACTED]	EMC Corporation
13436614	9158763	CATALOGING STORAGE ARRAYS	EMC Corporation
13436630		[REDACTED]	EMC Corporation
13436636	8782008	DYNAMIC PROXY SERVER ASSIGNMENT FOR VIRTUAL MACHINE BACKUP	EMC Corporation
13436641		[REDACTED]	EMC Corporation
13436677		[REDACTED]	EMC Corporation
13436680		[REDACTED]	EMC Corporation
13436702	9152820	METHOD AND APPARATUS FOR COOKIE ANONYMIZATION AND REJECTION	EMC Corporation
13436715		[REDACTED]	EMC Corporation
13436717	8898519	METHOD AND APPARATUS FOR AN ASYNCHRONOUS SPLITTER	EMC Corporation
13436720	9081754	METHOD AND APPARATUS FOR CASCADED REPLICATION USING A MULTI-SPLITTER	EMC Corporation
13436725	9189341	METHOD AND APPARATUS FOR MULTI-COPY REPLICATION USING A MULTI SPLITTER	EMC Corporation
13436771	9021275	METHOD AND APPARATUS TO EXERCISE AND MANAGE A RELATED SET OF POWER MANAGED STORAGE DEVICES	EMC Corporation
13436778	8862923	METHOD AND APPARATUS TO DETERMINE AN IDLE STATE OF A DEVICE SET BASED ON AVAILABILITY REQUIREMENTS CORRESPONDING TO THE DEVICE SET	EMC Corporation
13436862	9063892	MANAGING RESTORE OPERATIONS USING DATA LESS WRITES	EMC Corporation
13436885	9026708	FIELD SERVICEABLE IT SYSTEM	EMC Corporation
13436894	8909886	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE UPON DETECTING A MIGRATION EVENT	EMC Corporation
13436897	8966190	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13436899	8914583	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13436901		[REDACTED]	EMC Corporation
13436902	8913392	LOCKING / INDICATION SYSTEM	EMC Corporation
13436906	8886883	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13436907	8780542	SYSTEM AND METHOD FOR GENERATING ELECTRICITY FROM COMPONENT WASTE HEAT	EMC Corporation
13436909	8964398	LOCKING/INDICATION SYSTEM	EMC Corporation
13436911	8874799	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13436914	8816199	CABLE ROUTING SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
13436915	8914584	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE UPON DETECTION OF A LUN CONTROL EVENT	EMC Corporation
13436918	8554954	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13436919	8764468	ADAPTIVE CONNECTOR ASSEMBLY	EMC Corporation
13436920	8914585	SYSTEM AND METHOD FOR OBTAINING CONTROL OF A LOGICAL UNIT NUMBER	EMC Corporation
13436936	9292793	ANALYZING DEVICE SIMILARITY	EMC Corporation
13436941	9015120	HEURISTIC FILE SELECTION FOR BACKUP	EMC Corporation
13436943	8756201	FILE TYPE DATABASES	EMC Corporation
13436945	8676764	FILE CLUSTER CREATION	EMC Corporation
13437784	8364917	REPLICATION OF DEDUPLICATED STORAGE SYSTEM	EMC Corporation
13439063		[REDACTED]	EMC Corporation
13439293	9230129	SOFTWARE TRUSTED COMPUTING BASE	EMC Corporation
13440186	8600952	TECHNIQUES FOR PROCESSING RECOVERY POINTS	EMC Corporation
13443002	8782245	SYSTEM AND METHOD FOR MANAGING PROVISIONING OF STORAGE RESOURCES IN A NETWORK WITH VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
13443017	8769271	IDENTIFYING AND ENFORCING STRICT FILE CONFIDENTIALITY IN THE PRESENCE OF SYSTEM AND STORAGE ADMINISTRATORS IN A NAS SYSTEM	EMC Corporation
13444562	8924682	METHOD OF PROTECTING VIRTUAL TAPE DATA FROM ACCIDENTAL LOSS DUE TO OVERWRITING	EMC Corporation
13444996	8300554	LAYERED APPROACH FOR REPRESENTING AND ANALYZING VIRTUAL PRIVATE NETWORK SERVICES	EMC Corporation
13447048	8478951	METHOD AND APPARATUS FOR BLOCK LEVEL DATA DE-DUPLICATION	EMC Corporation
13448391	8938428	EFFICIENT INDEX PROCESSING	EMC Corporation
13451878	8751831	ACHIEVING STRONG CRYPTOGRAPHIC CORRELATION BETWEEN HIGHER LEVEL SEMANTIC UNITS AND LOWER LEVEL COMPONENTS IN A SECURE DATA STORAGE SYSTEM	EMC Corporation
13452491	8812612	VERSIONED COALESCER	EMC Corporation
13455044		[REDACTED]	EMC Corporation
13460285	8386521	SYSTEM FOR BACKING UP AND RESTORING DATA	EMC Corporation
13460295	8402063	RESTORING DATA BACKED UP IN A CONTENT ADDRESSED STORAGE(CAS) SYSTEM	EMC Corporation
13460711		[REDACTED]	EMC Corporation
13460722	9110792	SYSTEM AND METHOD FOR CACHE REPLACEMENT USING BLOOM FILTER LOOKAHEAD APPROACH	EMC Corporation
13461316	9104675	INODE TO PATHNAME SUPPORT WITH A HARD LINK DATABASE	EMC Corporation
13461637		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13464017	8423726	GLOBAL DE-DUPLICATION IN SHARED ARCHITECTURES	EMC Corporation
13464337	8578128	VIRTUAL BLOCK MAPPING FOR RELOCATING COMPRESSED AND/OR ENCRYPTED FILE DATA BLOCK BLOCKS	EMC Corporation
13465275		[REDACTED]	EMC Corporation
13466775	8935493	PERFORMING DATA STORAGE OPTIMIZATIONS ACROSS MULTIPLE DATA STORAGE SYSTEMS	EMC Corporation
13470317	9141290	SNAPSHOT MECHANISM	EMC Corporation
13476072	8843789	STORAGE ARRAY NETWORK PATH IMPACT ANALYSIS SERVER FOR PATH SELECTION IN A HOST-BASED I/O MULTI-PATH SYSTEM	EMC Corporation
13476666	8549245	DE-DUPLICATION IN A VIRTUALIZED STORAGE ENVIRONMENT	EMC Corporation
13477999	8554725	SYSTEM AND METHOD FOR HIGHLY RELIABLE DATA REPLICATION	EMC Corporation
13478903		[REDACTED]	EMC Corporation
13478969	9081611	SYSTEM FOR ITERATIVELY IDENTIFYING AVAILABLE NEXT HIGHER PRIORITY TRACKS WHEN IDENTIFIED TRACK MATCHING THE TASK'S NATIVE TRACK PRIORITY IS UNAVAILABLE	EMC Corporation
13485506	9128973	METHOD AND SYSTEM FOR TRACKING RE-SIZING AND RE-CREATION OF VOLUMES USING MODIFICATION TIME	EMC Corporation
13490752	8892835	INSERTION OF A VIRTUALIZATION LAYER INTO A REPLICATION ENVIRONMENT	EMC Corporation
13493394	8412858	TECHNIQUES FOR INDICATING A PASSIVE PATH STATE FOR A DEVICE	EMC Corporation
13493638		[REDACTED]	EMC Corporation
13495130		LOW LATENCY REPLICATION TECHNIQUES WITH CONTENT ADDRESSABLE STORAGE	EMC Corporation
13495795	9026740	PREFETCH DATA NEEDED IN THE NEAR FUTURE FOR DELTA COMPRESSION	EMC Corporation
13495831	8918390	PREFERENTIAL SELECTION OF CANDIDATES FOR DELTA COMPRESSION	EMC Corporation
13495856		[REDACTED]	EMC Corporation
13495859	9116902	PREFERENTIAL SELECTION OF CANDIDATES FOR DELTA COMPRESSION	EMC Corporation
13495868	8712978	PREFERENTIAL SELECTION OF CANDIDATES FOR DELTA COMPRESSION	EMC Corporation
13495881	9141301	METHOD FOR CLEANING A DELTA STORAGE SYSTEM	EMC Corporation
13495893	8972672	METHOD FOR CLEANING A DELTA STORAGE SYSTEM	EMC Corporation
13517829	9098525	CONCURRENT ACCESS TO DATA ON SHARED STORAGE THROUGH MULTIPLE ACCESS POINTS	EMC Corporation
13517864	8683099	LOAD BALANCING OF READ/WRITE ACCESSES ON A SINGLE HOST DEVICE	EMC Corporation

Application Number	Registration Number	Title	Owner
13525492		[REDACTED]	EMC Corporation
13525816		[REDACTED]	EMC Corporation
13525919	8719590	SECURE PROCESSING IN MULTI-TENANT CLOUD INFRASTRUCTURE	EMC Corporation
13527761		[REDACTED]	EMC Corporation
13528241		[REDACTED]	EMC Corporation
13529740	9342518	DECLARING DIRECTIVES IN A DATA STORE	EMC Corporation
13530503	8874524	HANDLING COPY ON FIRST WRITE DATA FOR SNAPSHOT PURPOSES	EMC Corporation
13530706	9213718	SYNCHRONIZED FILE MANAGEMENT ACROSS MULTIPLE DISPARATE ENDPOINTS	EMC Corporation
13530763	8850516	VIRTUAL PRIVATE CLOUD THAT PROVIDES ENTERPRISE GRADE FUNCTIONALITY AND COMPLIANCE	EMC Corporation
13531847	9092143	DYNAMIC ASSIGNMENT OF TIME INTERVAL BINS	EMC Corporation
13532132		[REDACTED]	EMC Corporation
13532309	8752148	PROCESSORLESS TOKEN FOR PRODUCING A ONE-TIME PASSWORD	EMC Corporation
13532355	9112895	ANOMALY DETECTION SYSTEM FOR ENTERPRISE NETWORK SECURITY	EMC Corporation
13532385	9038178	DETECTION OF MALWARE BEACONING ACTIVITIES	EMC Corporation
13533311		[REDACTED]	EMC Corporation
13534042		[REDACTED]	EMC Corporation
13534135	8700899	FORWARD-SECURE KEY UNLOCKING FOR CRYPTOGRAPHIC DEVICES	EMC Corporation
13534488		[REDACTED]	EMC Corporation
13534694	8978150	DATA RECOVERY SERVICE WITH AUTOMATED IDENTIFICATION AND RESPONSE TO COMPROMISED USER CREDENTIALS	EMC Corporation
13534873	9230066	ASSESSING RISK FOR THIRD-PARTY DATA COLLECTORS	EMC Corporation
13534879	9281943	DEFENDING AGAINST FACTORING BY COLLISION	EMC Corporation
13534906	9141633	SPECIAL MARKERS TO OPTIMIZE ACCESS CONTROL LIST (ACL) DATA FOR DEDUPLICATION	EMC Corporation
13534946		[REDACTED]	EMC Corporation
13534956	9218388	DECLARATIVE CLUSTER MANAGEMENT	EMC Corporation
13535003		[REDACTED]	EMC Corporation
13535018	9176902	DATA MIGRATION TECHNIQUES	EMC Corporation
13535417	8856928	PROTECTING ELECTRONIC ASSETS USING FALSE PROFILES IN SOCIAL NETWORKS	EMC Corporation
13535529	9155194	MEMORY INTERCONNECT ARRANGEMENT HAVING HIGH DATA TRANSFER SPEED SIGNAL INTEGRITY	EMC Corporation
13535593	8747132	PRINTED CIRCUIT BOARD INJECTOR/EJECTOR MECHANISM	EMC Corporation
13535684		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13535696	9020802	WORLDWIDE DISTRIBUTED ARCHITECTURE MODEL AND MANAGEMENT	EMC Corporation
13535712	9280381	EXECUTION FRAMEWORK FOR A DISTRIBUTED FILE SYSTEM	EMC Corporation
13535731		[REDACTED]	EMC Corporation
13535740	8775861	NON-DISRUPTIVE STORAGE DEVICE MIGRATION IN FAILOVER CLUSTER ENVIRONMENT	EMC Corporation
13535744	9158843	ADDRESSING MECHANISM FOR DATA AT WORLD WIDE SCALE	EMC Corporation
13535752	8977787	MANAGEMENT OF PATH OPERATING MODE TRANSITIONS IN MULTIPATHING HOST COMPUTER	EMC Corporation
13535760		[REDACTED]	EMC Corporation
13535796	9361263	CO-LOCATED CLOUDS, VERTICALLY INTEGRATED CLOUDS, AND FEDERATED CLOUDS	EMC Corporation
13535808		[REDACTED]	EMC Corporation
13535814		[REDACTED]	EMC Corporation
13535821	9338218	DISTRIBUTED PLATFORM AS A SERVICE	EMC Corporation
13535834	9122878	SOFTWARE LICENSE MANAGEMENT WITH DRIFTING COMPONENT	EMC Corporation
13535851	9229656	MANAGING SETTINGS AND QUERIES IN HOST-BASED DATA MIGRATION	EMC Corporation
13535862	9003432	EFFICIENT MANAGEMENT OF KERNEL DRIVER PERFORMANCE DATA	EMC Corporation
13535918	8972340	MANAGING PROPERTIES COLLECTION	EMC Corporation
13535951		[REDACTED]	EMC Corporation
13535981	8966173	MANAGING ACCESSES TO STORAGE OBJECTS	EMC Corporation
13536099	9032399	MEASUREMENT OF INPUT/OUTPUT SCHEDULING CHARACTERISTICS IN DISTRIBUTED VIRTUAL INFRASTRUCTURE	EMC Corporation
13536191	8955066	KNOWLEDGE BASED AUTHENTICATION USING RECENT USER INTERNET ACTIVITY	EMC Corporation
13536355	8904525	TECHNIQUES FOR DETECTING MALWARE ON A MOBILE DEVICE	EMC Corporation
13536357	9268727	METHOD AND APPARATUS FOR COMMAND ABSTRACTION	EMC Corporation
13536364	8826264	NON-DISRUPTIVE UPGRADE OF APPLICATIONS	EMC Corporation
13536371	8782324	TECHNIQUES FOR MANAGING PLACEMENT OF EXTENTS BASED ON A HISTORY OF ACTIVE EXTENTS	EMC Corporation
13536375	8799601	TECHNIQUES FOR MANAGING DEDUPLICATION BASED ON RECENTLY WRITTEN EXTENTS	EMC Corporation
13536389	8954699	TECHNIQUES FOR IDENTIFYING IO HOT SPOTS USING RANGE-LOCK INFORMATION	EMC Corporation
13536422	8862948	METHOD AND APPARATUS FOR PROVIDING AT RISK INFORMATION IN A CLOUD COMPUTING SYSTEM HAVING REDUNDANCY	EMC Corporation
13536424	8832325	TRANSFER BETWEEN STORAGE DEVICES	EMC Corporation
13536425		[REDACTED]	EMC Corporation
13536474	8880821	DETERMINING WHETHER TO MIGRATE FROM A SOURCE STORAGE DEVICE TO A TARGET STORAGE DEVICE	EMC Corporation

Application Number	Registration Number	Title	Owner
13536512	9298582	METHOD AND APPARATUS FOR PERFORMANCE DATA TRANSFORMATION IN A CLOUD COMPUTING SYSTEM	EMC Corporation
13536519	9189495	REPLICATION AND RESTORATION	EMC Corporation
13536583	9207703	METHOD AND APPARATUS FOR CLIENT APPLICATION CUSTOMIZATION	EMC Corporation
13536705	8918493	METHODS AND APPARATUS FOR AUTOMATING SERVICE LIFECYCLE MANAGEMENT	EMC Corporation
13536726		[REDACTED]	EMC Corporation
13536901	9170602	CALIBRATING A HIGH-SPEED CLOCK SIGNAL GENERATED USING A PROCESSOR INTERNAL TO THE ELECTRONIC AUTHENTICATION DEVICE WITHOUT USING A CRYSTAL OSCILLATOR	EMC Corporation
13537163		[REDACTED]	EMC Corporation
13537244	8782341	EMBEDDED ADVISORY FRAMEWORK FOR STORAGE CONFIGURATION MANAGEMENT	EMC Corporation
13537251	8910281	IDENTIFYING MALWARE SOURCES USING PHISHING KIT TEMPLATES	EMC Corporation
13537288	8924328	PREDICTIVE MODELS FOR CONFIGURATION MANAGEMENT OF DATA STORAGE SYSTEMS	EMC Corporation
13537345	8959305	SPACE RECLAMATION WITH VIRTUALLY PROVISIONED DEVICES	EMC Corporation
13537405	8972490	USER DISCOVERY IN SOCIALLY-AWARE DATA STORAGE SYSTEMS	EMC Corporation
13537496	8935321	VIRTUALIZED ENVIRONMENT FOR MANAGING HETEROGENEOUS ENTERPRISE SOFTWARE APPLICATIONS	EMC Corporation
13537539	8959650	VALIDATING ASSOCIATION OF CLIENT DEVICES WITH SESSIONS	EMC Corporation
13537578	9075755	OPTIMIZING DATA LESS WRITES FOR RESTORE OPERATIONS	EMC Corporation
13537594	8819803	VALIDATING ASSOCIATION OF CLIENT DEVICES WITH AUTHENTICATED CLIENTS	EMC Corporation
13537614		[REDACTED]	EMC Corporation
13537617	8855312	MOBILE TRUST BROKER	EMC Corporation
13537642		[REDACTED]	EMC Corporation
13537682		[REDACTED]	EMC Corporation
13537839		[REDACTED]	EMC Corporation
13537868	9021117	DYNAMICALLY SELECTABLE TRANSPORT OFR KERNEL DRIVER MANAGEMENT	EMC Corporation
13537889	8856257	SENDING ALERTS FROM CLOUD COMPUTING SYSTEMS	EMC Corporation
13537904	9021255	TECHNIQUES FOR MULTIPLE INDEPENDENT VERIFICATIONS FOR DIGITAL CERTIFICATES	EMC Corporation
13537910		[REDACTED]	EMC Corporation
13537958	8856923	SIMILARITY-BASED FRAUD DETECTION IN ADAPTIVE AUTHENTICATION SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
13538056	8626967	VIRTUALIZATION OF A STORAGE PROCESSOR FOR PORT FAILOVER	EMC Corporation
13538104	9069682	ACCELERATING FILE SYSTEM RECOVERY BY STORING FILE SYSTEM METADATA ON FAST PERSISTENT STORAGE DURING FILE SYSTEM RECOVERY	EMC Corporation
13538111	8949656	PORT MATCHING FOR DATA STORAGE SYSTEM PORT FAILOVER	EMC Corporation
13538113	8904229	ONLINE RECOVERY OF A FILE SYSTEM EXPERIENCING FAILURE OF REDUNDANT LOGICAL STORAGE STORING A SINGLE POINT OF FAILURE	EMC Corporation
13538120	8875267	ACTIVE LEARNING-BASED FRAUD DETECTION IN ADAPTIVE AUTHENTICATION SYSTEMS	EMC Corporation
13538126	8924773	REDUCING FILE SYSTEM DATA UNAVAILABILITY WINDOW BY ADAPTING HIERARCHICAL RECOVERY FRAMEWORK	EMC Corporation
13538137	9223799	A LIGHTWEIGHT METADATA SHARING PROTOCOL FOR LOCATION TRANSPARENT FILE ACCESS	EMC Corporation
13538199	8909980	COORDINATING PROCESSING FOR REQUEST REDIRECTION	EMC Corporation
13538219	9141908	DYNAMIC INFORMATION ASSEMBLY FOR DESIGNATED PURPOSE BASED ON SUITABILITY REASONING OVER METADATA	EMC Corporation
13538245	8688878	DATA STORAGE SYSTEM MODELING	EMC Corporation
13538360	8904047	CLOUD CAPABLE STORAGE SYSTEM WITH HIGH PERFORMANCE NOSQL KEY-VALUE PAIR OPERATING ENVIRONMENT	EMC Corporation
13538365	8873836	CLUSTER-BASED CLASSIFICATION OF HIGH-RESOLUTION DATA	EMC Corporation
13538370		[REDACTED]	EMC Corporation
13538428		[REDACTED]	EMC Corporation
13538534	8954383	ANALYZING MAPPING OBJECTS OF FILE SYSTEMS	EMC Corporation
13538541		[REDACTED]	EMC Corporation
13538567	8782752	APPARATUS AND METHOD FOR MULTI-PLANE THRESHOLD SECURITY	EMC Corporation
13538754	8612382	RECOVERING FILES IN DATA STORAGE SYSTEMS	EMC Corporation
13538789	9223500	FILE CLONES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
13538913	9305153	USER AUTHENTICATION	EMC Corporation
13538921	8862642	ENDURANT CACHE	EMC Corporation
13538954		[REDACTED]	EMC Corporation
13538964	9183218	METHOD AND SYSTEM TO IMPROVE DEDUPLICATION OF STRUCTURED DATASETS USING HYBRID CHUNKING AND BLOCK HEADER REMOVAL	EMC Corporation
13538965	9020903	RECOVERING DUPLICATE BLOCKS IN FILE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
13538993	9104971	AUTOMATED END-TO-END SALES PROCESS OF STORAGE APPLIANCES OF STORAGE SYSTEMS USING PREDICTIVE MODELING	EMC Corporation
13539005		[REDACTED]	EMC Corporation
13539082	9058326	RECOVERY AND FLUSH OF ENDURANT CACHE	EMC Corporation
13539084	9003227	RECOVERING FILE SYSTEM BLOCKS OF FILE SYSTEMS	EMC Corporation
13539392	9178880	GATEWAY MEDIATED MOBILE DEVICE AUTHENTICATION	EMC Corporation
13539396	9116811	SYSTEM AND METHOD FOR CACHE MANAGEMENT	EMC Corporation
13539398	9158578	SYSTEM AND METHOD FOR MIGRATING VIRTUAL MACHINES	EMC Corporation
13539404	9047493	SYSTEM AND METHOD FOR PROTECTING CONTENT	EMC Corporation
13539408	9116636	SYSTEM AND METHOD FOR ADJUSTING QOS	EMC Corporation
13539413	8924670	SYSTEM AND METHOD FOR PROTECTING CONTENT	EMC Corporation
13539419	9378096	SYSTEM AND METHOD FOR CACHE MANAGEMENT	EMC Corporation
13539420	9104330	SYSTEM AND METHOD FOR INTERLEAVING STORAGE	EMC Corporation
13539423	9092461	SYSTEM AND METHOD FOR TIERING DATA STORAGE	EMC Corporation
13539426		[REDACTED]	EMC Corporation
13539427		[REDACTED]	EMC Corporation
13539430	9135176	SYSTEM AND METHOD FOR THIN PROVISIONING	EMC Corporation
13539431	9026741	SYSTEM AND METHOD FOR WARMING CACHE	EMC Corporation
13539433	9152336	SYSTEM AND METHOD FOR LUN ADJUSTMENT	EMC Corporation
13539434		[REDACTED]	EMC Corporation
13539435	8671229	SYSTEM AND METHOD FOR MANAGING IO OPERATIONS	EMC Corporation
13539436		[REDACTED]	EMC Corporation
13539437		[REDACTED]	EMC Corporation
13539438	8930746	SYSTEM AND METHOD FOR LUN ADJUSTMENT	EMC Corporation
13549079	9100330	INTRODUCTION OF READ DELAY OR WRITE DELAY IN SERVERS OF A GEOGRAPHICALLY DISTRIBUTED DATA PROCESSING SYSTEM SO THAT CLIENTS READ UP-TO-DATE DATA	EMC Corporation
13550481		[REDACTED]	EMC Corporation
13556443		[REDACTED]	EMC Corporation
13557104	8595265	EFFICIENT STORAGE OF NON-SEARCHABLE ATTRIBUTES	EMC Corporation
13558859		[REDACTED]	EMC Corporation
13558889	8972405	STORAGE RESOURCE MANAGEMENT INFORMATION MODELING IN A CLOUD PROCESSING ENVIRONMENT	EMC Corporation
13561340	8832498	SCALABLE CODEBOOK CORRELATION FOR CLOUD SCALE TOPOLOGY	EMC Corporation

Application Number	Registration Number	Title	Owner
13566178	9037596	SYSTEM AND METHOD FOR COMMITTING DATA OBJECTS TO BE IMMUTABLE	EMC Corporation
13568909	8914328	BACKUP INFORMATION MANAGEMENT	EMC Corporation
13570827		[REDACTED]	EMC Corporation
13570912		[REDACTED]	EMC Corporation
13571666	8650395	SELECTIVE SHREDDING IN A DEDUPLICATION SYSTEM	EMC Corporation
13572543	8682827	SMART CONTAINERS	EMC Corporation
13584994		[REDACTED]	EMC Corporation
13586137	8832713	EVENT QUEUES	EMC Corporation
13586659	8527586	MULTI-PROTOCOL GLOBAL NAMESPACE MECHANISM FOR NETWORK ATTACHED STORAGE FOR NETWORK ATTACHED STORAGE	EMC Corporation
13591612	9152637	JUST-IN-TIME FORMATTING OF FILE SYSTEM METADATA	EMC Corporation
13595309	9330193	METHOD AND SYSTEM FOR DISPLAYING COMPONENTS IDENTIFIED BY GUIDE	EMC Corporation
13595727	8850425	METHOD AND SYSTEM FOR DISPLAYING CONFIGURATION TEST RESULTS BY LEVERAGED DATA PROTECTION SOFTWARE	EMC Corporation
13596088	8720089	ULTRA-THIN RETRACTABLE LABEL HOLDER FOR RACK-MOUNTED ELECTRICAL CHASSIS	EMC Corporation
13596180		[REDACTED]	EMC Corporation
13596227	9135120	CONSISTENCY GROUP MOVING	EMC Corporation
13596570		[REDACTED]	EMC Corporation
13597410		[REDACTED]	EMC Corporation
13597855		[REDACTED]	EMC Corporation
13598030		[REDACTED]	EMC Corporation
13598372		[REDACTED]	EMC Corporation
13598411		[REDACTED]	EMC Corporation
13599235		[REDACTED]	EMC Corporation
13599296		[REDACTED]	EMC Corporation
13599337	8977593	VIRTUALIZED CG	EMC Corporation
13599460		[REDACTED]	EMC Corporation
13599492		[REDACTED]	EMC Corporation
13600523	8838851	TECHNIQUES FOR PATH SELECTION	EMC Corporation
13600641	9230075	MULTI-SERVER AUTHENTICATION USING PROACTIVIZATION JOURNALING	EMC Corporation
13601885	9189408	SYSTEM AND METHOD OF OFFLINE ANNOTATION OF FUTURE ACCESSES FOR IMPROVING PERFORMANCE OF BACKUP STORAGE SYSTEM	EMC Corporation
13609398		[REDACTED]	EMC Corporation
13610058		[REDACTED]	EMC Corporation
13610118	9026765	PERFORMING WRITE OPERATIONS IN A MULTI-TIERED STORAGE ENVIRONMENT	EMC Corporation
13610214		[REDACTED]	EMC Corporation
13610474	9348569	METHOD AND SYSTEM FOR A CONFIGURABLE AUTOMATION FRAMEWORK	EMC Corporation
13610611	8667239	ASSISTED MAINFRAME DATA DE-DUPLICATION	EMC Corporation
13611267		[REDACTED]	EMC Corporation
13611287		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13611571	9078349	UNIVERSAL FILLER-BEZEL CLIP ASSEMBLY	EMC Corporation
13611868		[REDACTED]	EMC Corporation
13611919	8949953	BROKERING MULTIPLE AUTHENTICATIONS THROUGH A SINGLE PROXY	EMC Corporation
13611941	9032490	TECHNIQUES FOR AUTHENTICATING A USER WITH HEIGHTENED SECURITY	EMC Corporation
13612393	9128823	SYNTHETIC INCREMENTAL DATA GENERATION FOR BLOCK-BASED STORAGE	EMC Corporation
13613067		[REDACTED]	EMC Corporation
13613387	8903853	FEDERATED SEARCH	EMC Corporation
13613750		[REDACTED]	EMC Corporation
13615839	8800027	AUTHENTICATION USING PRIVACY PROTECTED PERSONALLY IDENTIFIABLE INFORMATION	EMC Corporation
13616741	8949669	ERROR DETECTION, CORRECTION AND TRIAGE OF A STORAGE ARRAY ERRORS	EMC Corporation
13616934	8874966	STORAGE DEVICE ERROR SIMULATOR TOOL	EMC Corporation
13616978	8825653	CHARACTERIZING AND MODELING INCREMENTAL CHANGES WITH VIRTUAL SYNTHETIC WORKLOADS	EMC Corporation
13617159	8769289	AUTHENTICATION OF A USER ACCESSING A PROTECTED RESOURCE USING MULTI-CHANNEL PROTOCOL	EMC Corporation
13617182	8732688	UPDATING SYSTEM STATUS	EMC Corporation
13617862	9152706	ANONYMOUS IDENTIFICATION TOKENS	EMC Corporation
13618039	9052952	ADAPTIVE BACKUP MODEL FOR OPTIMIZING BACKUP PERFORMANCE	EMC Corporation
13618209	9384051	ADAPTIVE POLICY GENERATING METHOD AND SYSTEM FOR PERFORMANCE OPTIMIZATION	EMC Corporation
13618492		[REDACTED]	EMC Corporation
13618634	8713554	AUTOMATED HOTFIX HANDLING MODEL	EMC Corporation
13620085	9152352	FILEMARK CACHE TO CACHE FILEMARK METADATA FOR VIRTUAL TAPES	EMC Corporation
13620394	8935470	PRUNING A FILEMARK CACHE USED TO CACHE FILEMARK METADATA FOR VIRTUAL TAPES	EMC Corporation
13622475	9262188	VIRTUAL ASSET MANAGEMENT IN DATA CENTER	EMC Corporation
13622543	8918372	CONTENT-AWARE DISTRIBUTED DEDUPLICATING STORAGE SYSTEM BASED ON CONSISTENT HASHING	EMC Corporation
13622553	9268784	CONTENT-AWARE DISTRIBUTED DEDUPLICATING STORAGE SYSTEM BASED ON LOCALITY-SENSITIVE HASHING	EMC Corporation
13623148	9009402	CONTENT ADDRESSABLE STORAGE IN LEGACY SYSTEMS	EMC Corporation
13624013	9172584	METHOD AND SYSTEM FOR HIGH-AVAILABILITY CLUSTER DATA PROTECTION	EMC Corporation
13624098	9081691	TECHNIQUES FOR CACHING DATA USING A VOLATILE MEMORY CACHE AND SOLID STATE DRIVE	EMC Corporation
13624154	8751622	TECHNIQUES FOR AUTOMATED APPLICATION DISCOVERY	EMC Corporation
13625182		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13625204	8990168	EFFICIENT CONFLICT RESOLUTION AMONG STATELESS PROCESSES	EMC Corporation
13625292	8977898	CONCURRENT ACCESS TO DATA DURING REPLAY OF A TRANSACTION LOG	EMC Corporation
13625418	9078129	KNOWLEDGE-BASED AUTHENTICATION FOR RESTRICTING ACCESS TO MOBILE DEVICES	EMC Corporation
13625465		[REDACTED]	EMC Corporation
13625480	8850609	CONDITIONAL INTEGRATION OF A SATELLITE DEVICE INTO AN AUTHENTICATION PROCESS INVOLVING A PRIMARY DEVICE	EMC Corporation
13625497	8938805	DETECTION OF TAMPERING WITH SOFTWARE INSTALLED ON A PROCESSING DEVICE	EMC Corporation
13625982	8782784	FRAMEWORK FOR IMPLEMENTING SECURITY INCIDENT AND EVENT MANAGEMENT IN AN ENTERPRISE	EMC Corporation
13625994		[REDACTED]	EMC Corporation
13626092	8798242	VOICE-RELATED INFORMATION IN DATA MANAGEMENT SYSTEMS	EMC Corporation
13626167		[REDACTED]	EMC Corporation
13626182		[REDACTED]	EMC Corporation
13626198		[REDACTED]	EMC Corporation
13626240		[REDACTED]	EMC Corporation
13626247		[REDACTED]	EMC Corporation
13626266	8914895	MANAGING VERIFICATION OF INPUT DATA	EMC Corporation
13626272		[REDACTED]	EMC Corporation
13626299	9158729	CLIENT REQUEST PROCESSING USING PROTOCOL ABSTRACTION	EMC Corporation
13626323		[REDACTED]	EMC Corporation
13626422	8909887	SELECTIVE DEFRAGMENTATION BASED ON IO HOT SPOTS	EMC Corporation
13626741	8620973	CREATING POINT-IN-TIME COPIES OF FILE MAPS FOR MULTIPLE VERSIONS OF A PRODUCTION FILE TO PRESERVE FILE MAP ALLOCATIONS FOR THE PRODUCTION FILE	EMC Corporation
13626757		[REDACTED]	EMC Corporation
13627189	8924647	DYNAMIC SELECTION OF DATA REPLACEMENT PROTOCOL FOR MULTI-LEVEL CACHE	EMC Corporation
13627195	8938477	SIMULATING DATA STORAGE SYSTEM CONFIGURATION DATA	EMC Corporation
13627224	8799655	MOBILE OFFLINE AUTHENTICATION USING ONE-TIME PASSCODES	EMC Corporation
13627423	8977662	STORING DATA OBJECTS FROM A FLAT NAMESPACE IN A HIERARCHICAL DIRECTORY STRUCTURED FILE SYSTEM	EMC Corporation
13627434	9020994	CLIENT-BASED MIGRATING OF DATA FROM CONTENT-ADDRESSED STORAGE TO FILE-BASED STORAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
13627594	8621121	DETECTING BOGUS IOS IN A MULTIPATHING DRIVER	EMC Corporation
13627671	9256473	METHOD AND SYSTEM FOR PROVISIONING A VIRTUAL COMPUTING ENVIRONMENT	EMC Corporation
13628085	9047225	DYNAMIC SELECTION OF DATA REPLACEMENT PROTOCOL FOR CACHE	EMC Corporation
13628259	9141505	ADAPTIVE FAILURE SURVIVABILITY IN A STORAGE SYSTEM	EMC Corporation
13628441	8965340	MOBILE DEVICE IDENTIFICATION BY DEVICE ELEMENT COLLECTION	EMC Corporation
13628479	9021478	PROVISIONING VIRTUAL MACHINES VIA CONTENT-CENTRIC NETWORK	EMC Corporation
13628589	9098617	DATA ANALYTICS LIFECYCLE AUTOMATION	EMC Corporation
13628624	8850537	SELF-TUNING KNOWLEDGE-BASED AUTHENTICATION	EMC Corporation
13628630		[REDACTED]	EMC Corporation
13628642	9202173	USING LINK ANALYSIS IN ADVERSARIAL KNOWLEDGE-BASED AUTHENTICATION MODEL	EMC Corporation
13628661		[REDACTED]	EMC Corporation
13628706	9053000	METHOD AND APPARATUS FOR EVENT CORRELATION BASED ON CAUSALITY EQUIVALENCE	EMC Corporation
13628732	9152775	QUESTION GENERATION IN KNOWLEDGE-BASED AUTHENTICATION FOR AN ENTERPRISE	EMC Corporation
13628746	9240986	MANAGING SECURITY AND WIRELESS SIGNAL DETECTION	EMC Corporation
13628757	8959195	CLOUD SERVICE LEVEL ATTESTATION	EMC Corporation
13628794		[REDACTED]	EMC Corporation
13628816		[REDACTED]	EMC Corporation
13628850		[REDACTED]	EMC Corporation
13628878	8966382	MANAGING PRODUCTION AND REPLICA COPIES DYNAMICALLY	EMC Corporation
13628918	8954381	DETERMINING DATA MOVEMENTS IN A MULTI-TIERED STORAGE ENVIRONMENT	EMC Corporation
13629017	8898507	METHODS AND APPARATUS FOR DISASTER TOLERANT CLUSTERS OF HYPERVISORS AS A VIRTUALIZED INFRASTRUCTURE SERVICE	EMC Corporation
13629375	8862818	HANDLING PARTIAL STRIPE WRITES IN LOG-STRUCTURED STORAGE SYSTEMS	EMC Corporation
13629573	8700578	SYSTEM AND METHOD FOR DETERMINING PHYSICAL STORAGE SPACE OF A DEDUPLICATED STORAGE SYSTEM	EMC Corporation
13629763		[REDACTED]	EMC Corporation
13629771	8990905	PROTECTED RESOURCE ACCESS CONTROL UTILIZING INTERMEDIATE VALUES OF A HASH CHAIN	EMC Corporation
13629794	8862645	MULTI-PATH FILE SYSTEM WITH BLOCK CACHEBETWEEN CLIENT AND STORAGE ARRAY	EMC Corporation
13629805	9202304	PATH PERFORMANCE MINI-CHARTS	EMC Corporation
13629821		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13629826		[REDACTED]	EMC Corporation
13629835	8972656	MANAGING ACCESSES TO ACTIVE-ACTIVE MAPPED LOGICAL VOLUMES	EMC Corporation
13629880	8972657	MANAGING ACTIVE-ACTIVE MAPPED LOGICAL VOLUMES	EMC Corporation
13629953	8874494	DYNAMIC SELECTION OF SPARE STORAGE ELEMENT TYPES IN ARRAY	EMC Corporation
13629967	8996583	INTERACTIVE VISUAL DATA MINING FOR INCREASING CLASSIFICATION ACCURACY	EMC Corporation
13630000		[REDACTED]	EMC Corporation
13630003	8875255	PREVENTING USER ENUMERATION BY AN AUTHENTICATION SERVER	EMC Corporation
13630010	8880488	EFFICIENT EXTENT-BASED B-TREE INSERTION	EMC Corporation
13630079	9047352	CENTRALIZED SEARCHING IN A DATA STORAGE ENVIRONMENT	EMC Corporation
13630093		[REDACTED]	EMC Corporation
13630167	9128854	SYSTEM AND METHOD FOR CACHE MANAGEMENT	EMC Corporation
13630169		[REDACTED]	EMC Corporation
13630214	8990615	SYSTEM AND METHOD FOR CACHE MANAGEMENT	EMC Corporation
13630220	9286219	SYSTEM AND METHOD FOR CACHE MANAGEMENT	EMC Corporation
13630229		[REDACTED]	EMC Corporation
13630266	9244955	METHODS AND APPARATUS FOR GENERATING A DATABASE LAYOUT	EMC Corporation
13630271	9134262	MULTI-CHANNEL CONTAMINANT MEASUREMENT SYSTEM	EMC Corporation
13630274	8862858	METHOD AND SYSTEM FOR FAST BLOCK STORAGE RECOVERY	EMC Corporation
13630275	9305068	METHODS AND APPARATUS FOR DATABASE VIRTUALIZATION	EMC Corporation
13630335	9154296	SECURE AND ANONYMOUS DISTRIBUTED AUTHENTICATION	EMC Corporation
13630378	8918586	POLICY-BASED STORAGE OF OBJECT FRAGMENTS IN A MULTI-TIERED STORAGE SYSTEM	EMC Corporation
13630388	8918844	DEVICE PRESENCE VALIDATION	EMC Corporation
13630408	8935474	POLICY-BASED STORAGE OF OBJECT FRAGMENTS IN A MULTI-TIERED STORAGE SYSTEM	EMC Corporation
13630420		[REDACTED]	EMC Corporation
13630442		[REDACTED]	EMC Corporation
13630445	8954880	USER INTERFACE HAVING USER-CUSTOMIZED DEFAULT VALUES	EMC Corporation
13630455		[REDACTED]	EMC Corporation
13630495	8977814	INFORMATION LIFECYCLE MANAGEMENT FOR BINDING CONTENT	EMC Corporation
13630574	9288077	CLUSTER FILE SYSTEM WITH SERVER BLOCK CACHE	EMC Corporation

Application Number	Registration Number	Title	Owner
13630632		[REDACTED]	EMC Corporation
13630635	9372793	SYSTEM AND METHOD FOR PREDICTIVE CACHING	EMC Corporation
13630638		[REDACTED]	EMC Corporation
13630678		[REDACTED]	EMC Corporation
13630699	9135119	SYSTEM AND METHOD FOR DATA MANAGEMENT	EMC Corporation
13630746		[REDACTED]	EMC Corporation
13630849	8902043	MITIGATING CONFORMATIONAL BIAS IN AUTHENTICATION SYSTEMS	EMC Corporation
13630887	9043943	SELF-DESTRUCTING CONTENT	EMC Corporation
13630957		[REDACTED]	EMC Corporation
13631014	9116888	CUSTOMER CONTROLLED DATA PRIVACY PROTECTION IN PUBLIC CLOUD	EMC Corporation
13631039		[REDACTED]	EMC Corporation
13631047	9104995	SUBJECT AND AUDIENCE ORIENTED INSTANT COLLABORATIVE DEVELOPMENT	EMC Corporation
13631055		[REDACTED]	EMC Corporation
13631190		[REDACTED]	EMC Corporation
13631214		[REDACTED]	EMC Corporation
13631231	9201887	CLUSTER FILE SERVER PROXY SERVER FOR BACKUP AND RECOVERY	EMC Corporation
13631238		[REDACTED]	EMC Corporation
13631246		[REDACTED]	EMC Corporation
13631298		[REDACTED]	EMC Corporation
13631406	8856079	APPLICATION PROGRAMMING INTERFACE FOR EFFICIENT OBJECT INFORMATION GATHERING AND LISTING	EMC Corporation
13631633	8943356	POST BACKUP CATALOGS	EMC Corporation
13631637		[REDACTED]	EMC Corporation
13631678	8893269	IMPORT AUTHORITIES FOR BACKUP SYSTEM	EMC Corporation
13631690		[REDACTED]	EMC Corporation
13631701	9323759	MULTIPROCESS DIVIDED FILE SYSTEM BACKUP	EMC Corporation
13631723	9311330	METHOD AND SYSTEM FOR PERFORMING FULL BACKUP IN A FAILOVER CLUSTER	EMC Corporation
13631753		[REDACTED]	EMC Corporation
13631774	9110604	SYSTEM AND METHOD FOR FULL VIRTUAL MACHINE BACKUP USING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
13631794	9104331	SYSTEM AND METHOD FOR INCREMENTAL VIRTUAL MACHINE BACKUP USING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
13631897	9009444	SYSTEM AND METHOD FOR LUN MANAGEMENT	EMC Corporation
13631917	8862550	RELIABLE IN-PLACE BOOTSTRAP METADATA TRANSFORMATION IN A SHARED DATA STORE	EMC Corporation
13632014	8850546	PRIVACY-PRESERVING USER ATTRIBUTE RELEASE AND SESSION MANAGEMENT	EMC Corporation
13632055		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13632063	8934378	RESILIENT CACHE-BASED TOPOLOGY DETECTION OF A DYNAMIC CLUSTER	EMC Corporation
13632095		[REDACTED]	EMC Corporation
13632099		[REDACTED]	EMC Corporation
13632105		[REDACTED]	EMC Corporation
13649659	9207881	SYSTEM AND METHOD FOR OBJECT MANAGEMENT	EMC Corporation
13649902	8825667	METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
13663535	8566916	AGILE OTP GENERATION	EMC Corporation
13665881		[REDACTED]	EMC Corporation
13665884		[REDACTED]	EMC Corporation
13665885	9235535	METHOD AND APPARATUS FOR REDUCING OVERHEADS OF PRIMARY STORAGE BY TRANSFERRING MODIFIED DATA IN AN OUT-OF-ORDER MANNER	EMC Corporation
13666871	8837480	DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
13668814	8442200	ENHANCED SERVICES PROVIDED USING COMMUNICATION REDIRECTION AND PROCESSING	EMC Corporation
13671774	9367569	RECOVERY OF DIRECTORY INFORMATION	EMC Corporation
13675965		[REDACTED]	EMC Corporation
13680733		[REDACTED]	EMC Corporation
13681517	9122688	NAMING SCHEME FOR DIFFERENT COMPUTER SYSTEMS	EMC Corporation
13681932	9311176	EVALUATING A SET OF STORAGE DEVICES AND PROVIDING RECOMMENDED ACTIVITIES	EMC Corporation
13684656	9323750	STORAGE ARRAY SNAPSHOTS FOR LOGGED ACCESS REPLICATION IN A CONTINUOUS DATA PROTECTION SYSTEM	EMC Corporation
13684953	8990533	CRASH CONSISTENCY	EMC Corporation
13685639		CORRELATIVE MONITORING, ANALYSIS, AND CONTROL OF MULTI-SERVICE, MULTI-NETWORK SYSTEMS	EMC Corporation
13688068	8949191	USING VERSIONING TO BACK UP MULTIPLE VERSIONS OF A STORED OBJECT	EMC Corporation
13690069		[REDACTED]	EMC Corporation
13690654		[REDACTED]	EMC Corporation
13693605	8997096	SCALABLE AND SECURE HIGH-LEVEL STORAGE ACCESS FOR CLOUD COMPUTING PLATFORMS	EMC Corporation
13706487	9275117	FAST DEPENDENCY MINING USING ACCESS PATTERNS IN A STORAGE SYSTEM	EMC Corporation
13707788		[REDACTED]	EMC Corporation
13708322	9015476	A CRYPTOGRAPHIC DEVICE OPERABLE IN A CHALLENGE-RESPONSE MODE	EMC Corporation

Application Number	Registration Number	Title	Owner
13710111	9201739	METHOD AND SYSTEM FOR A DATABASE MANAGEMENT SYSTEM ADD-IN FOR THIRD PARTY BACKUP AND RESTORE APPLICATIONS	EMC Corporation
13710657	9229942	METHOD AND SYSTEM FOR HARD LINK HANDLING FOR INCREMENTAL FILE MIGRATION	EMC Corporation
13710715		[REDACTED]	EMC Corporation
13710893	8843448	METHOD AND SYSTEM FOR RENAMED DIRECTORY HANDLING FOR INCREMENTAL FILE MIGRATION	EMC Corporation
13711859	9154480	CHALLENGE-RESPONSE AUTHENTICATION OF A CRYPTOGRAPHIC DEVICE	EMC Corporation
13711877		[REDACTED]	EMC Corporation
13712193	9054945	CONFIGURING STORAGE ACCESS CONTROL	EMC Corporation
13713136		[REDACTED]	EMC Corporation
13713658	8874904	VIEW COMPUTATION AND TRANSMISSION FOR A SET OF KEYS REFRESHED OVER MULTIPLE EPOCHS IN A CRYPTOGRAPHIC DEVICE	EMC Corporation
13715222	8990453	ADAPTIVE AND OPTIMIZED FLOW CONTROL MECHANISM	EMC Corporation
13715348	8924364	EFFICIENT MANAGEMENT OF FILE SYSTEM QUOTA TREES	EMC Corporation
13715575	8935449	CUSTOMIZATION OF DATA PROCESSING EQUIPMENT WITH A REMOVABLE STORAGE DEVICE	EMC Corporation
13715659	9069482	METHOD AND SYSTEM FOR DYNAMIC SNAPSHOT BASED BACKUP AND RECOVERY OPERATIONS	EMC Corporation
13715772		FILE SYSTEM QUIESCING DRIVER	EMC Corporation
13716305	9191386	AUTHENTICATION USING ONE-TIME PASSCODE AND PREDEFINED SWIPE PATTERN	EMC Corporation
13716327	8806627	CONTENT RANDOMIZATION FOR THWARTING MALICIOUS SOFTWARE ATTACKS	EMC Corporation
13716373	9098412	GUIDED PERFORMANCE TROUBLESHOOTING AND EXPLORATION	EMC Corporation
13716589	9176972	IMPLIED M83 NAMES IN ALTERNATE NAME GENERATION IN DIRECTORIES SUPPORTING MULTIPLE NAMING PROTOCOLS	EMC Corporation
13717004		[REDACTED]	EMC Corporation
13717929		[REDACTED]	EMC Corporation
13718171	8886316	AUTHENTICATION OF EXTERNAL DEVICES TO IMPLANTABLE MEDICAL DEVICES USING BIOMETRIC MEASUREMENTS	EMC Corporation
13718824	9063664	METHOD AND SYSTEM FOR PROCESSING CHECKSUM OF A DATA STREAM TO OPTIMIZE DEDUPLICATION	EMC Corporation
13718827	9087086	METHOD AND SYSTEM FOR HANDLING OBJECT BOUNDARIES OF A DATA STREAM TO OPTIMIZE DEDUPLICATION	EMC Corporation
13719084	8732215	ENVIRONMENT CLASSIFICATION AND SERVICE ANALYSIS	EMC Corporation
13719547	8832813	VOICE AUTHENTICATION VIA TRUSTED DEVICE	EMC Corporation
13720150		[REDACTED]	EMC Corporation
13720294		[REDACTED]	EMC Corporation
13720352		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13720404	8832790	FRAUD DETECTION IN ADAPTIVE AUTHENTICATION SYSTEMS	EMC Corporation
13720428	8839449	ASSESSING RISK OF INFORMATION LEAKAGE	EMC Corporation
13720449		[REDACTED]	EMC Corporation
13720458	9176648	AUTHORING A VIRTUALIZED DATA CENTER	EMC Corporation
13720473		[REDACTED]	EMC Corporation
13720493		[REDACTED]	EMC Corporation
13720814	9165001	MULTI STREAM DEDUPLICATED BACKUP OF COLLABORATION SERVER DATA	EMC Corporation
13721502	9348627	DISTRIBUTED DYNAMIC FEDERATION BETWEEN MULTI-CONNECTED VIRTUAL PLATFORM CLUSTERS	EMC Corporation
13721836	8949793	TEST BED DESIGN FROM CUSTOMER SYSTEM CONFIGURATIONS USING MACHINE LEARNING TECHNIQUES	EMC Corporation
13721844	9047299	RECLAIMING BLOCKS FROM A DIRECTORY	EMC Corporation
13722052		[REDACTED]	EMC Corporation
13722347	9135300	EFFICIENT SAMPLING WITH REPLACEMENT	EMC Corporation
13722425	9183201	POLICY BASED OVER SAMPLING WITH REPLACEMENT	EMC Corporation
13722747		[REDACTED]	EMC Corporation
13722780	9147168	DECISION TREE REPRESENTATION FOR BIG DATA	EMC Corporation
13722816		[REDACTED]	EMC Corporation
13722847	9122997	GENERATING ATTRIBUTE-CLASS-STATISTICS FOR DECISION TREES	EMC Corporation
13722864	8996436	DECISION TREE CLASSIFICATION FOR BIG DATA	EMC Corporation
13723088	9110898	METHOD AND APPARATUS FOR AUTOMATICALLY DETECTING REPLICATION PERFORMANCE DEGRADATION	EMC Corporation
13723110		[REDACTED]	EMC Corporation
13723134		[REDACTED]	EMC Corporation
13723931	9235606	SIMPLIFIED DATABASE/LOG BACKUP AND RESTORE	EMC Corporation
13725740	9026500	RESTORING VIRTUAL MACHINE DATA	EMC Corporation
13725845		[REDACTED]	EMC Corporation
13725854	9237057	SYSTEM AND METHOD FOR WORKLOAD BALANCING IN A FLEXIBLE MULTI-TIERED RESOURCE POOL	EMC Corporation
13726351	8914329	AUTOMATED TIME-BASED TESTING METHOD FOR DISTRIBUTED SYSTEM	EMC Corporation
13726805		[REDACTED]	EMC Corporation
13726912	8862541	N-SITE ASYNCHRONOUS REPLICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
13727738	9031994	DATABASE PARTITIONING FOR DATA PROCESSING SYSTEM	EMC Corporation
13727884		[REDACTED]	EMC Corporation
13728234	9361306	MANAGING CONCURRENT WRITE OPERATIONS TO A FILE SYSTEM TRANSACTION LOG	EMC Corporation
13728324		[REDACTED]	EMC Corporation
13728382	8990550	METHODS AND APPARATUS FOR SECURING COMMUNICATIONS BETWEEN A NODE AND A SERVER BASED ON HARDWARE METADATA GATHERED BY AN IN-MEMORY PROCESS	EMC Corporation
13728387		[REDACTED]	EMC Corporation
13728394	9262493	DATA ANALYTICS LIFECYCLE PROCESSES	EMC Corporation
13728421	9069594	BURST BUFFER APPLIANCE COMPRISING MULTIPLE VIRTUAL MACHINES	EMC Corporation
13728483		[REDACTED]	EMC Corporation
13728490		[REDACTED]	EMC Corporation
13729155		[REDACTED]	EMC Corporation
13729249		[REDACTED]	EMC Corporation
13729301	9361310	METHOD AND SYSTEM FOR NETWORK USER ACCESS IMPERSONATION FOR MULTI-THREADED BACKUP APPLICATIONS	EMC Corporation
13729361	9361327	ROLLING BLOOM FILTER FOR DATA WITH RETENTION POLICY	EMC Corporation
13729391		[REDACTED]	EMC Corporation
13729545	8959388	MANAGING TLU RECOVERY USING PRE-ALLOCATED LUN SLICES	EMC Corporation
13729618		[REDACTED]	EMC Corporation
13729644	8949483	TECHNIQUES USING I/O CLASSIFICATIONS IN CONNECTION WITH DETERMINING DATA MOVEMENTS	EMC Corporation
13729680	9354813	DATA STORAGE SYSTEM MODELING	EMC Corporation
13729701	8972637	GOVERNANCE OF STORAGE	EMC Corporation
13729780		[REDACTED]	EMC Corporation
13729996	8955076	EVENT-BASED BIOMETRIC AUTHENTICATION USING MOBILE DEVICE	EMC Corporation
13730037		[REDACTED]	EMC Corporation
13730086	9311333	MANAGING FILES OF FILE SYSTEMS	EMC Corporation
13730091		[REDACTED]	EMC Corporation
13730129		[REDACTED]	EMC Corporation
13730261		[REDACTED]	EMC Corporation
13730307		[REDACTED]	EMC Corporation
13730401	8949661	FEDERATION OF INDICES	EMC Corporation
13730409		[REDACTED]	EMC Corporation
13730442		[REDACTED]	EMC Corporation
13730451	9286177	S-PARAMETER ANALYSIS TOOL	EMC Corporation
13730464		[REDACTED]	EMC Corporation
13730468	9043535	MINIMIZING APPLICATION RESPONSE TIME	EMC Corporation
13730496		[REDACTED]	EMC Corporation
13730586		[REDACTED]	EMC Corporation
13730635		[REDACTED]	EMC Corporation
13730675		[REDACTED]	EMC Corporation
13730783		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13731182	9020977	MANAGING MULTIPROTOCOL DIRECTORIES	EMC Corporation
13731197	9201802	MANAGING READ/WRITE LOCKS FOR MULTIPLE CPU CORES FOR EFFICIENT ACCESS TO STORAGE ARRAY RESOURCES	EMC Corporation
13731271	9274817	STORAGE QUALITY-OF-SERVICE CONTROL IN DISTRIBUTED VIRTUAL INFRASTRUCTURE	EMC Corporation
13731274	9256700	PUBLIC SERVICE FOR EMULATION OF APPLICATION LOAD BASED ON SYNTHETIC DATA GENERATION DERIVED FROM PRE-EXISTING MODELS	EMC Corporation
13731279	9355112	OPTIMIZING COMPRESSION BASED ON DATA ACTIVITY	EMC Corporation
13731346	8817988	VARIABLE EPOCH SCHEDULER FOR PROACTIVE CRYPTOGRAPHY SYSTEMS	EMC Corporation
13731367	9177127	CONFOUNDER GENERATION IN KNOWLEDGE-BASED AUTHENTICATION FOR AN ENTERPRISE	EMC Corporation
13731415		[REDACTED]	EMC Corporation
13731430	9038134	MANAGING PREDICTIONS IN DATA SECURITY SYSTEMS	EMC Corporation
13731455		[REDACTED]	EMC Corporation
13731456	9201803	SYSTEM AND METHOD FOR CACHING DATA	EMC Corporation
13731461		[REDACTED]	EMC Corporation
13731514	8978159	METHODS AND APPARATUS FOR MEDIATING ACCESS TO DERIVATIVES OF SENSITIVE DATA	EMC Corporation
13731520	9160102	MAGNETIC, SELF-RETRACTING, AUTO-ALIGNING ELECTRICAL CONNECTOR	EMC Corporation
13731536		[REDACTED]	EMC Corporation
13731547	9286465	METHOD AND APPARATUS FOR FEDERATED SINGLE SIGN ON USING AUTHENTICATION BROKER	EMC Corporation
13731635	9378361	ANOMALY SENSOR FRAMEWORK FOR DETECTING ADVANCED PERSISTENT THREAT ATTACKS	EMC Corporation
13731643	9124585	FRAMEWORK FOR MAPPING NETWORK ADDRESSES TO HOSTS IN A ENTERPRISE NETWORK	EMC Corporation
13731654		[REDACTED]	EMC Corporation
13731707	9250955	MANAGING TASK APPROVAL	EMC Corporation
13731708	9146928	TECHNIQUES FOR STORING METADATA OF A FILESYSTEM IN PERSISTENT MEMORY	EMC Corporation
13731858	8997198	TECHNIQUES FOR SECURING A CENTRALIZED METADATA DISTRIBUTED FILESYSTEM	EMC Corporation
13731883	8909967	TECHNIQUE FOR SECURE COMPUTATION	EMC Corporation
13731885	9152716	TECHNIQUES FOR VERIFYING SEARCH RESULTS OVER A DISTRIBUTED COLLECTION	EMC Corporation
13732119	9047309	DYNAMIC SNAPSHOT MOUNTING	EMC Corporation
13732188		[REDACTED]	EMC Corporation
13736782	8930336	RETRIEVAL OF SEARCHABLE AND NON-SEARCHABLE ATTRIBUTES	EMC Corporation
13737295	8843917	TECHNIQUES FOR PARALLEL DRIVE UPGRADE WHILE MAINTAINING HOST ACCESSIBILITY	EMC Corporation
13741644	9015121	UNIFIED VIRTUAL MACHINE AND DATA STORAGE SNAPSHOTS	EMC Corporation

Application Number	Registration Number	Title	Owner
13751307	9330048	BALANCING RESPONSE TIMES FOR SYNCHRONOUS I/O REQUESTS HAVING DIFFERENT PRIORITIES	EMC Corporation
13751611		[REDACTED]	EMC Corporation
13753239	9021303	MULTI-THREADED IN-MEMORY PROCESSING OF A TRANSACTION LOG FOR CONCURRENT ACCESS TO DATA DURING LOG REPLAY	EMC Corporation
13753839	8984363	PROOF OF RETRIEVABILITY FOR ARCHIVED FILES	EMC Corporation
13758101	8707308	METHOD FOR DYNAMIC MANAGEMENT OF SYSTEM RESOURCES THROUGH APPLICATION HINTS	EMC Corporation
13762650	8756238	INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
13763508		[REDACTED]	EMC Corporation
13763522	9317218	MEMORY EFFICIENT SANITIZATION OF A DEDUPLICATED STORAGE SYSTEM USING A PERFECT HASH FUNCTION	EMC Corporation
13764358	9069785	STREAM LOCALITY DELTA COMPRESSION	EMC Corporation
13764429	8782010	REPRESENTING DE-DUPLICATED FILE DATA	EMC Corporation
13768163	9092508	OVERSEEING DATA STORAGE EQUIPMENT POWER USAGE VIA LOCAL COLLECTION OF POWER CONSUMPTION DATA AND REMOTE EVALUATION AND REPORTING OF PERFORMANCE	EMC Corporation
13768630		[REDACTED]	EMC Corporation
13768679		[REDACTED]	EMC Corporation
13770139		[REDACTED]	EMC Corporation
13771268	9128736	COMMON SCHEDULING AND SYNCHRONIZATION PRIMITIVES	EMC Corporation
13777226	9330150	REGISTRATION AND UTILIZATION OF ARBITRARY DATA CONVERSION SCHEMES IN A SHARED DATA STORE	EMC Corporation
13778269	8966281	SYSTEMS AND METHODS FOR ACCESSING STORAGE OR NETWORK BASED REPLICAS OF ENCRYPTED VOLUMES WITH NO ADDITIONAL KEY MANAGEMENT	EMC Corporation
13779127		[REDACTED]	EMC Corporation
13779177		[REDACTED]	EMC Corporation
13781316	9185188	METHOD AND SYSTEM FOR DETERMINING OPTIMAL TIME PERIOD FOR DATA MOVEMENT FROM SOURCE STORAGE TO TARGET STORAGE	EMC Corporation
13781329	8909605	METHOD AND SYSTEM FOR ACCELERATING DATA MOVEMENT USING CHANGE INFORMATION CONCERNING DIFFERENCE BETWEEN CURRENT AND PREVIOUS DATA MOVEMENTS	EMC Corporation
13783622		DECISION PROCEDURE FOR CUSTOMER ISSUE RESOLUTION	EMC Corporation
13784000	9081752	REDUNDANT DISK ENCODING VIA ERASURE DECODING	EMC Corporation
13784060		[REDACTED]	EMC Corporation
13784513	9361302	UNIFORM LOGIC REPLICATION FOR DDFS	EMC Corporation

Application Number	Registration Number	Title	Owner
13785625		[REDACTED]	EMC Corporation
13786100	9383936	PERCENT QUOTAS FOR DEDUPLICATION STORAGE APPLIANCE	EMC Corporation
13786270	9235475	METADATA OPTIMIZATION FOR NETWORK REPLICATION USING REPRESENTATIVE OF METADATA BATCH	EMC Corporation
13786277	9110964	METADATA OPTIMIZATION FOR NETWORK REPLICATION USING DIFFERENTIAL ENCODING	EMC Corporation
13790341	9330151	DATABASE CHANGE DATA CAPTURE WITHIN A STORAGE ARRAY	EMC Corporation
13792679	9356961	PRIVACY SCORING FOR CLOUD SERVICES	EMC Corporation
13792992		[REDACTED]	EMC Corporation
13793087		[REDACTED]	EMC Corporation
13793327	9270649	SECURE SOFTWARE AUTHENTICATOR DATA TRANSFER BETWEEN PROCESSING DEVICES	EMC Corporation
13794029	9052969	PROGRAMMING MODEL FOR TRANSPARENT PARALLELIZATION OF COMBINATORIAL OPTIMIZATION	EMC Corporation
13794198		[REDACTED]	EMC Corporation
13794237	9218251	METHOD TO PERFORM DISASTER RECOVERY USING BLOCK DATA MOVEMENT	EMC Corporation
13795061	9152578	SECURING DATA REPLICATION, BACKUP AND MOBILITY IN CLOUD STORAGE	EMC Corporation
13795512		[REDACTED]	EMC Corporation
13795801	9037858	DISTRIBUTED CRYPTOGRAPHY USING DISTINCT VALUE SETS EACH COMPRISING AT LEAST ONE OBSCURED SECRET VALUE	EMC Corporation
13798225		[REDACTED]	EMC Corporation
13798237	8904050	TECHNIQUES FOR AUTOMATED DATA STORAGE SYSTEM PORT INITIALIZATION	EMC Corporation
13798291		[REDACTED]	EMC Corporation
13798395	8977830	CRASH CONSISTENCY	EMC Corporation
13798542	8977847	DISTRIBUTED CHALLENGE-RESPONSE AUTHENTICATION	EMC Corporation
13798545	8924595	MIXED MODE SIMULATION	EMC Corporation
13798552	9128628	DYNAMIC REPLICATION MODE SWITCHING	EMC Corporation
13798988		[REDACTED]	EMC Corporation
13799197		[REDACTED]	EMC Corporation
13799198	8924935	PREDICTIVE MODEL OF AUTOMATED FIX HANDLING	EMC Corporation
13799224	8989513	IDENTIFYING MARKERS ASSOCIATED WITH IT COMPONENTS IN AN IMAGE	EMC Corporation
13799325	9244623	PARALLEL DE-DUPLICATION OF DATA CHUNKS OF A SHARED DATA OBJECT USING A LOG-STRUCTURED FILE SYSTEM	EMC Corporation
13799339	9378046	MANIPULATING HARDWARE USING A LAYERED DEVICE DRIVER	EMC Corporation

Application Number	Registration Number	Title	Owner
13799388		[REDACTED]	EMC Corporation
13799547		[REDACTED]	EMC Corporation
13799662		[REDACTED]	EMC Corporation
13799696		[REDACTED]	EMC Corporation
13799890		[REDACTED]	EMC Corporation
13800044		[REDACTED]	EMC Corporation
13800534	9231956	UTILIZING ENTITY-GENERIC RECORDS FOR DETERMINING ACCESS TO ASSETS	EMC Corporation
13800708		[REDACTED]	EMC Corporation
13800732		[REDACTED]	EMC Corporation
13801103		[REDACTED]	EMC Corporation
13801178		[REDACTED]	EMC Corporation
13801603	9083510	GENERATION AND MANAGEMENT OF CRYPTO KEY FOR CLOUD DATA	EMC Corporation
13803134		[REDACTED]	EMC Corporation
13803554	9021307	VERIFYING APPLICATION DATA PROTECTION	EMC Corporation
13803567	9130753	AUTHENTICATION USING SECURITY DEVICE WITH ELECTRONIC INTERFACE	EMC Corporation
13803840	9003106	CRASH CONSISTENCY	EMC Corporation
13803849		[REDACTED]	EMC Corporation
13804194	9361045	CONSTRUCTING VIRTUAL STORAGE NETWORKS FOR MULTIPLE TENANTS WITH QUALITY-OF-SERVICE DELIVERY	EMC Corporation
13804327	9367351	PROFILING INPUT/OUTPUT BEHAVIORAL CHARACTERISTICS IN DISTRIBUTED INFRASTRUCTURE	EMC Corporation
13804506	9367405	MANAGING SOFTWARE ERRORS IN STORAGE SYSTEMS	EMC Corporation
13804596		[REDACTED]	EMC Corporation
13804703		[REDACTED]	EMC Corporation
13804717	9092451	GENOMIC APPLICATION DATA STORAGE	EMC Corporation
13804893	9165009	LIGHTWEIGHT APPLIANCE FOR CONTENT STORAGE	EMC Corporation
13804962		[REDACTED]	EMC Corporation
13804996		[REDACTED]	EMC Corporation
13813825		RETRIEVEING DATA FROM DATA STORAGE SYSTEMS	EMC Corporation
13826966		[REDACTED]	EMC Corporation
13827118		[REDACTED]	EMC Corporation
13827385		[REDACTED]	EMC Corporation
13827452		[REDACTED]	EMC Corporation
13827814		[REDACTED]	EMC Corporation
13827862	8996460	ACCESSING AN IMAGE IN A CONTINUOUS DATA PROTECTION USING DEDUPLICATION-BASED STORAGE	EMC Corporation
13827909	9383937	JOURNAL TIERING IN A CONTINUOUS DATA PROTECTION SYSTEM USING DEDUPLICATION-BASED STORAGE	EMC Corporation
13827959	9110914	CONTINUOUS DATA PROTECTION USING DEDUPLICATION-BASED STORAGE	EMC Corporation
13827998	9325595	METHOD AND APPARATUS FOR IDENTIFYING AVAILABLE WORK	EMC Corporation

Application Number	Registration Number	Title	Owner
13828079		[REDACTED]	EMC Corporation
13828185	9195672	SELECTIVE FRAGMENTATION REPAIR	EMC Corporation
13828266		[REDACTED]	EMC Corporation
13828294		[REDACTED]	EMC Corporation
13828322	9286007	UNIFIED DATAPATH ARCHITECTURE	EMC Corporation
13829037	9119069	NEAR FIELD COMMUNICATION BASED AUTHENTICATION	EMC Corporation
13829293		[REDACTED]	EMC Corporation
13829374	9049185	AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS	EMC Corporation
13830138		[REDACTED]	EMC Corporation
13830184	9235582	TRACKING FILES EXCLUDED FROM BACKUP	EMC Corporation
13830421		[REDACTED]	EMC Corporation
13832280	9331916	DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS	EMC Corporation
13832331		[REDACTED]	EMC Corporation
13832362	9049596	PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION	EMC Corporation
13832412		[REDACTED]	EMC Corporation
13832468		[REDACTED]	EMC Corporation
13832636	9176681	MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS	EMC Corporation
13832695	9122689	RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION	EMC Corporation
13832705	9146921	ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK	EMC Corporation
13832784		[REDACTED]	EMC Corporation
13833280		[REDACTED]	EMC Corporation
13833356		[REDACTED]	EMC Corporation
13833517	8930687	SECURE DISTRIBUTED DEDUPLICATION IN ENCRYPTED DATA STORAGE	EMC Corporation
13833692	8856400	I/O PERFORMANCE QUOTAS	EMC Corporation
13834033	9195400	SNAPSHOT DATA MANAGEMENT FOR MODELING AND MIGRATION PLANNING OF DATA STORAGE SYSTEMS	EMC Corporation
13834360	9280467	METADATA FLUSHING USING ADDITIVE INCREASE AND MULTIPLICITIVE DECREASE TO DETERMINE A NUMBER OF IO PROCESSES USED	EMC Corporation
13834385	9229864	MANAGING METADATA SYNCHRONIZATION FOR REDUCING HOST SYSTEM LATENCY IN A STORAGE SYSTEM	EMC Corporation
13834465		[REDACTED]	EMC Corporation
13834695		[REDACTED]	EMC Corporation
13835929	9081842	SYNCHRONOUS AND ASYMMETRIC ASYNCHRONOUS ACTIVE-ACTIVE-ACTIVE DATA ACCESS	EMC Corporation
13835946		[REDACTED]	EMC Corporation
13835999	9244997	ASYMMETRIC ACTIVE-ACTIVE ACCESS OF ASYNCHRONOUSLY-PROTECTED DATA STORAGE	EMC Corporation
13836008		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13836095	9152339	SYNCHRONIZATION OF ASYMMETRIC ACTIVE-ACTIVE, ASYNCHRONOUSLY-PROTECTED STORAGE	EMC Corporation
13836185		[REDACTED]	EMC Corporation
13837053		[REDACTED]	EMC Corporation
13837086	9304999	VIRTUAL STORAGE PROCESSOR LOAD BALANCING	EMC Corporation
13837675	9225700	PROXIMITY-BASED AUTHENTICATION	EMC Corporation
13837707	9201573	ADAPTIVE GUI PRE-FETCHING	EMC Corporation
13837751	9262424	TECHNIQUES FOR PERFORMING SLICE CONSISTENCY CHECKS	EMC Corporation
13837825		[REDACTED]	EMC Corporation
13837869	8996837	PROVIDING MULTI-TENANCY WITHIN A DATA STORAGE APPARATUS	EMC Corporation
13838498	9092290	PERFORMING A NON-DISRUPTIVE SOFTWARE UPGRADE ON PHYSICAL STORAGE PROCESSORS HAVING ACCESS TO VIRTUAL STORAGE PROCESSORS	EMC Corporation
13838540		[REDACTED]	EMC Corporation
13838749		[REDACTED]	EMC Corporation
13838948	9075583	LAYOUT DESIGN FOR A MOBILE APPLICATION USING GOVERNANCE, RISK MANAGEMENT AND COMPLIANCE RULES	EMC Corporation
13838955		[REDACTED]	EMC Corporation
13839171	9171042	PARALLEL PROCESSING DATABASE TREE STRUCTURE	EMC Corporation
13839390		[REDACTED]	EMC Corporation
13839872		[REDACTED]	EMC Corporation
13840274	8972465	BURST BUFFER APPLIANCE WITH SMALL FILE AGGREGATION	EMC Corporation
13840420		[REDACTED]	EMC Corporation
13840654	9032212	SELF-REFRESHING DISTRIBUTED CRYPTOGRAPHY	EMC Corporation
13840912		DATA ANALYTICS PLATFORM OVER PARALLEL DATABASES AND DISTRIBUTED FILE SYSTEMS	EMC Corporation
13840948		[REDACTED]	EMC Corporation
13841234	9323760	INTELLIGENT SNAPSHOT BASED BACKUPS	EMC Corporation
13842710	9355104	INTELLIGENT PAIRING USING A LOOKUP DATABASE FOR SNAPSHOT BASED BACKUPS	EMC Corporation
13842816		[REDACTED]	EMC Corporation
13842955		[REDACTED]	EMC Corporation
13843067	9378224	ATHERECTOMY CATHETER WITH ALIGNED IMAGER	EMC Corporation
13843109	9164691	INTELLIGENT CONFIGURATION FOR SNAPSHOT BASED BACKUPS	EMC Corporation
13850727	8762583	APPLICATION AWARE INTELLIGENT STORAGE SYSTEM	EMC Corporation
13852187		[REDACTED]	EMC Corporation
13853060		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13853207	9071424	TOKEN-BASED KEY GENERATION	EMC Corporation
13853279	8978122	SECURE CROSS-TENANCY FEDERATION IN SOFTWARE-AS-A-SERVICE SYSTEM	EMC Corporation
13853284	9122697	UNIFIED DATA SERVICES FOR BLOCK AND FILE OBJECTS	EMC Corporation
13853291	8977896	MAINTAINING DATA INTEGRITY IN DATA MIGRATION OPERATIONS USING PER-MIGRATION DEVICE ERROR FLAGS	EMC Corporation
13853438		[REDACTED]	EMC Corporation
13853479		[REDACTED]	EMC Corporation
13853508	9280555	UNIFIED DATA PROTECTION FOR BLOCK AND FILE OBJECTS	EMC Corporation
13853519		[REDACTED]	EMC Corporation
13853653	9306943	ACCESS POINT AUTHENTICATION SERVER COMBINATION	EMC Corporation
13853803		[REDACTED]	EMC Corporation
13853817		[REDACTED]	EMC Corporation
13853827		[REDACTED]	EMC Corporation
13854114		[REDACTED]	EMC Corporation
13857396	9081704	TECHNIQUES FOR NON-DISRUPTIVE UPGRADE	EMC Corporation
13857454	9282053	TECHNIQUES FOR DYNAMIC RESOURCE PARTITIONING	EMC Corporation
13857548	9323682	NON-INTRUSIVE AUTOMATED STORAGE TIERING USING INFORMATION OF FRONT END STORAGE ACTIVITIES	EMC Corporation
13860397	8832491	POST ACCESS DATA PRESERVATION	EMC Corporation
13860405	8724788	ENHANCED SERVICES PROVIDED USING COMMUNICATION REDIRECTION AND PROCESSING	EMC Corporation
13862032	8880824	GLOBAL DE-DUPLICATION IN SHARED ARCHITECTURES	EMC Corporation
13863268	9361321	BACKEND CAPACITY REPORT FOR DE-DUPLICATED STORAGE SYSTEMS	EMC Corporation
13865931	8880469	PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM USING A PERFORMANCE SEGMENT STORAGE SYSTEM INCLUDING A DETERMINER	EMC Corporation
13870262		[REDACTED]	EMC Corporation
13870328		[REDACTED]	EMC Corporation
13872660	8904063	ORDERED KERNEL QUEUE FOR MULTIPATHING EVENTS	EMC Corporation
13873365	9203616	MULTI-SERVER FAULT TOLERANT DATA STORE UPDATE	EMC Corporation
13873518	9092159	OBJECT CLASSIFICATION AND IDENTIFICATION FROM RAW DATA	EMC Corporation
13874796	8706967	CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation

Application Number	Registration Number	Title	Owner
13875490	9235516	TECHNIQUES USING CACHELESS READ AND DEFERRED CACHING	EMC Corporation
13886644		[REDACTED]	EMC Corporation
13886687		[REDACTED]	EMC Corporation
13886763		[REDACTED]	EMC Corporation
13886786		[REDACTED]	EMC Corporation
13886892	9223517	SCALABLE INDEX STORE	EMC Corporation
13886897	9128627	METHOD AND SYSTEM FOR VIRTUAL MACHINE BACKUP	EMC Corporation
13886915		[REDACTED]	EMC Corporation
13889196		[REDACTED]	EMC Corporation
13889805	9122866	USER AUTHENTICATION	EMC Corporation
13889934	9047295	FILE SYSTEM QUIESCING	EMC Corporation
13891789	9063842	TECHNIQUE FOR INTEGRATING VTL TAPE POOLS WITH MTREE QUOTAS	EMC Corporation
13891802	9009742	VTL ADAPTIVE COMMIT	EMC Corporation
13891808	9110599	THIN PROVISIONING OF VTL TAPE POOLS WITH MTREE LOGICAL QUOTAS	EMC Corporation
13900150	9160526	SHARING ENCRYPTION-RELATED METADATA BETWEEN MULTIPLE LAYERS IN A STORAGE I/O STACK	EMC Corporation
13901648	9002904	HANDLING HIBERNATION OF A PROCESS ON A STORAGE DEVICE	EMC Corporation
13903390		[REDACTED]	EMC Corporation
13904353		[REDACTED]	EMC Corporation
13904368		[REDACTED]	EMC Corporation
13905310	9336166	BURST BUFFER APPLIANCE WITH OPERATING SYSTEM BYPASS FUNCTIONALITY TO FACILITATE REMOTE DIRECT MEMORY ACCESS	EMC Corporation
13905486		[REDACTED]	EMC Corporation
13905600	9043890	DISTRIBUTED AUTHENTICATION AGAINST STORED USER IDENTIFIERS AND USER TEMPLATES VIA PSEUDONYM ASSOCIATION	EMC Corporation
13905679		[REDACTED]	EMC Corporation
13905716		[REDACTED]	EMC Corporation
13905746		[REDACTED]	EMC Corporation
13905806		[REDACTED]	EMC Corporation
13906200	9195826	A GRAPH-BASED METHOD TO DETECT MALWARE COMMAND-AND-CONTROL INFRASTRUCTURE	EMC Corporation
13907315	8918562	HARDWARE METHOD FOR DETECTING TIMEOUT CONDITIONS IN A LARGE NUMBER OF DATA CONNECTIONS	EMC Corporation
13907760		[REDACTED]	EMC Corporation
13908083		[REDACTED]	EMC Corporation
13909871		[REDACTED]	EMC Corporation
13909875	9367448	METHOD AND SYSTEM FOR DETERMINING DATA INTEGRITY FOR GARBAGE COLLECTION OF DATA STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
13911455	9013732	USING FONT INFORMATION INSTALLED IN AN OPERATING SYSTEM TO INTERCEPT TEXT BEING PRINTED	EMC Corporation
13912955		[REDACTED]	EMC Corporation
13914836		[REDACTED]	EMC Corporation
13914989	9165019	SELF RECOVERY	EMC Corporation
13915799		[REDACTED]	EMC Corporation
13916859		[REDACTED]	EMC Corporation
13917112	9379894	AUTHENTICATION USING CRYPTOGRAPHIC VALUE DERIVED FROM A SHARED SECRET OF A NEAR FIELD COMMUNICATION TAG	EMC Corporation
13917999		[REDACTED]	EMC Corporation
13919346	9038175	PROVIDING AN AUTOMATIC ELECTRONIC FRAUD NETWORK DATA QUALITY FEEDBACK LOOP	EMC Corporation
13920387		[REDACTED]	EMC Corporation
13920700		[REDACTED]	EMC Corporation
13921457		[REDACTED]	EMC Corporation
13922325		[REDACTED]	EMC Corporation
13923234	9043814	DISPATCHER FRAMEWORK TO PROVIDE INTER-APPLICATION COMMUNICATION	EMC Corporation
13923242	8977891	OPTIMIZED RECOVERY	EMC Corporation
13923427		[REDACTED]	EMC Corporation
13923442	9158735	TECHNIQUES FOR GENERATING UNIQUE IDENTIFIERS	EMC Corporation
13923563		[REDACTED]	EMC Corporation
13923673		[REDACTED]	EMC Corporation
13923764		[REDACTED]	EMC Corporation
13923791		[REDACTED]	EMC Corporation
13923831		[REDACTED]	EMC Corporation
13923854		[REDACTED]	EMC Corporation
13924022	9171009	CLUSTER FILE SYSTEM COMPRISING STORAGE SERVER UNITS EACH HAVING A SCALE-OUT NETWORK ATTACHED STORAGE CLUSTER	EMC Corporation
13924348		[REDACTED]	EMC Corporation
13924772	9268647	BLOCK BASED INCREMENTAL BACKUP FROM USER MODE	EMC Corporation
13924777	9171002	FILE BASED INCREMENTAL BLOCK BACKUP FROM USER MODE	EMC Corporation
13925003		[REDACTED]	EMC Corporation
13925143	9189387	COMBINED MEMORY AND STORAGE TIERING	EMC Corporation
13925216	9026694	TECHNIQUES FOR WORKLOAD REDISTRIBUTION	EMC Corporation
13925289	9305161	PASSWORD HARDENING SYSTEM USING PASSWORD SHARES DISTRIBUTED ACROSS MULTIPLE SERVERS	EMC Corporation
13925518		[REDACTED]	EMC Corporation
13925985	9178834	INTERCONNECT FLOW CONTROL	EMC Corporation
13926094	9128629	THROTTLING TECHNIQUES FOR USE WITH DATA RELOCATION	EMC Corporation
13926130		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13926899		[REDACTED]	EMC Corporation
13927187	9367573	METHODS AND APPARATUS FOR ARCHIVING SYSTEM HAVING ENHANCED PROCESSING EFFICIENCY	EMC Corporation
13927341	9262217	COMPUTATION RESOURCE CYCLIC UTILIZATION	EMC Corporation
13927492	8838840	METHOD AND APPARATUS FOR RECOVERING FROM SLOW OR STUCK SCSI COMMANDS AT A SCSI TARGET	EMC Corporation
13927528	9235450	METHOD AND APPARATUS FOR REDUCING SLOW OR STUCK SCSI COMMANDS IN A MULTI-SERVICE ENVIRONMENT AT A SCSI TARGET	EMC Corporation
13927681	9128855	FLASH CACHE PARTITIONING	EMC Corporation
13928610		[REDACTED]	EMC Corporation
13928706		[REDACTED]	EMC Corporation
13928784	9124570	PROVIDING AN ASSESSMENT OF AUTHENTICATION REQUESTS	EMC Corporation
13928810	9235802	AUTOMATED DEFECT AND OPTIMIZATION DISCOVERY	EMC Corporation
13928880	9210147	PROVIDING AN ASSESSMENT OF AUTHENTICATION REQUESTS	EMC Corporation
13928907		[REDACTED]	EMC Corporation
13928937	9202167	AUTOMATED DEFECT IDENTIFICATION AND RESOLUTION	EMC Corporation
13928966		[REDACTED]	EMC Corporation
13928972		[REDACTED]	EMC Corporation
13928976		[REDACTED]	EMC Corporation
13928985		[REDACTED]	EMC Corporation
13929019		[REDACTED]	EMC Corporation
13929027	9304699	MANAGING TOKEN STATES ACROSS MULTIPLE STORAGE PROCESSORS OF A DATA STORAGE ARRAY	EMC Corporation
13929038	9380114	TECHNIQUES FOR PEER MESSAGING ACROSS MULTIPLE STORAGE PROCESSORS OF A DATA STORAGE ARRAY	EMC Corporation
13929070	9244632	DATA STORAGE SYSTEM CONFIGURATION	EMC Corporation
13929516		[REDACTED]	EMC Corporation
13929558		[REDACTED]	EMC Corporation
13929580		[REDACTED]	EMC Corporation
13929621	9384151	UNIFIED SCSI TARGET MANAGEMENT FOR MANAGING A CRASHED SERVICE DAEMON IN A DEDUPLICATION APPLIANCE	EMC Corporation
13929626	9378180	UNIFIED SCSI TARGET MANAGEMENT FOR STARTING AND CONFIGURING A SERVICE DAEMON IN A DEDUPLICATION APPLIANCE	EMC Corporation
13929632	9378160	UNIFIED SCSI TARGET MANAGEMENT FOR SHUTTING DOWN AND DE-CONFIGURING A SERVICE DAEMON IN A DEDUPLICATION APPLIANCE	EMC Corporation

Application Number	Registration Number	Title	Owner
13929639	9390034	UNIFIED SCSI TARGET MANAGEMENT FOR PERFORMING A DELAYED SHUTTDOWN OF A SERVICE DAEMON IN A DEDUPLICATION APPLIANCE	EMC Corporation
13929664		[REDACTED]	EMC Corporation
13929755		[REDACTED]	EMC Corporation
13929879		[REDACTED]	EMC Corporation
13929887		[REDACTED]	EMC Corporation
13929892		[REDACTED]	EMC Corporation
13929999		[REDACTED]	EMC Corporation
13930010		[REDACTED]	EMC Corporation
13930104		METHOD AND SYSTEM FOR MANAGING VIRTUAL MACHINE DISKS	EMC Corporation
13930164	9122589	DATA STORAGE SYSTEM WITH UNIFIED SYSTEM CACHE	EMC Corporation
13930214	9280423	MOUNTING BLOCK LEVEL BACKUP IMAGES	EMC Corporation
13930286		[REDACTED]	EMC Corporation
13930373	8850455	METHOD AND SYSTEM FOR PARENT BACKUP APPLICATION MONITORING OF CHILDREN BACKUP APPLICATIONS	EMC Corporation
13930506	9355121	SEGREGATING DATA AND METADATA IN A FILE SYSTEM	EMC Corporation
13930684	9122712	COMPRESSING CONTAINER FILES	EMC Corporation
13930819		[REDACTED]	EMC Corporation
13930820		[REDACTED]	EMC Corporation
13930884		[REDACTED]	EMC Corporation
13930896		[REDACTED]	EMC Corporation
13930977		[REDACTED]	EMC Corporation
13931044		[REDACTED]	EMC Corporation
13931083	8984602	PROTECTED RESOURCE ACCESS CONTROL UTILIZING CREDENTIALS BASED ON MESSAGE AUTHENTICATION CODES AND HASH CHAIN VALUES	EMC Corporation
13931095		[REDACTED]	EMC Corporation
13931164	9330029	MULTIPLE CONNECTOR IO BOARD	EMC Corporation
13931200		[REDACTED]	EMC Corporation
13931212		[REDACTED]	EMC Corporation
13931259		[REDACTED]	EMC Corporation
13931422		[REDACTED]	EMC Corporation
13931458		[REDACTED]	EMC Corporation
13931501		[REDACTED]	EMC Corporation
13931609		[REDACTED]	EMC Corporation
13931757	9256603	FILE SYSTEM OVER FULLY PROVISIONED VOLUME FILE IN DIRECT MODE	EMC Corporation
13931764	9256614	FILE SYSTEM SNAPSHOTS OVER FULLY PROVISIONED VOLUME FILE IN DIRECT MODE	EMC Corporation
13931769	9329803	FILE SYSTEM OVER THINLY PROVISIONED VOLUME FILE IN MAPPED MODE	EMC Corporation
13931772		[REDACTED]	EMC Corporation
13931775	9256629	FILE SYSTEM SNAPSHOTS OVER THINLY PROVISIONED VOLUME FILE IN MAPPED MODE	EMC Corporation

Application Number	Registration Number	Title	Owner
13931876	9324036	FRAMEWORK FOR CALCULATING GROUPED OPTIMIZATION ALGORITHMS WITHIN A DISTRIBUTED DATA STORE	EMC Corporation
13931879	9235813	A GENERAL FRAMEWORK FOR CROSS-VALIDATION OF MACHINE LEARNING ALGORITHMS USING SQL ON DISTRIBUTED SYSTEMS	EMC Corporation
13931940	9244869	ASYNCHRONOUS CHECKPOINTING WITH MESSAGE PASSING TO BURST BUFFERS	EMC Corporation
13931959		[REDACTED]	EMC Corporation
13931979	9280578	COMBINING TRANSACTIONS IN A METADATA TRANSACTION LOG	EMC Corporation
13931985		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
13931989		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
13931990	9384218	FORMAT IDENTIFICATION FOR FRAGMENTED IMAGE DATA	EMC Corporation
13931991		FORMAT IDENTIFICATION FOR FRAGMENTED IMAGE DATA	EMC Corporation
13931993		FORMAT IDENTIFICATION FOR FRAGMENTED IMAGE DATA	EMC Corporation
13932525	9137096	POLICY BASED NETWORK COMPLIANCE	EMC Corporation
13932668	9304581	PROGRAMMABLE AVAILABILITY FOR A HIGH AVAILABILITY STORAGE SYSTEM	EMC Corporation
13937566	8892507	PROVIDING FILE SYSTEM QUOTA SUPPORT FOR A FILE SYSTEM HAVING SEPARATED DATA AND METADATA	EMC Corporation
13947272	9002965	DISTRIBUTION OF MESSAGES IN NODES CONNECTED BY A GRID ARCHITECTURE	EMC Corporation
13956010	9208166	SEEDING REPLICATION	EMC Corporation
13956091	9189623	HISTORICAL BEHAVIOR BASELINE MODELING AND ANOMALY DETECTION IN MACHINE GENERATED END TO END EVENT LOG	EMC Corporation
13956217	9110910	COMMON BACKUP FORMAT AND LOG BASED VIRTUAL CONSTRUCTION	EMC Corporation
13956237		[REDACTED]	EMC Corporation
13957318		[REDACTED]	EMC Corporation
13959450	9348797	EFFICIENT COMPUTATION OF SKETCHES	EMC Corporation
13962449	9069481	AUTOMATED NON-DISRUPTIVE DATA ENCAPSULATION AND DE-ENCAPSULATION	EMC Corporation
13966009		[REDACTED]	EMC Corporation
13966065	9152545	READ-WRITE ACCESS IN A READ-ONLY ENVIRONMENT	EMC Corporation
13966163	9152342	READ-WRITE ACCESS IN A READ-ONLY ENVIRONMENT	EMC Corporation
13969191	8935497	DE-DUPLICATION IN A VIRTUALIZED STORAGE ENVIRONMENT	EMC Corporation
13971740	9213494	DE-DUPLICATION IN A VIRTUALIZED STORAGE ENVIRONMENT	EMC Corporation
13972089	8819212	DELEGATION OF DATA CLASSIFICATION USING COMMON LANGUAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
13975709		[REDACTED]	EMC Corporation
13978623	9141305	STORAGE RESOURCE USAGE ANALYSIS FOR CUSTOMIZED APPLICATION OPTIONS	EMC Corporation
13983589	9153122	ENVIRONMENTAL ALERT FOR COMPUTER SYSTEMS	EMC Corporation
14/036498	9160744	INCREASING ENTROPY FOR PASSWORD AND KEY GENERATION ON A MOBILE DEVICE	EMC Corporation
14/037626	9208162	GENERATING A SHORT HASH HANDLE	EMC Corporation
14/039242	9177160	KEY MANAGEMENT IN FULL DISK AND FILE-LEVEL ENCRYPTION	EMC Corporation
14/039267	9177123	DETECTING ILLEGITIMATE CODE GENERATORS	EMC Corporation
14/042180	9363141	SYSTEM AND METHOD FOR PARTITIONING A NETWORK	EMC Corporation
14/042273	9268625	SYSTEM AND METHOD FOR STORAGE MANAGEMENT	EMC Corporation
14/042326	9372743	SYSTEM AND METHOD FOR STORAGE MANAGEMENT	EMC Corporation
14/099163	9355235	VALIDATING A USER OF A VIRTUAL MACHINE FOR ADMINISTRATOR/ROOT ACCESS	EMC Corporation
14/105490	9052832	SYSTEM AND METHOD FOR PROVIDING LONG-TERM STORAGE FOR DATA	EMC Corporation
14/105706	9367260	DYNAMIC REPLICATION SYSTEM	EMC Corporation
14/137448	9372636	TIERED-STORAGE DESIGN	EMC Corporation
14/138563	9348703	IMAGE RECOVERY FROM VOLUME IMAGE FILES	EMC Corporation
14/138961	9231962	IDENTIFYING SUSPICIOUS USER LOGINS IN ENTERPRISE NETWORKS	EMC Corporation
14/139003	9049221	DETECTING SUSPICIOUS WEB TRAFFIC FROM AN ENTERPRISE NETWORK	EMC Corporation
14/139019	9338187	MODELING USER WORKING TIME USING AUTHENTICATION EVENTS WITHIN AN ENTERPRISE NETWORK	EMC Corporation
14/172610	9164906	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
14/194342	9348831	PERSISTENT FILE SYSTEM OBJECTS FOR MANAGEMENT OF DATABASES	EMC Corporation
14/211846	9288042	SECURELY AND REDUNDANTLY STORING ENCRYPTION CREDENTIALS SYSTEM AND METHOD	EMC Corporation
14/218581	9372761	TIME BASED CHECKPOINT RESTART	EMC Corporation
14/230510		HETEROSCEDASTIC DATA COMPRESSION USING ARIMA-GARCH MODEL ESTIMATION	EMC Corporation
14/236270	9354975	LOAD BALANCING ON DISKS IN RAID BASED ON LINEAR BLOCK CODES	EMC Corporation
14/243507	8886845	I/O SCHEDULING SYSTEM AND METHOD	EMC Corporation
14/246427		METHOD AND APPARATUS FOR DATABASE SANITIZING	EMC Corporation
14/313143	9276338	COMPLIANT PIN, ELECTRICAL ASSEMBLY INCLUDING THE COMPLIANT PIN AND METHOD OF MANUFACTURING THE COMPLIANT PIN	EMC Corporation
14/319417	9350545	RECOVERY MECHANISM FOR FAULT-TOLERANT SPLIT-SERVER PASSCODE VERIFICATION OF ONE-TIME AUTHENTICATION TOKENS	EMC Corporation
14/329336		PATH SELECTION TO READ OR WRITE DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
14/339794	9087115	MIRROR RESYNCHNRONIZATION OF FIXED PAGE LENGTH TABLES FOR BETTER REPAIR TIME TO HIGH AVAILABILITY IN DATABASES	EMC Corporation
14/495404		METHOD AND APPARATUS FOR FILE SYSTEM	EMC Corporation
14/530596		FLASH MODULE	EMC Corporation
14/749833	9209833	METHODS AND APPARATUS FOR RATIONAL COMPRESSION AND DECOMPRESSION OF NUMBERS	EMC Corporation
14/884560		SELECTIVE FRAGMENTATION REPAIR	EMC Corporation
14/923775	9337863	METHODS AND APPARATUS FOR RATIONAL COMPRESSION AND DECOMPRESSION OF NUMBERS	EMC Corporation
14/937680		GENERATION AND USE OF A MODIFIED PROTECTED FILE	EMC Corporation
14/963061		GENERAL FRAMEWORK FOR CROSS-VALIDATION OF MACHINE LEARNING ALGORITHMS USING SQL ON DISTRIBUTED SYSTEMS	EMC Corporation
14010955	8898357	STORAGE INTEGRATION PLUGIN FOR VIRTUAL SERVERS	EMC Corporation
14013465		[REDACTED]	EMC Corporation
14015445	8930626	CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
14015583	8769198	SYSTEM AND METHOD FOR OUT-OF-BAND CACHE COHERENCY	EMC Corporation
14018552		[REDACTED]	EMC Corporation
14019826	9195685	MULTI-TIER RECOVERY	EMC Corporation
14020291	8850460	TECHNIQUES FOR PERFORMING A REMOTE PROCEDURE CALL USING REMOTE PROCEDURE CALL CONFIGURATION INFORMATION	EMC Corporation
14020333	9069813	QUERY TRANSLATION FOR SEARCHING COMPLEX STRUCTURES OF OBJECTS	EMC Corporation
14021488		[REDACTED]	EMC Corporation
14023016	9354962	MEMORY DUMP FILE COLLECTION AND ANALYSIS USING ANALYSIS SERVER AND CLOUD KNOWLEDGE BASE	EMC Corporation
14024793	9311207	DATA STORAGE SYSTEM OPTIMIZATIONS IN A MULTI-TIERED ENVIRONMENT	EMC Corporation
14024965	9069479	SNAPSHOTS IN DEDUPLICATION	EMC Corporation
14025333	9275218	METHODS AND APPARATUS FOR VERIFICATION OF A USER AT A FIRST DEVICE BASED ON INPUT RECEIVED FROM A SECOND DEVICE	EMC Corporation
14025377		[REDACTED]	EMC Corporation
14025719	8799603	EFFICIENT USE OF MEMORY AND ACCESSING OF STORED RECORDS	EMC Corporation
14030044	9026760	TECHNIQUES FOR ENFORCING CAPACITY RESTRICTIONS OF AN ALLOCATION POLICY	EMC Corporation
14030470	9223792	AUGMENTING METADATA COLLECTION FOR STORED DATA ANALYTICS	EMC Corporation
14030476	9378047	EFFICIENT COMMUNICATION OF INTERRUPTS FROM KERNEL SPACE TO USER SPACE USING EVENT QUEUES	EMC Corporation

Application Number	Registration Number	Title	Owner
14030511	9298633	ADAPTIVE PREFECTH FOR PREDICTED WRITE REQUESTS	EMC Corporation
14031130	8966216	TECHNIQUES FOR AUTOMATED EVALUATION AND MOVEMENT OF DATA BETWEEN STORAGE TIERS	EMC Corporation
14031210		[REDACTED]	EMC Corporation
14031628	9043605	ONLINE AND OFFLINE VALIDATION OF TOKENCODES	EMC Corporation
14031833		[REDACTED]	EMC Corporation
14032547		[REDACTED]	EMC Corporation
14033811	9043592	COMMUNICATING TRUST MODELS TO RELYING PARTIES	EMC Corporation
14034027		[REDACTED]	EMC Corporation
14034229	9317547	METHOD AND SYSTEM FOR CHILDREN BACKUP APPLICATIONS COMMUNICATING TO PARENT BACKUP APPLICATIONS VIA APPLICATION PROGRAM INTERFACES	EMC Corporation
14034603	9348888	ITERATIVE FILTER EXPRESSION PROCESSING FOR FILTERING EMBEDDED DATA OBJECTS	EMC Corporation
14034810		[REDACTED]	EMC Corporation
14034893		[REDACTED]	EMC Corporation
14034981		[REDACTED]	EMC Corporation
14035034		DATA REDACTION SYSTEM	EMC Corporation
14035055		[REDACTED]	EMC Corporation
14035118		[REDACTED]	EMC Corporation
14035124		[REDACTED]	EMC Corporation
14035295		[REDACTED]	EMC Corporation
14035364		[REDACTED]	EMC Corporation
14035664	9256651	INHERITANCE OF PROPERTIES FILES WITH LOCALE CHAIN SUPPORT	EMC Corporation
14035768		[REDACTED]	EMC Corporation
14036177		[REDACTED]	EMC Corporation
14036225	9154496	PROACTIVATION METHODS AND APPARATUS FOR PASSWORD-HARDENING SYSTEMS	EMC Corporation
14036239	9230092	METHODS AND APPARATUS FOR OBSCURING A VALID PASSWORD IN A SET OF PASSWORDS IN A PASSWORD-HARDENING SYSTEM	EMC Corporation
14036330	9261925	OPTIMIZED SERVER DESIGN USING DENSE DIMM SPACING, WIDE HEATSINK, IMPROVED ROUTING CHANNELS, AND IMPROVED AIR DELIVERY TO REAR DEVICES	EMC Corporation
14036396		[REDACTED]	EMC Corporation
14036612	9235630	DATASET DISCOVERY IN DATA ANALYTICS	EMC Corporation
14036635	9098699	SMART TELEVISION DATA SHARING TO PROVIDE SECURITY	EMC Corporation
14037199	9229796	SYSTEM AND METHOD FOR DETERMINING DISK FAILURE INDICATOR TO PREDICT FUTURE DISK FAILURES	EMC Corporation
14037202	9189309	SYSTEM AND METHOD FOR PREDICTING SINGLE-DISK FAILURES	EMC Corporation

Application Number	Registration Number	Title	Owner
14037204	9141457	SYSTEM AND METHOD FOR PREDICTING MULTIPLE-DISK FAILURES	EMC Corporation
14037241		IDENTITY AND ACCESS MANAGEMENT	EMC Corporation
14037259	9189345	METHOD TO PERFORM INSTANT RESTORE OF PHYSICAL MACHINES	EMC Corporation
14037293	9317809	HIGHLY SCALABLE MEMORY-EFFICIENT PARALLEL LDA IN A SHARED-NOTHING MPP DATABASE	EMC Corporation
14037474		[REDACTED]	EMC Corporation
14037480		[REDACTED]	EMC Corporation
14037511	9037822	HIERARCHICAL VOLUME TREE	EMC Corporation
14037577	9378106	HASH-BASED REPLICATION	EMC Corporation
14037663	8909829	METHODS AND APPARATUS FOR STORAGE POOL SELECTION	EMC Corporation
14037786		[REDACTED]	EMC Corporation
14037978	9336232	NATIVE FILE ACCESS	EMC Corporation
14038024	8976636	TECHNIQUES FOR STORING DATA	EMC Corporation
14038312	9313091	ANALYTICS PLATFORM FOR AUTOMATED DIAGNOSIS, REMEDIATION, AND PROACTIVE SUPPORTABILITY	EMC Corporation
14038514	9202052	DYNAMIC GRAPH ANOMALY DETECTION FRAMEWORK AND SCALABLE SYSTEM ARCHITECTURE	EMC Corporation
14038563	9237143	USER AUTHENTICATION AVOIDING EXPOSURE OF INFORMATION ABOUT ENUMERABLE SYSTEM RESOURCES	EMC Corporation
14038625	9367557	SYSTEM AND METHOD FOR IMPROVING DATA COMPRESSION	EMC Corporation
14038628		[REDACTED]	EMC Corporation
14038632		[REDACTED]	EMC Corporation
14038635		[REDACTED]	EMC Corporation
14038637		[REDACTED]	EMC Corporation
14038665	9304914	DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038668	8935446	INDEXING ARCHITECTURE FOR DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038673	9390116	INSERTION AND EVICTION SCHEMES FOR DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038687	9189414	FILE INDEXING USING AN EXCLUSION LIST OF A DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038694	9336143	INDEXING A DEDUPLICATED CACHE SYSTEM BY INTEGRATING FINGERPRINTS OF UNDERLYING DEDUPLICATED STORAGE SYSTEM	EMC Corporation
14038699	9189402	METHOD FOR PACKAGING AND STORING CACHED DATA IN DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038847		[REDACTED]	EMC Corporation
14038929	9240988	COMPUTER SYSTEM EMPLOYING DUAL-BAND AUTHENTICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
14039019	9280453	METHOD AND SYSTEM FOR TEST AUTOMATION FRAMEWORK FOR BACKUP AND RECOVERY APPLICATIONS	EMC Corporation
14039099		[REDACTED]	EMC Corporation
14039215		[REDACTED]	EMC Corporation
14039315		[REDACTED]	EMC Corporation
14039430		[REDACTED]	EMC Corporation
14039463		[REDACTED]	EMC Corporation
14039647		[REDACTED]	EMC Corporation
14039691	9147063	PASSCODE GENERATION UTILIZING SELECTED PERMUTATION TYPE APPLIED TO TOKENCODE AND PERSONAL IDENTIFIER	EMC Corporation
14039868	9355234	AUTHENTICATION INVOLVING SELECTION AMONG DIFFERENT BIOMETRIC METHODS DYNAMICALLY	EMC Corporation
14039881	9154516	DETECTING RISKY NETWORK COMMUNICATIONS BASED ON BEHAVIOR PROFILING	EMC Corporation
14039891	9395923	METHOD AND SYSTEM FOR RECOVERING FROM EMBEDDED ERRORS FROM WRITING DATA TO STREAMING MEDIA	EMC Corporation
14039897		[REDACTED]	EMC Corporation
14039926		[REDACTED]	EMC Corporation
14039956	9262450	USING DISTINGUISHED NAMES AND RELATIVE DISTINGUISHED NAMES FOR MERGING DATA IN AN XML SCHEMA	EMC Corporation
14040052		[REDACTED]	EMC Corporation
14040209	9355480	UNIFORM DISTRIBUTION OF VISUAL COMPONENT WIDTHS	EMC Corporation
14040226	9306961	VISUAL SECURITY WORKFLOW	EMC Corporation
14040248	9160742	LOCALIZED RISK ANALYTICS FOR USER AUTHENTICATION	EMC Corporation
14040264		[REDACTED]	EMC Corporation
14040305	9350758	DISTRIBUTED DENIAL OF SERVICE (DDOS) HONEYPOTS	EMC Corporation
14040307		[REDACTED]	EMC Corporation
14040350	9274872	SET-BASED BUGS DISCOVERY SYSTEM VIA SQL QUERY	EMC Corporation
14040382		[REDACTED]	EMC Corporation
14040397	9092563	SYSTEM FOR DISCOVERING BUGS USING INTERVAL ALGEBRA QUERY LANGUAGE	EMC Corporation
14040407	9225691	DEDUPLICATION OF ENCRYPTED DATASET ON DATADOMAIN BACKUP APPLIANCE	EMC Corporation
14040802	9235632	REPLICATION SYNCHRONIZATION	EMC Corporation
14040921		[REDACTED]	EMC Corporation
14040939		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14041013	9275359	MECHANISM AND TECHNIQUES FOR DISCOVERY AND PREDICTION OF LONG-TERM-HIGH LEVEL NEARLY PERIODICAL BUSINESS PROCESSES FROM LOW-LEVEL LOGS	EMC Corporation
14041067		[REDACTED]	EMC Corporation
14041097	9305071	PROVIDING VIRTUAL STORAGE PROCESSOR (VSP) MOBILITY WITH INDUCED FILE SYSTEM FORMAT MIGRATION	EMC Corporation
14041103		[REDACTED]	EMC Corporation
14041108		[REDACTED]	EMC Corporation
14041125	9332433	DISTRIBUTING ACCESS AND IDENTIFICATION TOKENS IN A MOBILE ENVIRONMENT	EMC Corporation
14041150	9325499	MESSAGE ENCRYPTION AND DECRYPTION UTILIZING LOW-ENTROPY KEYS	EMC Corporation
14041176	9378261	UNIFIED SYNCHRONOUS REPLICATION FOR BLOCK AND FILE OBJECTS	EMC Corporation
14041191	9305009	SYNCHRONOUS REPLICATION OF VIRTUALIZED STORAGE PROCESSORS	EMC Corporation
14041194		[REDACTED]	EMC Corporation
14041204	9378219	METRO-CLUSTER BASED ON SYNCHRONOUS REPLICATION OF VIRTUALIZED STORAGE PROCESSORS	EMC Corporation
14041217	9152353	VERIFYING THE CONSISTENCY OF SLICE ALLOCATION METADATA	EMC Corporation
14041229		[REDACTED]	EMC Corporation
14041238	9330155	UNIFIED MANAGEMENT OF SYNC AND ASYNC REPLICATION FOR BLOCK AND FILE OBJECTS	EMC Corporation
14041290	9177670	METHOD AND APPARATUS FOR FLASH CACHE MANAGEMENT	EMC Corporation
14041314		[REDACTED]	EMC Corporation
14041317		[REDACTED]	EMC Corporation
14041332	9244711	VIRTUAL MACHINE CAPACITY PLANNING	EMC Corporation
14041456		[REDACTED]	EMC Corporation
14041567		[REDACTED]	EMC Corporation
14041795		[REDACTED]	EMC Corporation
14041820		[REDACTED]	EMC Corporation
14041823	9201736	METHODS AND APPARATUS FOR RECOVERY OF COMPLEX ASSETS IN DISTRIBUTED INFORMATION PROCESSING SYSTEMS	EMC Corporation
14041847		[REDACTED]	EMC Corporation
14041855		[REDACTED]	EMC Corporation
14041864		[REDACTED]	EMC Corporation
14041893		[REDACTED]	EMC Corporation
14041899		[REDACTED]	EMC Corporation
14041977		[REDACTED]	EMC Corporation
14041988		[REDACTED]	EMC Corporation
14042088		[REDACTED]	EMC Corporation
14042242		[REDACTED]	EMC Corporation
14042252		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14042304		[REDACTED]	EMC Corporation
14042369		[REDACTED]	EMC Corporation
14042396		[REDACTED]	EMC Corporation
14042411	9231357	MID-PLANE ASSEMBLY	EMC Corporation
14042470		[REDACTED]	EMC Corporation
14042488		[REDACTED]	EMC Corporation
14042491	9274874	AUTOMATED DEFECT DIAGNOSIS FROM MACHINE DIAGNOSTIC DATA	EMC Corporation
14042494		[REDACTED]	EMC Corporation
14042501		[REDACTED]	EMC Corporation
14042504	9357666	FIELD-SERVICEABLE IT DEVICE	EMC Corporation
14042511		[REDACTED]	EMC Corporation
14042535	9207726	IT DEVICE	EMC Corporation
14042551		[REDACTED]	EMC Corporation
14042645		[REDACTED]	EMC Corporation
14042688	9159115	PROCESSING VECTORIZED ELEMENTS ASSOCIATED WITH IT SYSTEM IMAGES	EMC Corporation
14042703	9129386	PROCESSING IMAGE DATA ASSOCIATED WITH IT SYSTEM COMPONENTS	EMC Corporation
14042708		[REDACTED]	EMC Corporation
14048952	8819478	AUTO-ADAPTING MULTI-TIER CACHE	EMC Corporation
14051713		[REDACTED]	EMC Corporation
14055031		[REDACTED]	EMC Corporation
14056106	8856397	TECHNIQUES FOR STATISTICS COLLECTION IN CONNECTION WITH DATA STORAGE PERFORMANCE.	EMC Corporation
14058357	8942073	MAINTAINING TAPE EMULATION CONSISTENCY	EMC Corporation
14058389	8850538	AGILE OTP GENERATION	EMC Corporation
14058469	8880484	COMPRESSION FORECASTING FOR A DEDUPLICATING STORAGE SYSTEM	EMC Corporation
14058511		METHOD AND APPARATUS FOR DIAGNOSIS AND RECOVERY OF SYSTEM PROBLEMS	EMC Corporation
14061532	8949282	EFFICIENT STORAGE OF NON-SEARCHABLE ATTRIBUTES	EMC Corporation
14063241		METHOD AND APPARATUS FOR PROVIDING CACHING SERVICE IN NETWORK INFRASTRUCTURE	EMC Corporation
14065675		[REDACTED]	EMC Corporation
14065688		[REDACTED]	EMC Corporation
14065812		[REDACTED]	EMC Corporation
14066252		INSTANTIATING VIRTUAL APPLIANCES	EMC Corporation
14068288		[REDACTED]	EMC Corporation
14073237	8923497	REDIRECTING AND MIRRORING OF TELEPHONIC COMMUNICATIONS	EMC Corporation
14080290	9294474	VERIFICATION BASED ON INPUT COMPRISING CAPTURED IMAGES, CAPTURED AUDIO AND TRACKED EYE MOVEMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
14080306	9323911	USER VERIFICATION METHOD WITH DATA REMOVAL PROTECTION	EMC Corporation
14080327	9280645	LOCAL-REMOTE VERIFICATION	EMC Corporation
14080520		[REDACTED]	EMC Corporation
14083201		[REDACTED]	EMC Corporation
14083254		[REDACTED]	EMC Corporation
14083283		[REDACTED]	EMC Corporation
14084290	9043595	SELECTIVE SHREDDING IN A DEDUPLICATION SYSTEM	EMC Corporation
14085195	9037795	MANAGING DATA STORAGE BY PROVISIONING CACHE AS A VIRTUAL DEVICE	EMC Corporation
14085511		[REDACTED]	EMC Corporation
14089862	8973096	FRAUD DETECTION IN ADAPTIVE AUTHENTICATION SYSTEMS	EMC Corporation
14089909		METHOD AND APPARATUS FOR RECOGNIZING IMAGE CONTENT	EMC Corporation
14089931	8904146	TECHNIQUES FOR DATA STORAGE ARRAY VIRTUALIZATION	EMC Corporation
14090146		[REDACTED]	EMC Corporation
14090777	8898387	DATA CACHING SYSTEM AND METHOD	EMC Corporation
14090937		[REDACTED]	EMC Corporation
14091237		[REDACTED]	EMC Corporation
14091256		[REDACTED]	EMC Corporation
14091735		[REDACTED]	EMC Corporation
14092028		[REDACTED]	EMC Corporation
14092427	9292520	ADVANCED VIRTUAL SYNTHETIC FULL BACKUP SYNTHESIZED FROM PREVIOUS FULL-BACKUPS	EMC Corporation
14097759		[REDACTED]	EMC Corporation
14097826		[REDACTED]	EMC Corporation
14098213	8836548	METHOD AND SYSTEM FOR DATA COMPRESSION AT A STORAGE SYSTEM	EMC Corporation
14098269		[REDACTED]	EMC Corporation
14098271	9176675	FAST-ZEROING IN A FILE SYSTEM	EMC Corporation
14100466		APPARATUS AND METHOD FOR SEARCHING INFORMATION	EMC Corporation
14101091		[REDACTED]	EMC Corporation
14102043	9225529	ENCRYPTED VIRTUAL MACHINES IN A CLOUD	EMC Corporation
14102111		[REDACTED]	EMC Corporation
14102770		[REDACTED]	EMC Corporation
14104250		[REDACTED]	EMC Corporation
14104982		[REDACTED]	EMC Corporation
14105037		[REDACTED]	EMC Corporation
14105567		[REDACTED]	EMC Corporation
14105608		[REDACTED]	EMC Corporation
14107305	9128622	NETWORK VIRTUALIZATION-AWARE DATA STORAGE SYSTEM	EMC Corporation
14107921		[REDACTED]	EMC Corporation
14108002		[REDACTED]	EMC Corporation
14108021		[REDACTED]	EMC Corporation
14108032		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14108053		[REDACTED]	EMC Corporation
14108060		[REDACTED]	EMC Corporation
14108150		[REDACTED]	EMC Corporation
14108473		[REDACTED]	EMC Corporation
14108497	9009355	PROCESSING REQUESTS TO A DATA STORE DURING BACK UP	EMC Corporation
14108653		[REDACTED]	EMC Corporation
14108979		[REDACTED]	EMC Corporation
14109030		METHOD AND SYSTEM FOR DATA PROTECTION	EMC Corporation
14109381		[REDACTED]	EMC Corporation
14122396	9378460	PROVISIONING STORAGE RESOURCES BASED ON AN EXPERT SYSTEM	EMC Corporation
14122404	9304859	POLAR CODES FOR EFFICIENT ENCODING AND DECODING IN REDUNDANT DISK ARRAYS	EMC Corporation
14132308		[REDACTED]	EMC Corporation
14132669		[REDACTED]	EMC Corporation
14132715		METHOD AND APPARATUS FOR USER AUTHENTICATION	EMC Corporation
14132730	9202035	USER AUTHENTICATION BASED ON BIOMETRIC HANDWRITING ASPECTS OF A HANDWRITTEN CODE	EMC Corporation
14132750		[REDACTED]	EMC Corporation
14132894		[REDACTED]	EMC Corporation
14132921		[REDACTED]	EMC Corporation
14132933		[REDACTED]	EMC Corporation
14133371		[REDACTED]	EMC Corporation
14133466		[REDACTED]	EMC Corporation
14133705	9258242	PATH SELECTION USING A SERVICE LEVEL OBJECTIVE	EMC Corporation
14133774		[REDACTED]	EMC Corporation
14133852		[REDACTED]	EMC Corporation
14133892		[REDACTED]	EMC Corporation
14133929		[REDACTED]	EMC Corporation
14133945	9158630	TESTING INTEGRITY OF REPLICATED STORAGE	EMC Corporation
14134521		[REDACTED]	EMC Corporation
14134746	9235715	TECHNIQUES FOR INCREASING MOBILE DEVICE SECURITY	EMC Corporation
14134748		[REDACTED]	EMC Corporation
14134773		[REDACTED]	EMC Corporation
14135029		[REDACTED]	EMC Corporation
14135046		[REDACTED]	EMC Corporation
14135385	9274907	DECOMMISSIONING OF VIRTUAL BACKUP APPLIANCES	EMC Corporation
14136177		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14136288	9317189	METHOD TO INPUT CONTENT IN A STRUCTURED MANNER WITH REAL-TIME ASSISTANCE AND VALIDATION	EMC Corporation
14136368		[REDACTED]	EMC Corporation
14136871	9185100	DEVICE PAIRING USING A CRYPTOGRAPHIC COMMITMENT PROCESS INVOLVING MEASURED MOTION VALUES	EMC Corporation
14136964	9298847	LATE BOUND, TRANSACTIONAL CONFIGURATION SYSTEM AND METHODS	EMC Corporation
14137457		[REDACTED]	EMC Corporation
14137559	9317216	SMR AUTO-TIERING	EMC Corporation
14137575		[REDACTED]	EMC Corporation
14137754		[REDACTED]	EMC Corporation
14137759	9268640	LIMITING DATA LOSS ON PARITY RAID GROUPS	EMC Corporation
14137768		[REDACTED]	EMC Corporation
14137774	9244811	SYSTEM AND METHOD FOR SMART FRAMEWORK FOR NETWORK BACKUP SOFTWARE DEBUGGING	EMC Corporation
14137788		[REDACTED]	EMC Corporation
14137850		[REDACTED]	EMC Corporation
14138260	9223800	CLUSTER FILE SYSTEM PROVIDING OBJECT STORE AND FUNCTIONALITY FOR TRANSFORMATION OF METADATA FILES INTO OBJECTS	EMC Corporation
14138297		[REDACTED]	EMC Corporation
14138415		[REDACTED]	EMC Corporation
14138451		[REDACTED]	EMC Corporation
14138520		[REDACTED]	EMC Corporation
14138525		[REDACTED]	EMC Corporation
14138534		[REDACTED]	EMC Corporation
14138538	9348849	BACKUP CLIENT ZERO-MANAGEMENT	EMC Corporation
14138622		[REDACTED]	EMC Corporation
14138626	9305151	RISK-BASED AUTHENTICATION USING LOCKOUT STATES	EMC Corporation
14138756		[REDACTED]	EMC Corporation
14138848	9143504	SECURE COMMUNICATION INFRASTRUCTURE	EMC Corporation
14139011		[REDACTED]	EMC Corporation
14139036		[REDACTED]	EMC Corporation
14139105		[REDACTED]	EMC Corporation
14139572		[REDACTED]	EMC Corporation
14139688		[REDACTED]	EMC Corporation
14139760	9053236	AUTOMATED DIRECTORY SERVICES TEST SETUP UTILITY	EMC Corporation
14139927	9329805	HOST ORIENTED AUTOMATIC VERIFICATION OF BEST PRACTICES	EMC Corporation
14139931	8990463	TRANSFER OF DATA STORAGE DEVICE FEATURES	EMC Corporation
14139956		[REDACTED]	EMC Corporation
14140047		[REDACTED]	EMC Corporation
14140132		[REDACTED]	EMC Corporation
14140135		[REDACTED]	EMC Corporation
14140721	9201770	A/B TESTING OF INSTALLED GRAPHICAL USER INTERFACES	EMC Corporation

Application Number	Registration Number	Title	Owner
14141107		METHOD AND APPARATUS FOR PROVIDING COMPUTING RESOURCES	EMC Corporation
14141221		[REDACTED]	EMC Corporation
14141258		[REDACTED]	EMC Corporation
14141287	9384206	MANAGING DATA DEDUPLICATION IN STORAGE SYSTEMS	EMC Corporation
14141310	9229797	DEFERRED DRIVE PROCESSING	EMC Corporation
14141376		[REDACTED]	EMC Corporation
14141643	9307015	CLOUD BLACK BOX FOR CLOUD INFRASTRUCTURE	EMC Corporation
14141869		[REDACTED]	EMC Corporation
14141988	8819308	PSEUDO WRITING SYSTEM AND METHOD	EMC Corporation
14142007	9298555	MANAGING RECOVERY OF FILE SYSTEMS	EMC Corporation
14142498		[REDACTED]	EMC Corporation
14142501		[REDACTED]	EMC Corporation
14142534		[REDACTED]	EMC Corporation
14142569		[REDACTED]	EMC Corporation
14142578		[REDACTED]	EMC Corporation
14143020		[REDACTED]	EMC Corporation
14143036		[REDACTED]	EMC Corporation
14143089		[REDACTED]	EMC Corporation
14143174	9330727	BINDING A DATA OBJECT TO A ROTATIONAL HARD DRIVE	EMC Corporation
14143295		METHOD, SYSTEM, AND APPARATUS FOR SECURING A COMPUTER THROUGH DETECTION OF USER PROXIMITY	EMC Corporation
14143347		[REDACTED]	EMC Corporation
14143396		[REDACTED]	EMC Corporation
14143402		[REDACTED]	EMC Corporation
14143778		[REDACTED]	EMC Corporation
14143790		[REDACTED]	EMC Corporation
14143825		[REDACTED]	EMC Corporation
14143863	9305010	VIRTUAL FILE SYSTEM PROVIDING INTERFACE BETWEEN ANALYTICS PLATFORM AND PHYSICAL FILE SYSTEM	EMC Corporation
14143970		[REDACTED]	EMC Corporation
14143981	9378082	DIAGNOSIS OF STORAGE SYSTEM COMPONENT ISSUES VIA DATA ANALYTICS	EMC Corporation
14143993		[REDACTED]	EMC Corporation
14144007		[REDACTED]	EMC Corporation
14144019	9330416	VISUALIZATION OF FRAUD PATTERNS	EMC Corporation
14144644	9286003	METHOD AND APPARATUS FOR CREATING A SHORT HASH HANDLE HIGHLY CORRELATED WITH A GLOBALLY-UNIQUE HASH SIGNATURE	EMC Corporation
14144647		[REDACTED]	EMC Corporation
14144651		[REDACTED]	EMC Corporation
14144780	9367515	MANAGING ADAPTIVE REBOOTS ON MULTIPLE STORAGE PROCESSORS	EMC Corporation
14144835	9230121	TECHNIQUES FOR PERSISTENTLY TOGGLING A FIPS-140 CRYPTOGRAPHIC MODE OF A CLUSTERED STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
14144892	9350735	CONTEXT-BASED DYNAMIC INFORMATION RIGHTS MANAGEMENT	EMC Corporation
14144930		PARALLEL ON-PREMISES AND CLOUD-BASED AUTHENTICATION	EMC Corporation
14144940	9332434	POLICY-BASED LOCATION COLLECTION FOR AUTHENTICATION	EMC Corporation
14144970		[REDACTED]	EMC Corporation
14145012		[REDACTED]	EMC Corporation
14145125		[REDACTED]	EMC Corporation
14145266	9213648	SYSTEM, APPARATUS, AND METHOD OF SECURELY ERASING CACHE	EMC Corporation
14145284	9286238	SYSTEM, APPARATUS, AND METHOD OF CACHE MANAGEMENT	EMC Corporation
14145302	9323669	SYSTEM, APPARATUS, AND METHOD OF INITIALIZING CACHE	EMC Corporation
14145313	9170942	SYSTEM, APPARATUS, AND METHOD OF AUTOMATIC DATA PADDING	EMC Corporation
14145327	9069783	ACTIVE-ACTIVE SCALE-OUT FOR UNIFIED DATA PATH ARCHITECTURE	EMC Corporation
14145351		[REDACTED]	EMC Corporation
14145859		[REDACTED]	EMC Corporation
14149609	9182917	STORAGE SYSTEM POLLING REDUCTION	EMC Corporation
14152126	9026696	USING I/O TRACK INFORMATION FOR CONTINUOUS PUSH WITH SPLITTER FOR STORAGE DEVICE	EMC Corporation
14154407	8875134	ACTIVE/ACTIVE STORAGE AND VIRTUAL MACHINE MOBILITY OVER ASYNCHRONOUS DISTANCES	EMC Corporation
14155596		MOBILE PRODUCT AND SERVICE INFORMATION MANAGEMENT	EMC Corporation
14156678		[REDACTED]	EMC Corporation
14161910	9092145	SNAPSHOTTING OF A PERFORMANCE STORAGE SYSTEM IN A SYSTEM FOR PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	EMC Corporation
14162409	9244790	SYSTEM AND METHOD FOR PREDICTING FUTURE DISK FAILURES	EMC Corporation
14164612	9311001	METHOD AND APPARATUS FOR IMPLEMENTING HIGH-PERFORMANCE, SCALABLE DATA PROCESSING AND STORAGE SYSTEMS	EMC Corporation
14167314	9356626	DATA ENCODING FOR DATA STORAGE SYSTEM BASED ON GENERALIZED CONTATENATED CODES	EMC Corporation
14167389	9229811	FOLDED CODES FOR CORRECTION OF LATENT MEDIA ERRORS	EMC Corporation
14168478	9280416	SELECTION OF ERASURE CODE PARAMETERS FOR NO DATA REPAIR	EMC Corporation
14169013	8972320	SMART CONTAINERS	EMC Corporation
14169811		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14173105		COLLECTING DATA IN INTERNET OF THINGS	EMC Corporation
14174684		METADATA CACHE SUPPORTING MULTIPLE HETEROGENEOUS SYSTEMS	EMC Corporation
14175328	9063839	CAPACITY FORECASTING FOR BACKUP STORAGE	EMC Corporation
14177576		[REDACTED]	EMC Corporation
14183061		[REDACTED]	EMC Corporation
14189326		[REDACTED]	EMC Corporation
14189571	9183216	CLUSTER STORAGE USING SUBSEGMENTING FOR EFFICIENT STORAGE	EMC Corporation
14189707	9223679	LIGHTWEIGHT, NON-INTRUSIVE, AND FLEXIBLE APPARATUS TO OBTAIN SYSTEM AND PROCESS STATE	EMC Corporation
14190195	9256725	CREDENTIAL RECOVERY WITH THE ASSISTANCE OF TRUSTED ENTITIES	EMC Corporation
14193963	9354896	HYPERVISOR UTILIZATION TO REDUCE BOOTSTRAP TIME FOR DATA STORAGE SYSTEM	EMC Corporation
14196308		[REDACTED]	EMC Corporation
14197618	9383940	TECHNIQUES FOR PERFORMING DATA MIGRATION	EMC Corporation
14197638		METHOD AND APPARATUS FOR PARALLEL COMPUTING	EMC Corporation
14198019		DETERMINING CORRECTNESS OF AN APPLICATION	EMC Corporation
14200572		[REDACTED]	EMC Corporation
14200593		[REDACTED]	EMC Corporation
14200604	9304893	INTEGRATED SOFTWARE DEVELOPMENT AND TEST CASE MANAGEMENT SYSTEM	EMC Corporation
14202767	9323765	SCALABLE CLOUD FILE SYSTEM WITH EFFICIENT INTEGRITY CHECKS	EMC Corporation
14206378		[REDACTED]	EMC Corporation
14207078	9195851	OFFLOADING ENCRYPTION TO THE CLIENT	EMC Corporation
14208045		[REDACTED]	EMC Corporation
14209587		[REDACTED]	EMC Corporation
14211109		DATA MANAGEMENT IN A MULTI-TENANT DISTRIBUTIVE ENVIRONMENT	EMC Corporation
14211546		A METHOD AND APPARATUS FOR EFFICIENT DATA COPYING AND DATA MIGRATION	EMC Corporation
14211574		DATABASE SEARCH	EMC Corporation
14211736	9286230	SPARSE VOLUME MANAGEMENT CACHE MECHANISM	EMC Corporation
14217738		[REDACTED]	EMC Corporation
14218024		[REDACTED]	EMC Corporation
14220391		[REDACTED]	EMC Corporation
14221469		[REDACTED]	EMC Corporation
14221608	9094447	COMPUTER SECURITY APPLICATION CONFIGURATION STRUCTURE EMPLOYING INDEPENDENTLY SPECIFIED CONFIGURATION OBJECTS AND SEPARATE RESOLVER	EMC Corporation
14222200		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14222938		[REDACTED]	EMC Corporation
14222971		[REDACTED]	EMC Corporation
14223190		[REDACTED]	EMC Corporation
14223265		[REDACTED]	EMC Corporation
14224303		[REDACTED]	EMC Corporation
14225033	9311496	PRIVACY SCREEN-BASED SECURITY	EMC Corporation
14225036		[REDACTED]	EMC Corporation
14225069		[REDACTED]	EMC Corporation
14225089		[REDACTED]	EMC Corporation
14225104		[REDACTED]	EMC Corporation
14225188		[REDACTED]	EMC Corporation
14225697	9231955	MULTIPARTY AUTHORIZATION FOR CONTROLLING RESOURCE ACCESS	EMC Corporation
14225959		[REDACTED]	EMC Corporation
14227051	9063661	AUTOMATED UPDATING OF PARAMETERS AND METADATA IN A FEDERATED STORAGE ENVIRONMENT	EMC Corporation
14227058		[REDACTED]	EMC Corporation
14227161	9268693	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
14227202		[REDACTED]	EMC Corporation
14227208	9389800	SYNTHESIZING VIRTUAL MACHINE DISK BACKUPS	EMC Corporation
14227234		[REDACTED]	EMC Corporation
14227290	9348827	FILE-BASED SNAPSHOTS FOR BLOCK-BASED BACKUPS	EMC Corporation
14227388		[REDACTED]	EMC Corporation
14227766		[REDACTED]	EMC Corporation
14228559		[REDACTED]	EMC Corporation
14228647		[REDACTED]	EMC Corporation
14228754		[REDACTED]	EMC Corporation
14228945		[REDACTED]	EMC Corporation
14228971		[REDACTED]	EMC Corporation
14228982	9367398	BACKING UP JOURNAL DATA TO A MEMORY OF ANOTHER NODE	EMC Corporation
14229000		[REDACTED]	EMC Corporation
14229020		[REDACTED]	EMC Corporation
14229028		[REDACTED]	EMC Corporation
14229049		[REDACTED]	EMC Corporation
14229085		[REDACTED]	EMC Corporation
14229222		[REDACTED]	EMC Corporation
14229323	9330103	PRESERVING FILE HANDLES WHEN MOVING FILE SYSTEM OPERATION BETWEEN STORAGE PROCESSORS	EMC Corporation
14229364		[REDACTED]	EMC Corporation
14229467	9189339	REPLICATION OF A VIRTUAL DISTRIBUTED VOLUME WITH VIRTUAL MACHINE GRANULARITY	EMC Corporation
14229491		[REDACTED]	EMC Corporation
14229536		[REDACTED]	EMC Corporation
14230118		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14230164		[REDACTED]	EMC Corporation
14230168		[REDACTED]	EMC Corporation
14230173		[REDACTED]	EMC Corporation
14230227	9286004	MANAGING I/O OPERATIONS IN MULTI-CORE SYSTEMS	EMC Corporation
14230359		[REDACTED]	EMC Corporation
14230405		[REDACTED]	EMC Corporation
14230414	9342465	ENCRYPTING DATA IN A FLASH-BASED CONTENTS-ADDRESSABLE BLOCK	EMC Corporation
14230425		[REDACTED]	EMC Corporation
14230545		[REDACTED]	EMC Corporation
14230551		[REDACTED]	EMC Corporation
14230583		[REDACTED]	EMC Corporation
14230589		[REDACTED]	EMC Corporation
14230596	9280427	STORAGE SYSTEM PERFORMANCE RECOVERY AFTER STORAGE PROCESSOR FAILURE	EMC Corporation
14230598		[REDACTED]	EMC Corporation
14230644	9286226	STORAGE PROCESSOR HARDWARE UPGRADE IN A STORAGE SYSTEM	EMC Corporation
14230804	9110820	HYBRID DATA STORAGE SYSTEM IN AN HPC EXASCALE ENVIRONMENT	EMC Corporation
14230818		[REDACTED]	EMC Corporation
14230831		[REDACTED]	EMC Corporation
14230845		[REDACTED]	EMC Corporation
14230863		[REDACTED]	EMC Corporation
14230891		[REDACTED]	EMC Corporation
14230928		[REDACTED]	EMC Corporation
14230930		[REDACTED]	EMC Corporation
14231075		[REDACTED]	EMC Corporation
14231148		[REDACTED]	EMC Corporation
14231151	9164681	METHOD AND APPARATUS FOR DYNAMIC PATH-SELECTION FOR IMPROVING I/O PERFORMANCE IN VIRTUAL PROVISIONED STORAGE ARRAYS WITH DATA STRIPING	EMC Corporation
14231162		[REDACTED]	EMC Corporation
14231248		[REDACTED]	EMC Corporation
14231293		[REDACTED]	EMC Corporation
14231381		[REDACTED]	EMC Corporation
14231384		[REDACTED]	EMC Corporation
14231391		[REDACTED]	EMC Corporation
14231704		[REDACTED]	EMC Corporation
14236230		OFFLOADING RAID UPDATE OPERATIONS TO DISK CONTROLLERS	EMC Corporation
14236273	9379989	CONGESTION AVOIDANCE AND CONTROL FOR UPD BASED PROTOCOLS	EMC Corporation
14236290	9232222	LOSSLESS COLOR IMAGE COMPRESSION ADAPTIVELY USING SPATIAL PREDICTION OR INTER-COMPONENT PREDICTION	EMC Corporation
14244777	9275251	SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION AND COMPRESSION OF SEGMENTS	EMC Corporation

Application Number	Registration Number	Title	Owner
14245998		MODEL FRAMEWORK TO FACILITATE ROBUST PROGRAMMING OF DISTRIBUTED WORKFLOWS	EMC Corporation
14249749		IDENTITY PROTOCOL TRANSLATION GATEWAY	EMC Corporation
14251153	9268696	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
14255221	9268711	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
14259068	9026494	SYNCHRONIZATION OF STORAGE USING COMPARISONS OF FINGERPRINTS OF BLOCKS	EMC Corporation
14264383		[REDACTED]	EMC Corporation
14267675		CAPACITY FORECASTING FOR A DEDUPLICATING STORAGE SYSTEM	EMC Corporation
14267733		STATE-BASED DIRECTING OF SEGMENTS IN A MULTINODE DEDUPLICATED STORAGE SYSTEM	EMC Corporation
14267799	9201949	INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
14269758		SYSTEM AND METHOD FOR RESOURCE SHARING ACROSS MULTI-CLOUD ARRAYS	EMC Corporation
14271246		SEGMENT DEDUPLICATION SYSTEM WITH COMPRESSION OF SEGMENTS	EMC Corporation
14280425		SUBSEGMENTING FOR EFFICIENT STORAGE, RESEMBLANCE DETERMINATION, AND TRANSMISSION	EMC Corporation
14281855	9256373	INVULNERABLE DATA MOVEMENT FOR FILE SYSTEM UPGRADE	EMC Corporation
14282098		[REDACTED]	EMC Corporation
14282318	9250823	ONLINE REPLACEMENT OF PHYSICAL STORAGE IN A VIRTUAL STORAGE SYSTEM	EMC Corporation
14284298		[REDACTED]	EMC Corporation
14285229		[REDACTED]	EMC Corporation
14289065	9104436	COMPILER DIRECTIVES FOR MEMORY MANAGEMENT	EMC Corporation
14289282	9128950	REPRESENTING DE-DUPLICATED FILE DATA	EMC Corporation
14290632		[REDACTED]	EMC Corporation
14290898	9189342	GENERIC PROCESS FOR DETERMINING CHILD TO PARENT INHERITANCE FOR FAST PROVISIONED OR LINKED CLONE VIRTUAL MACHINES	EMC Corporation
14290928	9292327	OPTIMIZATION FOR INCREMENTAL BACKUP OF VMS	EMC Corporation
14291395		[REDACTED]	EMC Corporation
14291500		[REDACTED]	EMC Corporation
14292183		[REDACTED]	EMC Corporation
14292290		[REDACTED]	EMC Corporation
14292309	9367402	COEXISTENCE OF BLOCK BASED BACKUP (BBB) PRODUCTS	EMC Corporation
14292714		[REDACTED]	EMC Corporation
14293977		[REDACTED]	EMC Corporation
14296501	9037816	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
14297467		[REDACTED]	EMC Corporation
14297475		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14298443		[REDACTED]	EMC Corporation
14298621		[REDACTED]	EMC Corporation
14298680		[REDACTED]	EMC Corporation
14298698		[REDACTED]	EMC Corporation
14300524		[REDACTED]	EMC Corporation
14302552		[REDACTED]	EMC Corporation
14302558		[REDACTED]	EMC Corporation
14302570		[REDACTED]	EMC Corporation
14303402		[REDACTED]	EMC Corporation
14303418		[REDACTED]	EMC Corporation
14303427		[REDACTED]	EMC Corporation
14304616		[REDACTED]	EMC Corporation
14304623		[REDACTED]	EMC Corporation
14307710		[REDACTED]	EMC Corporation
14308590		[REDACTED]	EMC Corporation
14308599		[REDACTED]	EMC Corporation
14310148		[REDACTED]	EMC Corporation
14310150		[REDACTED]	EMC Corporation
14310178	9274718	MIGRATION IN REPLICATION SYSTEM	EMC Corporation
14310179		[REDACTED]	EMC Corporation
14310264		[REDACTED]	EMC Corporation
14310330		[REDACTED]	EMC Corporation
14310474		MEASURING PERFORMANCE OF STORAGE SYSTEM	EMC Corporation
14311157	9201699	DECOMMISSIONING VIRTUAL APPLIANCES	EMC Corporation
14313094		[REDACTED]	EMC Corporation
14313104		[REDACTED]	EMC Corporation
14314377		[REDACTED]	EMC Corporation
14314378		[REDACTED]	EMC Corporation
14314380		[REDACTED]	EMC Corporation
14314411		[REDACTED]	EMC Corporation
14314458		[REDACTED]	EMC Corporation
14314523		[REDACTED]	EMC Corporation
14315414		[REDACTED]	EMC Corporation
14315438		[REDACTED]	EMC Corporation
14315957		[REDACTED]	EMC Corporation
14317002		[REDACTED]	EMC Corporation
14317141		[REDACTED]	EMC Corporation
14317202		[REDACTED]	EMC Corporation
14317203		[REDACTED]	EMC Corporation
14317328		[REDACTED]	EMC Corporation
14317455		[REDACTED]	EMC Corporation
14318068	9282094	TRANSPARENT ADAPTIVE AUTHENTICATION AND TRANSACTION MONITORING	EMC Corporation
14318805		APPLICATION AND INFORMATION MOVEMENT IN A CLOUD ENVIRONMENT	EMC Corporation
14318831		CLOUDBOOK	EMC Corporation
14318856		[REDACTED]	EMC Corporation
14318939		[REDACTED]	EMC Corporation
14318987	9356968	MANAGING AUTHENTICATION USING COMMON AUTHENTICATION FRAMEWORK CIRCUITRY	EMC Corporation

Application Number	Registration Number	Title	Owner
14319040	9378136	TECHNIQUES FOR SELECTING WRITE ENDURANCE CLASSIFICATION OF FLASH STORAGE BASED ON READ-WRITE MIXTURE OF I/O WORKLOAD	EMC Corporation
14319054		[REDACTED]	EMC Corporation
14319084	9348761	WEIGHTED-VALUE CONSISTENT HASHING FOR BALANCING DEVICE WEAR	EMC Corporation
14319113		[REDACTED]	EMC Corporation
14319117		[REDACTED]	EMC Corporation
14319124		[REDACTED]	EMC Corporation
14319128		[REDACTED]	EMC Corporation
14319175		[REDACTED]	EMC Corporation
14319183		[REDACTED]	EMC Corporation
14319205		[REDACTED]	EMC Corporation
14319213	9300661	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR DETERMINING WHETHER TO SUSPEND AUTHENTICATION BY AN AUTHENTICATION DEVICE	EMC Corporation
14319249		[REDACTED]	EMC Corporation
14319272		[REDACTED]	EMC Corporation
14319334		[REDACTED]	EMC Corporation
14319348		[REDACTED]	EMC Corporation
14319349		[REDACTED]	EMC Corporation
14319396		[REDACTED]	EMC Corporation
14319440		[REDACTED]	EMC Corporation
14319566		[REDACTED]	EMC Corporation
14319590	9092754	MOBILE SCANNING FOR INVENTORY MANAGEMENT	EMC Corporation
14319602		[REDACTED]	EMC Corporation
14319622		[REDACTED]	EMC Corporation
14319634		[REDACTED]	EMC Corporation
14319645		[REDACTED]	EMC Corporation
14319646		[REDACTED]	EMC Corporation
14319652		[REDACTED]	EMC Corporation
14319660		[REDACTED]	EMC Corporation
14319677	9225738	MARKOV BEHAVIOR SCORING	EMC Corporation
14319739		[REDACTED]	EMC Corporation
14319757		[REDACTED]	EMC Corporation
14319764		[REDACTED]	EMC Corporation
14319772		[REDACTED]	EMC Corporation
14319777		[REDACTED]	EMC Corporation
14319797		[REDACTED]	EMC Corporation
14319804		[REDACTED]	EMC Corporation
14319854		[REDACTED]	EMC Corporation
14319889		SOFTWARE OVERLAYS FOR DISAGGREGATED COMPONENTS	EMC Corporation
14319991		[REDACTED]	EMC Corporation
14319998		[REDACTED]	EMC Corporation
14320001		CONTENT FABRIC FOR A DISTRIBUTED FILE SYSTEM	EMC Corporation
14320069		DYNAMICALLY COMPOSED COMPUTE NODES COMPRISING DISAGGREGATED COMPONENTS	EMC Corporation

Application Number	Registration Number	Title	Owner
14320216		[REDACTED]	EMC Corporation
14320230		[REDACTED]	EMC Corporation
14320265		[REDACTED]	EMC Corporation
14320311		[REDACTED]	EMC Corporation
14320321		[REDACTED]	EMC Corporation
14320476		[REDACTED]	EMC Corporation
14320551		[REDACTED]	EMC Corporation
14325516		[REDACTED]	EMC Corporation
14325690		[REDACTED]	EMC Corporation
14325977		[REDACTED]	EMC Corporation
14325980		[REDACTED]	EMC Corporation
14326082		[REDACTED]	EMC Corporation
14327699		[REDACTED]	EMC Corporation
14328930		[REDACTED]	EMC Corporation
14332434	9344501	COMMUNICATION WITH MULTIPLE STORAGE PROCESSORS USING NETWORK INFRASTRUCTURE.	EMC Corporation
14332552		[REDACTED]	EMC Corporation
14334327		[REDACTED]	EMC Corporation
14335239		[REDACTED]	EMC Corporation
14338775	9235479	DISTRIBUTED FILE SYSTEM HAVING SEPARATE DATA AND METADATA AND PROVIDING A CONSISTENT SNAPSHOT THEREOF	EMC Corporation
14339392	9025602	DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
14340358	8953265	METHOD AND SYSTEM FOR MONITORING DISK RELIABILITY WITH GLOBAL DISK SCRUBBING	EMC Corporation
14341669		[REDACTED]	EMC Corporation
14347729		RESOURCE PROVISIONING BASED ON LOGICAL PROFILES AND OBJECTIVE FUNCTIONS	EMC Corporation
14369091		FLEXIBLE LICENSING ARCHITECTURE	EMC Corporation
14369093		DYNAMIC MALICIOUS APPLICATION DETECTION IN STORAGE SYSTEMS	EMC Corporation
14410295		[REDACTED]	EMC Corporation
14410299		[REDACTED]	EMC Corporation
14451665	9083734	INTEGRATED FORENSICS PLATFORM FOR ANALYZING IT RESOURCES CONSUMED TO DERIVE OPERATIONAL AND ARCHITECTURAL RECOMMENDATIONS	EMC Corporation
14451795		[REDACTED]	EMC Corporation
14451839	9118663	AGILE OTP GENERATION	EMC Corporation
14454086		SYSTEM AND METHOD FOR SECURE MULTI-TENANCY IN AN OPERATING SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14457240	9268658	FAILOVER TO BACKUP SITE IN CONNECTION WITH TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
14463402	9268778	EFFICIENT BACKUP OF VIRTUAL DATA	EMC Corporation
14466200		FILE DELETION DETECTION IN KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
14466745		DATA REPLICATION WITH DELTA COMPRESSION	EMC Corporation

Application Number	Registration Number	Title	Owner
14466756		EFFICIENT DATA REHYDRATION	EMC Corporation
14466950		[REDACTED]	EMC Corporation
14468084	9336157	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
14471540		[REDACTED]	EMC Corporation
14472209	9367549	VIRTUAL PRIVATE CLOUD THAT PROVIDES ENTERPRISE GRADE FUNCTIONALITY AND COMPLIANCE	EMC Corporation
14473243	9378149	METHOD AND SYSTEM FOR TRACKING MODIFICATION TIMES OF DATA IN A STORAGE SYSTEM	EMC Corporation
14473325		METHOD AND SYSTEM FOR GARBAGE COLLECTION IN A STORAGE SYSTEM BASED ON LONGEVITY OF STORED DATA	EMC Corporation
14474576		[REDACTED]	EMC Corporation
14474755	9262280	AGE-OUT SELECTION IN HASH CACHES	EMC Corporation
14475835		[REDACTED]	EMC Corporation
14477152	9361447	AUTHENTICATION BASED ON USER-SELECTED IMAGE OVERLAY EFFECTS	EMC Corporation
14478677	9098204	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
14483249	9372775	METHOD AND APPARATUS FOR PROVIDING AT RISK INFORMATION IN A CLOUD COMPUTING SYSTEM HAVING REDUNDANCY	EMC Corporation
14484861		SYSTEM AND METHOD FOR PREDICTING MEMORY PERFORMANCE	EMC Corporation
14484945		[REDACTED]	EMC Corporation
14487159		[REDACTED]	EMC Corporation
14487520		[REDACTED]	EMC Corporation
14488000		[REDACTED]	EMC Corporation
14488072	9279754	METHOD AND APPARATUS FOR TESTING A CABLE	EMC Corporation
14488278	9141172	METHOD AND APPARATUS TO CONTROL AND MANAGE A POWER STATE IN A RELATED SET OF STORAGE DEVICES	EMC Corporation
14488377	9380076	ACCESS MANAGEMENT SYSTEM	EMC Corporation
14489004		TROUBLESHOOTING BASED ON LOG SIMILARITY	EMC Corporation
14489295		[REDACTED]	EMC Corporation
14489317		[REDACTED]	EMC Corporation
14489363		[REDACTED]	EMC Corporation
14490756		[REDACTED]	EMC Corporation
14491151		[REDACTED]	EMC Corporation
14491400		[REDACTED]	EMC Corporation
14492185	9007706	DISK SYNCHRONIZING	EMC Corporation
14492241		[REDACTED]	EMC Corporation
14492506		[REDACTED]	EMC Corporation
14493616		[REDACTED]	EMC Corporation
14494895		[REDACTED]	EMC Corporation
14494899	9304889	SUSPENDING DATA REPLICATION	EMC Corporation
14495379		REMOVING CACHED DATA	EMC Corporation
14496119		[REDACTED]	EMC Corporation
14496441		[REDACTED]	EMC Corporation
14496783		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14496795		[REDACTED]	EMC Corporation
14497224		[REDACTED]	EMC Corporation
14497737		[REDACTED]	EMC Corporation
14497811		[REDACTED]	EMC Corporation
14497814		[REDACTED]	EMC Corporation
14498093		[REDACTED]	EMC Corporation
14499429		[REDACTED]	EMC Corporation
14499499		[REDACTED]	EMC Corporation
14499551		[REDACTED]	EMC Corporation
14499569		[REDACTED]	EMC Corporation
14500032		[REDACTED]	EMC Corporation
14500050		[REDACTED]	EMC Corporation
14500135		[REDACTED]	EMC Corporation
14500247		[REDACTED]	EMC Corporation
14500471		[REDACTED]	EMC Corporation
14500485		[REDACTED]	EMC Corporation
14500524	9047229	SYSTEM AND METHOD FOR PROTECTING CONTENT	EMC Corporation
14500595		[REDACTED]	EMC Corporation
14500872		[REDACTED]	EMC Corporation
14501096		[REDACTED]	EMC Corporation
14501104		[REDACTED]	EMC Corporation
14501112		[REDACTED]	EMC Corporation
14501245		[REDACTED]	EMC Corporation
14501325		[REDACTED]	EMC Corporation
14501407	9378200	AUTOMATED CONTENT INFERENCE SYSTEM FOR UNSTRUCTURED TEXT DATA	EMC Corporation
14501415		[REDACTED]	EMC Corporation
14501431		[REDACTED]	EMC Corporation
14501455		[REDACTED]	EMC Corporation
14501474		[REDACTED]	EMC Corporation
14501485		[REDACTED]	EMC Corporation
14501502		[REDACTED]	EMC Corporation
14501518		[REDACTED]	EMC Corporation
14501522		[REDACTED]	EMC Corporation
14501531		[REDACTED]	EMC Corporation
14501533		[REDACTED]	EMC Corporation
14501700		[REDACTED]	EMC Corporation
14501756		[REDACTED]	EMC Corporation
14501763		CLOUD CONSISTENCY TECHNOLOGY	EMC Corporation
14501806		[REDACTED]	EMC Corporation
14501808		LEVELING IO	EMC Corporation
14501855		[REDACTED]	EMC Corporation
14501881		[REDACTED]	EMC Corporation
14501891		[REDACTED]	EMC Corporation
14501892		[REDACTED]	EMC Corporation
14501904		[REDACTED]	EMC Corporation
14501911		[REDACTED]	EMC Corporation
14501917		METHOD AND SYSTEM FOR IMPROVING FLASH STORAGE UTILIZATION BY PREDICTING BAD M-PAGES	EMC Corporation
14501919		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14501928		[REDACTED]	EMC Corporation
14501939		[REDACTED]	EMC Corporation
14501951		[REDACTED]	EMC Corporation
14501958		[REDACTED]	EMC Corporation
14501987		[REDACTED]	EMC Corporation
14502020		[REDACTED]	EMC Corporation
14502036		[REDACTED]	EMC Corporation
14502177	9367395	MANAGING DATA INCONSISTENCIES IN STORAGE SYSTEMS	EMC Corporation
14502244		[REDACTED]	EMC Corporation
14502250		[REDACTED]	EMC Corporation
14502289		[REDACTED]	EMC Corporation
14502327		METHOD AND APPARATUS FOR COST-BASED LOAD BALANCING FOR PORT SELECTION	EMC Corporation
14502491		[REDACTED]	EMC Corporation
14502518		[REDACTED]	EMC Corporation
14502543		[REDACTED]	EMC Corporation
14502574		[REDACTED]	EMC Corporation
14502614		[REDACTED]	EMC Corporation
14503319		[REDACTED]	EMC Corporation
14503331		[REDACTED]	EMC Corporation
14507655		PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM INCLUDING A DETERMINER	EMC Corporation
14510363		[REDACTED]	EMC Corporation
14510737		[REDACTED]	EMC Corporation
14510750		[REDACTED]	EMC Corporation
14521086		[REDACTED]	EMC Corporation
14523466		[REDACTED]	EMC Corporation
14524188		[REDACTED]	EMC Corporation
14529041	9390179	FEDERATED SEARCH	EMC Corporation
14530061	9325733	UNSUPERVISED AGGREGATION OF SECURITY RULES	EMC Corporation
14533437		[REDACTED]	EMC Corporation
14534416		[REDACTED]	EMC Corporation
14538089		[REDACTED]	EMC Corporation
14538494	9374920	LOCKING/INDICATION SYSTEM	EMC Corporation
14547386		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14551496	9118565	HARDWARE METHOD FOR DETECTING TIMEOUT CONDITIONS IN A LARGE NUMBER OF DATA CONNECTIONS	EMC Corporation
14554492		[REDACTED]	EMC Corporation
14557559	9332024	UTILIZING DIGITAL LINEAR RECURSIVE FILTERS TO ESTIMATE STATISTICS FOR ANOMALY DETECTION	EMC Corporation
14558619		[REDACTED]	EMC Corporation
14558620		[REDACTED]	EMC Corporation
14558624		[REDACTED]	EMC Corporation
14558626		[REDACTED]	EMC Corporation
14559031		[REDACTED]	EMC Corporation
14559036		[REDACTED]	EMC Corporation
14561640		[REDACTED]	EMC Corporation
14562229		[REDACTED]	EMC Corporation
14564420		[REDACTED]	EMC Corporation
14564971		[REDACTED]	EMC Corporation
14565739		[REDACTED]	EMC Corporation
14567669		[REDACTED]	EMC Corporation
14568740		CONFIGURING A DATA CENTER	EMC Corporation
14569526		VIRTUAL MACHINE DISASTER RECOVERY	EMC Corporation
14572027		[REDACTED]	EMC Corporation
14572457		POST BACKUP CATALOGS	EMC Corporation
14572899		[REDACTED]	EMC Corporation
14573213		[REDACTED]	EMC Corporation
14573228		VIRTUALIZATION IN A STORAGE AREA NETWORK	EMC Corporation
14573320		[REDACTED]	EMC Corporation
14575056		[REDACTED]	EMC Corporation
14575079		[REDACTED]	EMC Corporation
14575080		[REDACTED]	EMC Corporation
14575295		[REDACTED]	EMC Corporation
14576040		[REDACTED]	EMC Corporation
14576060		[REDACTED]	EMC Corporation
14576193		[REDACTED]	EMC Corporation
14576450		[REDACTED]	EMC Corporation
14576887		[REDACTED]	EMC Corporation
14576899		[REDACTED]	EMC Corporation
14576921		METHOD AND SYSTEM TO SEARCH LOGS THAT CONTAIN A MASSIVE NUMBER OF ENTRIES	EMC Corporation
14576931		[REDACTED]	EMC Corporation
14576943		[REDACTED]	EMC Corporation
14576952		[REDACTED]	EMC Corporation
14577206		[REDACTED]	EMC Corporation
14577387		[REDACTED]	EMC Corporation
14577469		[REDACTED]	EMC Corporation
14578113		[REDACTED]	EMC Corporation
14578151		[REDACTED]	EMC Corporation
14578162		[REDACTED]	EMC Corporation
14578168		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14578172		[REDACTED]	EMC Corporation
14578310		[REDACTED]	EMC Corporation
14578411		[REDACTED]	EMC Corporation
14578582		[REDACTED]	EMC Corporation
14578663		[REDACTED]	EMC Corporation
14578902		[REDACTED]	EMC Corporation
14579195		[REDACTED]	EMC Corporation
14579209		[REDACTED]	EMC Corporation
14579288		[REDACTED]	EMC Corporation
14579949		[REDACTED]	EMC Corporation
14579996		USING VERSIONING TO BACK UP MULTIPLE VERSIONS OF A STORED OBJECT	EMC Corporation
14580304		[REDACTED]	EMC Corporation
14580531		[REDACTED]	EMC Corporation
14580865		[REDACTED]	EMC Corporation
14580956		[REDACTED]	EMC Corporation
14581201		[REDACTED]	EMC Corporation
14581224		[REDACTED]	EMC Corporation
14581392		INCLUDING KERNEL OBJECT INFORMATION IN A USER DUMP	EMC Corporation
14581399		[REDACTED]	EMC Corporation
14581409		[REDACTED]	EMC Corporation
14581620		[REDACTED]	EMC Corporation
14581678		[REDACTED]	EMC Corporation
14581750		[REDACTED]	EMC Corporation
14581901		[REDACTED]	EMC Corporation
14581907		[REDACTED]	EMC Corporation
14582334		[REDACTED]	EMC Corporation
14583857		[REDACTED]	EMC Corporation
14584028		[REDACTED]	EMC Corporation
14584341		[REDACTED]	EMC Corporation
14584464		[REDACTED]	EMC Corporation
14585258		[REDACTED]	EMC Corporation
14585259		[REDACTED]	EMC Corporation
14585595		[REDACTED]	EMC Corporation
14585810		[REDACTED]	EMC Corporation
14585939		[REDACTED]	EMC Corporation
14585992		[REDACTED]	EMC Corporation
14586001		[REDACTED]	EMC Corporation
14586053		[REDACTED]	EMC Corporation
14586128		[REDACTED]	EMC Corporation
14586165		[REDACTED]	EMC Corporation
14586184		[REDACTED]	EMC Corporation
14586227		[REDACTED]	EMC Corporation
14586654		[REDACTED]	EMC Corporation
14587106		[REDACTED]	EMC Corporation
14587138		[REDACTED]	EMC Corporation
14587187		[REDACTED]	EMC Corporation
14587237		[REDACTED]	EMC Corporation
14587345		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14587371		[REDACTED]	EMC Corporation
14587654		[REDACTED]	EMC Corporation
14587871		[REDACTED]	EMC Corporation
14588308		[REDACTED]	EMC Corporation
14588446	9336092	SECURE DATA DEDUPLICATION	EMC Corporation
14594011		[REDACTED]	EMC Corporation
14597501		[REDACTED]	EMC Corporation
14604689		EFFICIENT BACKUP REPLICATION	EMC Corporation
14604690	9298759	SMART CONTAINERS	EMC Corporation
14606675		OPTIMIZED RECOVERY	EMC Corporation
14609839		[REDACTED]	EMC Corporation
14609889		[REDACTED]	EMC Corporation
14609902		[REDACTED]	EMC Corporation
14610191		[REDACTED]	EMC Corporation
14612681	9244618	TECHNIQUES FOR STORING DATA ON DISK DRIVES PARTITIONED INTO TWO REGIONS	EMC Corporation
14614011		[REDACTED]	EMC Corporation
14615608		[REDACTED]	EMC Corporation
14616465		EFFICIENT CONFLICT RESOLUTION AMONG STATELESS PROCESSES	EMC Corporation
14619157		[REDACTED]	EMC Corporation
14619274		[REDACTED]	EMC Corporation
14620631	9063910	DATA RECOVERY AFTER TRIPLE DISK FAILURE	EMC Corporation
14622593		METADATA GENERATION FOR INCREMENTAL BACKUP	EMC Corporation
14629573	9355275	HETEROGENEOUS DATA FROM MULTIPLE SOURCES	EMC Corporation
14632036		[REDACTED]	EMC Corporation
14636515	9323459	TECHNIQUES FOR DYNAMIC DATA STORAGE CONFIGURATION IN ACCORDANCE WITH AN ALLOCATION POLICY	EMC Corporation
14640444		[REDACTED]	EMC Corporation
14641201		MULTIPROCESSOR SYSTEM WITH INDEPENDENT DIRECT ACCESS TO BULK SOLID STATE MEMORY RESOURCES	EMC Corporation
14641799		[REDACTED]	EMC Corporation
14643206		[REDACTED]	EMC Corporation
14644475		[REDACTED]	EMC Corporation
14644482		[REDACTED]	EMC Corporation
14646422		[REDACTED]	EMC Corporation
14657286		[REDACTED]	EMC Corporation
14660638		[REDACTED]	EMC Corporation
14661604		[REDACTED]	EMC Corporation
14661636		[REDACTED]	EMC Corporation
14662372		[REDACTED]	EMC Corporation
14662377		[REDACTED]	EMC Corporation
14662385		[REDACTED]	EMC Corporation
14662887		[REDACTED]	EMC Corporation
14664618		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14665110		[REDACTED]	EMC Corporation
14665276		[REDACTED]	EMC Corporation
14666176		[REDACTED]	EMC Corporation
14666653		[REDACTED]	EMC Corporation
14666980		[REDACTED]	EMC Corporation
14667268		[REDACTED]	EMC Corporation
14667853		[REDACTED]	EMC Corporation
14668818		[REDACTED]	EMC Corporation
14669223		[REDACTED]	EMC Corporation
14669377		[REDACTED]	EMC Corporation
14669437		RELOCATING DATA BETWEEN STORAGE ARRAYS	EMC Corporation
14669444		SCALE-OUT STORAGE IN A VIRTUALIZED STORAGE SYSTEM	EMC Corporation
14669534		[REDACTED]	EMC Corporation
14669554		[REDACTED]	EMC Corporation
14669896		POWER MANAGEMENT	EMC Corporation
14669900		FACILITATING MANAGEMENT OF RESOURCES	EMC Corporation
14670544		[REDACTED]	EMC Corporation
14670593		[REDACTED]	EMC Corporation
14670718		[REDACTED]	EMC Corporation
14670810		[REDACTED]	EMC Corporation
14670901		[REDACTED]	EMC Corporation
14670909		[REDACTED]	EMC Corporation
14670976		[REDACTED]	EMC Corporation
14671017		[REDACTED]	EMC Corporation
14671024		[REDACTED]	EMC Corporation
14671318		[REDACTED]	EMC Corporation
14671513		[REDACTED]	EMC Corporation
14671578		[REDACTED]	EMC Corporation
14671654		[REDACTED]	EMC Corporation
14671670		[REDACTED]	EMC Corporation
14671675		[REDACTED]	EMC Corporation
14671740		[REDACTED]	EMC Corporation
14671948		[REDACTED]	EMC Corporation
14672347		[REDACTED]	EMC Corporation
14672410		[REDACTED]	EMC Corporation
14672526		[REDACTED]	EMC Corporation
14672560		[REDACTED]	EMC Corporation
14672577		[REDACTED]	EMC Corporation
14672640		[REDACTED]	EMC Corporation
14672652		[REDACTED]	EMC Corporation
14672741		[REDACTED]	EMC Corporation
14672841		[REDACTED]	EMC Corporation
14672849		[REDACTED]	EMC Corporation
14672889		DYNAMIC STORAGE TIERING	EMC Corporation
14672913		ACCESSING DATA	EMC Corporation
14672921		MONITORING HEALTH CONDITION OF A HARD DISK	EMC Corporation
14672983		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14673017		[REDACTED]	EMC Corporation
14673052		[REDACTED]	EMC Corporation
14673071		[REDACTED]	EMC Corporation
14673073		[REDACTED]	EMC Corporation
14673103		[REDACTED]	EMC Corporation
14673284		[REDACTED]	EMC Corporation
14673310		[REDACTED]	EMC Corporation
14673317		[REDACTED]	EMC Corporation
14673382		[REDACTED]	EMC Corporation
14673415		[REDACTED]	EMC Corporation
14673441		[REDACTED]	EMC Corporation
14673464		[REDACTED]	EMC Corporation
14673503		[REDACTED]	EMC Corporation
14673531		[REDACTED]	EMC Corporation
14673594		[REDACTED]	EMC Corporation
14673618		[REDACTED]	EMC Corporation
14673662		[REDACTED]	EMC Corporation
14673686		[REDACTED]	EMC Corporation
14673706		[REDACTED]	EMC Corporation
14673715		[REDACTED]	EMC Corporation
14673913		[REDACTED]	EMC Corporation
14673963		[REDACTED]	EMC Corporation
14673980		[REDACTED]	EMC Corporation
14673983		[REDACTED]	EMC Corporation
14673998		[REDACTED]	EMC Corporation
14674018		[REDACTED]	EMC Corporation
14674066		[REDACTED]	EMC Corporation
14674078		[REDACTED]	EMC Corporation
14674087		[REDACTED]	EMC Corporation
14674121		[REDACTED]	EMC Corporation
14674128		[REDACTED]	EMC Corporation
14674131		[REDACTED]	EMC Corporation
14674134		[REDACTED]	EMC Corporation
14674153		[REDACTED]	EMC Corporation
14674233		[REDACTED]	EMC Corporation
14674241		[REDACTED]	EMC Corporation
14674265		[REDACTED]	EMC Corporation
14674308		[REDACTED]	EMC Corporation
14674314		[REDACTED]	EMC Corporation
14674324		[REDACTED]	EMC Corporation
14674347		[REDACTED]	EMC Corporation
14674358		[REDACTED]	EMC Corporation
14674382		[REDACTED]	EMC Corporation
14674389		[REDACTED]	EMC Corporation
14674420		[REDACTED]	EMC Corporation
14674438		[REDACTED]	EMC Corporation
14674450	9378052	GRANTING RANGELOCKS ACCORDING TO THREAD ARRIVAL TIME	EMC Corporation
14674485		[REDACTED]	EMC Corporation
14674522		[REDACTED]	EMC Corporation
14674556		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14674566		[REDACTED]	EMC Corporation
14674608		[REDACTED]	EMC Corporation
14674617		[REDACTED]	EMC Corporation
14674647		[REDACTED]	EMC Corporation
14674667		[REDACTED]	EMC Corporation
14674708		[REDACTED]	EMC Corporation
14674732		[REDACTED]	EMC Corporation
14674738		[REDACTED]	EMC Corporation
14674797		[REDACTED]	EMC Corporation
14674816		[REDACTED]	EMC Corporation
14674877		[REDACTED]	EMC Corporation
14674896		[REDACTED]	EMC Corporation
14674905		[REDACTED]	EMC Corporation
14674911		[REDACTED]	EMC Corporation
14674956		[REDACTED]	EMC Corporation
14675131		[REDACTED]	EMC Corporation
14675169		[REDACTED]	EMC Corporation
14675177		[REDACTED]	EMC Corporation
14675216		[REDACTED]	EMC Corporation
14675396		[REDACTED]	EMC Corporation
14675405		[REDACTED]	EMC Corporation
14675425		[REDACTED]	EMC Corporation
14675439		[REDACTED]	EMC Corporation
14675440		[REDACTED]	EMC Corporation
14676673		[REDACTED]	EMC Corporation
14677212	9390100	STORING DIFFERENCES BETWEEN PRECOMPRESSED AND RECOMPRESSED DATA FILES	EMC Corporation
14677231		SYNCHRONIZATION OF STORAGE USING COMPARISONS OF FINGERPRINTS OF BLOCKS	EMC Corporation
14677795		EFFICIENT BUILDING OF RESTORE LIST	EMC Corporation
14677822		EFFICIENTLY ESTIMATING COMPRESSION RATIO IN A DEDUPLICATING FILE SYSTEM	EMC Corporation
14686400		[REDACTED]	EMC Corporation
14686438		[REDACTED]	EMC Corporation
14686468		[REDACTED]	EMC Corporation
14686650		[REDACTED]	EMC Corporation
14686668		[REDACTED]	EMC Corporation
14686701		[REDACTED]	EMC Corporation
14689735		[REDACTED]	EMC Corporation
14690771	9369479	DETECTION OF MALWARE BEACONING ACTIVITIES	EMC Corporation
14692905		[REDACTED]	EMC Corporation
14694924	9350549	SELECTIVE SHREDDING IN A DEDUPLICATION SYSTEM	EMC Corporation
14695500		SELF-DESTRUCTING CONTENT	EMC Corporation
14696708		METHOD AND SYSTEM FOR SECURING DATA	EMC Corporation
14697116	9304841	DISPATCHER FRAMEWORK TO PROVIDE INTER-APPLICATION COMMUNICATION	EMC Corporation
14698047		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14699594		[REDACTED]	EMC Corporation
14704774		SYSTEM AND METHOD FOR PROVIDING LONG-TERM STORAGE FOR DATA	EMC Corporation
14705086		[REDACTED]	EMC Corporation
14706068		[REDACTED]	EMC Corporation
14706104	9235481	CONTINUOUS DATA REPLICATION	EMC Corporation
14707587		[REDACTED]	EMC Corporation
14709894		[REDACTED]	EMC Corporation
14710768	9306942	AGILE OTP GENERATION	EMC Corporation
14714726	9251051	CAPACITY FORECASTING FOR BACKUP STORAGE	EMC Corporation
14719594		QUERY TRANSLATION FOR SEARCHING COMPLEX STRUCTURES OF OBJECTS	EMC Corporation
14721229		[REDACTED]	EMC Corporation
14721587		[REDACTED]	EMC Corporation
14723196		STREAM LOCALITY DELTA COMPRESSION	EMC Corporation
14723943		[REDACTED]	EMC Corporation
14727988		[REDACTED]	EMC Corporation
14728787		[REDACTED]	EMC Corporation
14729714		[REDACTED]	EMC Corporation
14731015		[REDACTED]	EMC Corporation
14734037		[REDACTED]	EMC Corporation
14734339		SUBJECT AND AUDIENCE ORIENTED INSTANT COLLABORATIVE DEVELOPMENT	EMC Corporation
14737286		[REDACTED]	EMC Corporation
14737841		[REDACTED]	EMC Corporation
14737859		[REDACTED]	EMC Corporation
14739881		[REDACTED]	EMC Corporation
14741627		[REDACTED]	EMC Corporation
14741928		[REDACTED]	EMC Corporation
14742183		[REDACTED]	EMC Corporation
14742228		[REDACTED]	EMC Corporation
14743152		[REDACTED]	EMC Corporation
14743242		[REDACTED]	EMC Corporation
14743306		[REDACTED]	EMC Corporation
14743339		[REDACTED]	EMC Corporation
14743358		[REDACTED]	EMC Corporation
14743370		[REDACTED]	EMC Corporation
14743453		[REDACTED]	EMC Corporation
14744217		[REDACTED]	EMC Corporation
14744268		[REDACTED]	EMC Corporation
14744565		[REDACTED]	EMC Corporation
14744617		[REDACTED]	EMC Corporation
14744886		[REDACTED]	EMC Corporation
14744921		[REDACTED]	EMC Corporation
14745376		[REDACTED]	EMC Corporation
14745669		[REDACTED]	EMC Corporation
14746510		SYSTEM FOR DISCOVERING BUGS USING INTERVAL ALGEBRA QUERY LANGUAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
14746546		SNAPSHOTTING OF A PERFORMANCE STORAGE SYSTEM IN A SYSTEM FOR PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	EMC Corporation
14747119		[REDACTED]	EMC Corporation
14747347		GENOMIC APPLICATION DATA STORAGE	EMC Corporation
14748503		[REDACTED]	EMC Corporation
14748556		[REDACTED]	EMC Corporation
14748671		OBJECT CLASSIFICATION AND IDENTIFICATION FROM RAW DATA	EMC Corporation
14748709		[REDACTED]	EMC Corporation
14748751		[REDACTED]	EMC Corporation
14749794		[REDACTED]	EMC Corporation
14749818		[REDACTED]	EMC Corporation
14749958		[REDACTED]	EMC Corporation
14750044		[REDACTED]	EMC Corporation
14750048		[REDACTED]	EMC Corporation
14750441		[REDACTED]	EMC Corporation
14751427		[REDACTED]	EMC Corporation
14751652		[REDACTED]	EMC Corporation
14751699		[REDACTED]	EMC Corporation
14751702		[REDACTED]	EMC Corporation
14751861		[REDACTED]	EMC Corporation
14751980		[REDACTED]	EMC Corporation
14752012		[REDACTED]	EMC Corporation
14752018		[REDACTED]	EMC Corporation
14752059		[REDACTED]	EMC Corporation
14752106		[REDACTED]	EMC Corporation
14752141		[REDACTED]	EMC Corporation
14752153		[REDACTED]	EMC Corporation
14752351		[REDACTED]	EMC Corporation
14752371		[REDACTED]	EMC Corporation
14752382		[REDACTED]	EMC Corporation
14752397		[REDACTED]	EMC Corporation
14752404		[REDACTED]	EMC Corporation
14752484		[REDACTED]	EMC Corporation
14752519		[REDACTED]	EMC Corporation
14752530		[REDACTED]	EMC Corporation
14752614		[REDACTED]	EMC Corporation
14752616		[REDACTED]	EMC Corporation
14752717		[REDACTED]	EMC Corporation
14752766		[REDACTED]	EMC Corporation
14752788		[REDACTED]	EMC Corporation
14753217		[REDACTED]	EMC Corporation
14753375		[REDACTED]	EMC Corporation
14753389		[REDACTED]	EMC Corporation
14753421		[REDACTED]	EMC Corporation
14753430		[REDACTED]	EMC Corporation
14753450		[REDACTED]	EMC Corporation
14753452		[REDACTED]	EMC Corporation
14753463		[REDACTED]	EMC Corporation
14753476		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14753510		[REDACTED]	EMC Corporation
14753561		[REDACTED]	EMC Corporation
14753758		[REDACTED]	EMC Corporation
14753831		[REDACTED]	EMC Corporation
14753930		[REDACTED]	EMC Corporation
14754065		[REDACTED]	EMC Corporation
14754094		[REDACTED]	EMC Corporation
14754819		[REDACTED]	EMC Corporation
14754838		[REDACTED]	EMC Corporation
14754865		[REDACTED]	EMC Corporation
14754961		[REDACTED]	EMC Corporation
14755001		[REDACTED]	EMC Corporation
14755012		[REDACTED]	EMC Corporation
14755066		[REDACTED]	EMC Corporation
14755114		[REDACTED]	EMC Corporation
14755130		[REDACTED]	EMC Corporation
14755142		[REDACTED]	EMC Corporation
14755164		[REDACTED]	EMC Corporation
14755210		[REDACTED]	EMC Corporation
14755248		[REDACTED]	EMC Corporation
14755258		[REDACTED]	EMC Corporation
14755292		[REDACTED]	EMC Corporation
14755298		[REDACTED]	EMC Corporation
14755311		[REDACTED]	EMC Corporation
14755331		[REDACTED]	EMC Corporation
14755384		[REDACTED]	EMC Corporation
14755499		[REDACTED]	EMC Corporation
14755517		[REDACTED]	EMC Corporation
14755630		[REDACTED]	EMC Corporation
14755667		[REDACTED]	EMC Corporation
14755678		[REDACTED]	EMC Corporation
14755706		[REDACTED]	EMC Corporation
14755711		[REDACTED]	EMC Corporation
14755744		[REDACTED]	EMC Corporation
14755761		[REDACTED]	EMC Corporation
14755789		[REDACTED]	EMC Corporation
14755808		[REDACTED]	EMC Corporation
14755849		[REDACTED]	EMC Corporation
14755855		[REDACTED]	EMC Corporation
14755914		[REDACTED]	EMC Corporation
14755937		[REDACTED]	EMC Corporation
14757999		[REDACTED]	EMC Corporation
14767387		[REDACTED]	EMC Corporation
14771703		[REDACTED]	EMC Corporation
14771743		MANAGING PROVISIONING OF STORAGE RESOURCES	EMC Corporation
14788071		[REDACTED]	EMC Corporation
14788079		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14788103		[REDACTED]	EMC Corporation
14788106		[REDACTED]	EMC Corporation
14788129		[REDACTED]	EMC Corporation
14788142		[REDACTED]	EMC Corporation
14788184		[REDACTED]	EMC Corporation
14788281		[REDACTED]	EMC Corporation
14788323		[REDACTED]	EMC Corporation
14788346		[REDACTED]	EMC Corporation
14788362		[REDACTED]	EMC Corporation
14788381		[REDACTED]	EMC Corporation
14788412		[REDACTED]	EMC Corporation
14788533		[REDACTED]	EMC Corporation
14788543		[REDACTED]	EMC Corporation
14788597		[REDACTED]	EMC Corporation
14788598		[REDACTED]	EMC Corporation
14788732		[REDACTED]	EMC Corporation
14788755		[REDACTED]	EMC Corporation
14788775		[REDACTED]	EMC Corporation
14789659		[REDACTED]	EMC Corporation
14789757		DATA MOVER DISCOVERY OF OBJECT EXTENT	EMC Corporation
14793583		AUTOMATED END-TO-END SALES PROCESS OF STORAGE APPLIANCES OF STORAGE SYSTEMS USING PREDICTIVE MODELING	EMC Corporation
14794708		ANOMALY DETECTION SYSTEM FOR ENTERPRISE NETWORK SECURITY	EMC Corporation
14797058		[REDACTED]	EMC Corporation
14801720		CUSTOMER CONTROLLED DATA PRIVACY PROTECTION IN PUBLIC CLOUD	EMC Corporation
14808238		[REDACTED]	EMC Corporation
14808369		[REDACTED]	EMC Corporation
14814235		[REDACTED]	EMC Corporation
14814474		[REDACTED]	EMC Corporation
14819333		ASYNCHRONOUS MULTI-NODE FILESYSTEM COORDINATED REPLICATION	EMC Corporation
14819920		[REDACTED]	EMC Corporation
14820026		[REDACTED]	EMC Corporation
14825724		[REDACTED]	EMC Corporation
14825845		PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM USING A PERFORMANCE SEGMENT STORAGE SYSTEM AND A SEGMENT STORAGE SYSTEM	EMC Corporation
14828851		[REDACTED]	EMC Corporation
14829478		[REDACTED]	EMC Corporation
14831138		[REDACTED]	EMC Corporation
14836761		[REDACTED]	EMC Corporation
14838940		[REDACTED]	EMC Corporation
14840476		[REDACTED]	EMC Corporation
14840573		[REDACTED]	EMC Corporation
14840685		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14842720		EFFICIENT FILE BROWSING USING KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
14847583		[REDACTED]	EMC Corporation
14849938		[REDACTED]	EMC Corporation
14850195		[REDACTED]	EMC Corporation
14850308		[REDACTED]	EMC Corporation
14850814		PARALLEL PROCESSING DATABASE TREE STRUCTURE	EMC Corporation
14853437		[REDACTED]	EMC Corporation
14854299		[REDACTED]	EMC Corporation
14854420		[REDACTED]	EMC Corporation
14856952		[REDACTED]	EMC Corporation
14857894		[REDACTED]	EMC Corporation
14858002		[REDACTED]	EMC Corporation
14858027		FILE BASED INCREMENTAL BLOCK BACKUP FROM USER MODE	EMC Corporation
14858376		[REDACTED]	EMC Corporation
14859152		MULTI STREAM DEDUPLICATED BACKUP OF COLLABORATION SERVER DATA	EMC Corporation
14859550		[REDACTED]	EMC Corporation
14859559		[REDACTED]	EMC Corporation
14860935		[REDACTED]	EMC Corporation
14861080		[REDACTED]	EMC Corporation
14861488		[REDACTED]	EMC Corporation
14861624		[REDACTED]	EMC Corporation
14861858		[REDACTED]	EMC Corporation
14862491		[REDACTED]	EMC Corporation
14862655		[REDACTED]	EMC Corporation
14862855		[REDACTED]	EMC Corporation
14863196		GENERATING A QR CODE	EMC Corporation
14863318		[REDACTED]	EMC Corporation
14863608		[REDACTED]	EMC Corporation
14863783		[REDACTED]	EMC Corporation
14863885		[REDACTED]	EMC Corporation
14863958		[REDACTED]	EMC Corporation
14864399		[REDACTED]	EMC Corporation
14864425		[REDACTED]	EMC Corporation
14865333		[REDACTED]	EMC Corporation
14865392		[REDACTED]	EMC Corporation
14866139		[REDACTED]	EMC Corporation
14866270		[REDACTED]	EMC Corporation
14867153		DETERMINING FAILURE LOCATION IN A STORAGE SYSTEM	EMC Corporation
14867158		PERFORMANCE OF DE-CLUSTERED DISK ARRAY	EMC Corporation
14867166		METHOD AND APPARATUS FOR ACCELERATING DATA RECONSTRUCTION FOR A DISK ARRAY	EMC Corporation
14867389		[REDACTED]	EMC Corporation
14867820		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14868142		[REDACTED]	EMC Corporation
14868499		[REDACTED]	EMC Corporation
14868512		[REDACTED]	EMC Corporation
14868567		[REDACTED]	EMC Corporation
14868577		[REDACTED]	EMC Corporation
14868596		[REDACTED]	EMC Corporation
14868618		[REDACTED]	EMC Corporation
14868675		[REDACTED]	EMC Corporation
14868676		[REDACTED]	EMC Corporation
14868687		[REDACTED]	EMC Corporation
14868693		[REDACTED]	EMC Corporation
14868694		[REDACTED]	EMC Corporation
14869195		[REDACTED]	EMC Corporation
14869354		[REDACTED]	EMC Corporation
14869431		[REDACTED]	EMC Corporation
14869461		[REDACTED]	EMC Corporation
14869777		[REDACTED]	EMC Corporation
14869787		[REDACTED]	EMC Corporation
14869960		[REDACTED]	EMC Corporation
14870053		[REDACTED]	EMC Corporation
14870088		[REDACTED]	EMC Corporation
14870093		[REDACTED]	EMC Corporation
14870116		[REDACTED]	EMC Corporation
14870128		[REDACTED]	EMC Corporation
14870147		[REDACTED]	EMC Corporation
14870151		[REDACTED]	EMC Corporation
14870159		[REDACTED]	EMC Corporation
14870165		[REDACTED]	EMC Corporation
14870167		[REDACTED]	EMC Corporation
14870190		[REDACTED]	EMC Corporation
14870218		[REDACTED]	EMC Corporation
14870308		[REDACTED]	EMC Corporation
14870336		[REDACTED]	EMC Corporation
14870350		[REDACTED]	EMC Corporation
14870407		[REDACTED]	EMC Corporation
14870423		[REDACTED]	EMC Corporation
14870462		[REDACTED]	EMC Corporation
14870475		[REDACTED]	EMC Corporation
14870492		[REDACTED]	EMC Corporation
14870506		[REDACTED]	EMC Corporation
14870514		[REDACTED]	EMC Corporation
14870529		[REDACTED]	EMC Corporation
14870537		[REDACTED]	EMC Corporation
14870556		[REDACTED]	EMC Corporation
14870565		[REDACTED]	EMC Corporation
14870595		[REDACTED]	EMC Corporation
14870660		[REDACTED]	EMC Corporation
14870668		[REDACTED]	EMC Corporation
14870709		[REDACTED]	EMC Corporation
14870717		[REDACTED]	EMC Corporation
14870718		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14870898		[REDACTED]	EMC Corporation
14870899		[REDACTED]	EMC Corporation
14870942		[REDACTED]	EMC Corporation
14870984		[REDACTED]	EMC Corporation
14871051		[REDACTED]	EMC Corporation
14871109		[REDACTED]	EMC Corporation
14871114		[REDACTED]	EMC Corporation
14871160		[REDACTED]	EMC Corporation
14871161		[REDACTED]	EMC Corporation
14871179		[REDACTED]	EMC Corporation
14871213		[REDACTED]	EMC Corporation
14871231		[REDACTED]	EMC Corporation
14871242		[REDACTED]	EMC Corporation
14871321		INTERCONNECT FLOW CONTROL	EMC Corporation
14871324		[REDACTED]	EMC Corporation
14871344		[REDACTED]	EMC Corporation
14871467		[REDACTED]	EMC Corporation
14871529		[REDACTED]	EMC Corporation
14871530		[REDACTED]	EMC Corporation
14871592		[REDACTED]	EMC Corporation
14871698		[REDACTED]	EMC Corporation
14871749		[REDACTED]	EMC Corporation
14871751		[REDACTED]	EMC Corporation
14871760		[REDACTED]	EMC Corporation
14871803		[REDACTED]	EMC Corporation
14871909		[REDACTED]	EMC Corporation
14872075		[REDACTED]	EMC Corporation
14872135		[REDACTED]	EMC Corporation
14872218		[REDACTED]	EMC Corporation
14872233		[REDACTED]	EMC Corporation
14872346		[REDACTED]	EMC Corporation
14872395		[REDACTED]	EMC Corporation
14872515		[REDACTED]	EMC Corporation
14874020	9361592	AUTOMATED DEFECT AND OPTIMIZATION DISCOVERY	EMC Corporation
14874911		[REDACTED]	EMC Corporation
14875546	9389964	READ-WRITE ACCESS IN A READ-ONLY ENVIRONMENT	EMC Corporation
14878921		CLUSTER STORAGE USING SUBSEGMENTING FOR EFFICIENT STORAGE	EMC Corporation
14881055		UPDATING KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
14882931		ENABLING NON-VOLATILE RANDOM ACCESS TO DATA	EMC Corporation
14883082		PROCESSING AN INPUT/ OUTPUT OPERATION REQUEST	EMC Corporation
14883112		DISK DATA MANAGEMENT	EMC Corporation
14883138		DATA CACHE AND METHOD FOR DATA CACHING	EMC Corporation
14884501		ASSIGNING LOCK RESOURCES TO OBJECTS	EMC Corporation
14902100		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14919039		CLUSTER FILE SERVER PROXY SERVER FOR BACKUP AND RECOVERY	EMC Corporation
14921515		[REDACTED]	EMC Corporation
14924550		DYNAMIC GRAPH ANOMALY DETECTION FRAMEWORK AND SCALABLE SYSTEM ARCHITECTURE	EMC Corporation
14924636		[REDACTED]	EMC Corporation
14928986		[REDACTED]	EMC Corporation
14929788		[REDACTED]	EMC Corporation
14938692		SYNCHRONIZED FILE MANAGEMENT ACROSS MULTIPLE DISPARATE ENDPOINTS	EMC Corporation
14939562		[REDACTED]	EMC Corporation
14940450		[REDACTED]	EMC Corporation
14941184		DECLARATIVE CLUSTER MANAGEMENT	EMC Corporation
14949063		[REDACTED]	EMC Corporation
14952140		[REDACTED]	EMC Corporation
14952505		[REDACTED]	EMC Corporation
14954043		[REDACTED]	EMC Corporation
14954620		[REDACTED]	EMC Corporation
14958469		[REDACTED]	EMC Corporation
14960244		TRANSMITTING FILESYSTEM CHANGES OVER A NETWORK	EMC Corporation
14960267		DYNAMIC PRIORITIZED RECOVERY	EMC Corporation
14961763		[REDACTED]	EMC Corporation
14961764		[REDACTED]	EMC Corporation
14962052		[REDACTED]	EMC Corporation
14963079		TRACKING FILES EXCLUDED FROM BACKUP	EMC Corporation
14964498		[REDACTED]	EMC Corporation
14966569		[REDACTED]	EMC Corporation
14966613		[REDACTED]	EMC Corporation
14966637		[REDACTED]	EMC Corporation
14967555		[REDACTED]	EMC Corporation
14968251		[REDACTED]	EMC Corporation
14968360		COMPUTING AND OBTAINING FAULT RELATED INFORMATION	EMC Corporation
14968399		SOFTWARE TESTING	EMC Corporation
14968416		[REDACTED]	EMC Corporation
14968421		[REDACTED]	EMC Corporation
14968431		[REDACTED]	EMC Corporation
14968434		CONTROLLING SHARING OF RESOURCE AMONG A PLURALITY OF NODES	EMC Corporation
14968745		VIRTUAL MACHINE CAPACITY PLANNING	EMC Corporation
14968773		SYSTEM AND METHOD FOR SMART FRAMEWORK FOR NETWORK BACKUP SOFTWARE DEBUGGING	EMC Corporation
14969801		[REDACTED]	EMC Corporation
14970903		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14970976		PROVIDING ACCESS TO RESOURCES	EMC Corporation
14970978		PROCESSING TRANSACTIONS IN A SYNCHRONIZED REPLICATION SYSTEM	EMC Corporation
14971006		QUALITY OF SERVICE SETTING	EMC Corporation
14971010		MANAGING A PERIPHERAL COMPONENT INTERFACE EXPRESS DEVICE HOTPLUG	EMC Corporation
14971036		ANALYZING USER BEHAVIORS	EMC Corporation
14971043		REUSING STORAGE BLOCKS OF A FILE SYSTEM	EMC Corporation
14971076		QUOTA BASED RESOURCE MANAGEMENT	EMC Corporation
14971107		MANAGEMENT OF STORAGE DEVICES	EMC Corporation
14971112		[REDACTED]	EMC Corporation
14971137		PROVIDING STORAGE SERVICE TO TENANT IN CLOUD STORAGE ENVIRONMENT	EMC Corporation
14971220		[REDACTED]	EMC Corporation
14971249		[REDACTED]	EMC Corporation
14971770		[REDACTED]	EMC Corporation
14971808		[REDACTED]	EMC Corporation
14971935		[REDACTED]	EMC Corporation
14972377		[REDACTED]	EMC Corporation
14972613		[REDACTED]	EMC Corporation
14973160		AUTOMATICALLY TESTING FIRMWARE	EMC Corporation
14973204		[REDACTED]	EMC Corporation
14973245		[REDACTED]	EMC Corporation
14973258		[REDACTED]	EMC Corporation
14973281		[REDACTED]	EMC Corporation
14973412		SMART MULTIMEDIA PROCESSING	EMC Corporation
14973950		[REDACTED]	EMC Corporation
14974177		[REDACTED]	EMC Corporation
14974231		[REDACTED]	EMC Corporation
14974286		[REDACTED]	EMC Corporation
14974364		[REDACTED]	EMC Corporation
14974419		[REDACTED]	EMC Corporation
14974454		[REDACTED]	EMC Corporation
14974462		[REDACTED]	EMC Corporation
14974613		[REDACTED]	EMC Corporation
14974982		[REDACTED]	EMC Corporation
14974989		[REDACTED]	EMC Corporation
14975072		[REDACTED]	EMC Corporation
14975296		[REDACTED]	EMC Corporation
14975317		[REDACTED]	EMC Corporation
14975445		[REDACTED]	EMC Corporation
14976156		[REDACTED]	EMC Corporation
14976168		[REDACTED]	EMC Corporation
14976325		[REDACTED]	EMC Corporation
14976332		[REDACTED]	EMC Corporation
14976499		[REDACTED]	EMC Corporation
14976532		[REDACTED]	EMC Corporation
14976719		[REDACTED]	EMC Corporation
14976727		[REDACTED]	EMC Corporation
14977042		[REDACTED]	EMC Corporation
14977221		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14977960		[REDACTED]	EMC Corporation
14978351		[REDACTED]	EMC Corporation
14978378		[REDACTED]	EMC Corporation
14978424		[REDACTED]	EMC Corporation
14978444		[REDACTED]	EMC Corporation
14978480		[REDACTED]	EMC Corporation
14978520		[REDACTED]	EMC Corporation
14979218		[REDACTED]	EMC Corporation
14979453		[REDACTED]	EMC Corporation
14979484		[REDACTED]	EMC Corporation
14979727		TEXT COMPRESSION AND DECOMPRESSION	EMC Corporation
14979750		PERFORMING CROSS-LAYER ORCHESTRATION OF RESOURCES IN DATA CENTER HAVING MULTI-LAYER ARCHITECTURE	EMC Corporation
14979890		[REDACTED]	EMC Corporation
14979897		[REDACTED]	EMC Corporation
14979913		[REDACTED]	EMC Corporation
14980023		[REDACTED]	EMC Corporation
14980032		[REDACTED]	EMC Corporation
14980037		[REDACTED]	EMC Corporation
14980039		[REDACTED]	EMC Corporation
14980101		[REDACTED]	EMC Corporation
14980252		[REDACTED]	EMC Corporation
14980479		[REDACTED]	EMC Corporation
14980490		[REDACTED]	EMC Corporation
14980501		[REDACTED]	EMC Corporation
14980510		[REDACTED]	EMC Corporation
14980676		[REDACTED]	EMC Corporation
14980889		[REDACTED]	EMC Corporation
14980928		[REDACTED]	EMC Corporation
14980944		[REDACTED]	EMC Corporation
14981560		[REDACTED]	EMC Corporation
14981671		[REDACTED]	EMC Corporation
14981686		[REDACTED]	EMC Corporation
14981692		[REDACTED]	EMC Corporation
14981695		[REDACTED]	EMC Corporation
14981698		[REDACTED]	EMC Corporation
14982007		[REDACTED]	EMC Corporation
14982012		[REDACTED]	EMC Corporation
14982020		[REDACTED]	EMC Corporation
14982026		[REDACTED]	EMC Corporation
14982063		[REDACTED]	EMC Corporation
14982341		[REDACTED]	EMC Corporation
14982351		[REDACTED]	EMC Corporation
14982355		[REDACTED]	EMC Corporation
14982597		[REDACTED]	EMC Corporation
14982625		[REDACTED]	EMC Corporation
14982639		[REDACTED]	EMC Corporation
14982776		[REDACTED]	EMC Corporation
14982798		[REDACTED]	EMC Corporation
14982951		[REDACTED]	EMC Corporation
14982963		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14982971		[REDACTED]	EMC Corporation
14982976		[REDACTED]	EMC Corporation
14983039		[REDACTED]	EMC Corporation
14983203		[REDACTED]	EMC Corporation
14983269		[REDACTED]	EMC Corporation
14983319		[REDACTED]	EMC Corporation
14983631		[REDACTED]	EMC Corporation
14983666		[REDACTED]	EMC Corporation
14983699		[REDACTED]	EMC Corporation
14983866		FAILURE RECOVERY IN A STORAGE DEVICE	EMC Corporation
14983914		[REDACTED]	EMC Corporation
14983920		[REDACTED]	EMC Corporation
14983932		[REDACTED]	EMC Corporation
14983943		[REDACTED]	EMC Corporation
14983952		[REDACTED]	EMC Corporation
14983958		[REDACTED]	EMC Corporation
14983966		[REDACTED]	EMC Corporation
14983971		[REDACTED]	EMC Corporation
14983981		[REDACTED]	EMC Corporation
14983991		[REDACTED]	EMC Corporation
14984004		[REDACTED]	EMC Corporation
14984060		[REDACTED]	EMC Corporation
14984063		[REDACTED]	EMC Corporation
14984137		[REDACTED]	EMC Corporation
14984163		[REDACTED]	EMC Corporation
14984185		[REDACTED]	EMC Corporation
14984192		PASSIVE SAN DISCOVERY	EMC Corporation
14984219		[REDACTED]	EMC Corporation
14984224		[REDACTED]	EMC Corporation
14984279		[REDACTED]	EMC Corporation
14984296		[REDACTED]	EMC Corporation
14984301		[REDACTED]	EMC Corporation
14984312		[REDACTED]	EMC Corporation
14984317		[REDACTED]	EMC Corporation
14984324		[REDACTED]	EMC Corporation
14984334		[REDACTED]	EMC Corporation
14984376		[REDACTED]	EMC Corporation
14984502		RECOGNIZING HARD DISK MOVEMENT	EMC Corporation
14984579		MONITORING TARGET OBJECT BY MULTIPLE CAMERAS	EMC Corporation
14984737		[REDACTED]	EMC Corporation
14984749		[REDACTED]	EMC Corporation
14984824		[REDACTED]	EMC Corporation
14984864		[REDACTED]	EMC Corporation
14985518		[REDACTED]	EMC Corporation
14985612		[REDACTED]	EMC Corporation
14985656		[REDACTED]	EMC Corporation
14985706		[REDACTED]	EMC Corporation
14985735		[REDACTED]	EMC Corporation
14985749		[REDACTED]	EMC Corporation
14985769		[REDACTED]	EMC Corporation
14986066		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14986276		[REDACTED]	EMC Corporation
14986309		[REDACTED]	EMC Corporation
14992099		[REDACTED]	EMC Corporation
14994734		EFFICIENT BACKUP OF VIRTUAL DATA	EMC Corporation
14997980		AUTOMATED DEFECT DIAGNOSIS FROM MACHINE DIAGNOSTIC DATA	EMC Corporation
14998102		[REDACTED]	EMC Corporation
14998112		[REDACTED]	EMC Corporation
14998139		[REDACTED]	EMC Corporation
14998374		[REDACTED]	EMC Corporation
15000709		BLOCK BASED INCREMENTAL BACKUP FROM USER MODE	EMC Corporation
15001784		[REDACTED]	EMC Corporation
15001789		[REDACTED]	EMC Corporation
15004800		SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION AND COMPRESSION OF SEGMENTS	EMC Corporation
15005810		[REDACTED]	EMC Corporation
15005817		[REDACTED]	EMC Corporation
15007087		EFFICIENT STORAGE TIERING	EMC Corporation
15042022		[REDACTED]	EMC Corporation
15056072		[REDACTED]	EMC Corporation
15056115		[REDACTED]	EMC Corporation
15056439		[REDACTED]	EMC Corporation
15057631		[REDACTED]	EMC Corporation
15057849		[REDACTED]	EMC Corporation
15059011		[REDACTED]	EMC Corporation
15064183		PRIVACY SCREEN-BASED SECURITY	EMC Corporation
15064314		[REDACTED]	EMC Corporation
15064829		[REDACTED]	EMC Corporation
15065353		[REDACTED]	EMC Corporation
15066221		[REDACTED]	EMC Corporation
15066235		[REDACTED]	EMC Corporation
15066291		[REDACTED]	EMC Corporation
15067489		ASSURED FEDERATED RECORDS MANAGEMENT	EMC Corporation
15067564		[REDACTED]	EMC Corporation
15069283		[REDACTED]	EMC Corporation
15070450		[REDACTED]	EMC Corporation
15071009		METHOD TO INPUT CONTENT IN A STRUCTURED MANNER WITH REAL-TIME ASSISTANCE AND VALIDATION	EMC Corporation
15071311		[REDACTED]	EMC Corporation
15071862		[REDACTED]	EMC Corporation
15072981		[REDACTED]	EMC Corporation
15073944		[REDACTED]	EMC Corporation
15074037		[REDACTED]	EMC Corporation
15074063		FRAMEWORK FOR CALCULATING GROUPED OPTIMIZATION ALGORITHMS WITHIN A DISTRIBUTED DATA STORE	EMC Corporation

Application Number	Registration Number	Title	Owner
15075038		[REDACTED]	EMC Corporation
15075887		[REDACTED]	EMC Corporation
15076034		[REDACTED]	EMC Corporation
15076224		[REDACTED]	EMC Corporation
15076775		[REDACTED]	EMC Corporation
15076946		[REDACTED]	EMC Corporation
15077179		[REDACTED]	EMC Corporation
15077183		[REDACTED]	EMC Corporation
15077184		[REDACTED]	EMC Corporation
15077372		[REDACTED]	EMC Corporation
15078375		[REDACTED]	EMC Corporation
15078672		[REDACTED]	EMC Corporation
15078688		[REDACTED]	EMC Corporation
15079197		[REDACTED]	EMC Corporation
15079208		[REDACTED]	EMC Corporation
15079219		[REDACTED]	EMC Corporation
15079228		[REDACTED]	EMC Corporation
15079896		[REDACTED]	EMC Corporation
15080437		[REDACTED]	EMC Corporation
15080448		[REDACTED]	EMC Corporation
15080483		[REDACTED]	EMC Corporation
15080490		[REDACTED]	EMC Corporation
15080495		[REDACTED]	EMC Corporation
15080499		[REDACTED]	EMC Corporation
15080543		[REDACTED]	EMC Corporation
15080554		[REDACTED]	EMC Corporation
15081137		[REDACTED]	EMC Corporation
15081470		[REDACTED]	EMC Corporation
15081531		[REDACTED]	EMC Corporation
15082670		[REDACTED]	EMC Corporation
15082679		[REDACTED]	EMC Corporation
15083324		[REDACTED]	EMC Corporation
15083600		[REDACTED]	EMC Corporation
15083662		[REDACTED]	EMC Corporation
15083685		[REDACTED]	EMC Corporation
15083687		[REDACTED]	EMC Corporation
15083873		[REDACTED]	EMC Corporation
15083911		[REDACTED]	EMC Corporation
15083956		[REDACTED]	EMC Corporation
15083958		[REDACTED]	EMC Corporation
15084208		[REDACTED]	EMC Corporation
15084234		[REDACTED]	EMC Corporation
15084242		[REDACTED]	EMC Corporation
15084285		[REDACTED]	EMC Corporation
15084324		[REDACTED]	EMC Corporation
15084346		[REDACTED]	EMC Corporation
15084398		[REDACTED]	EMC Corporation
15084529		[REDACTED]	EMC Corporation
15084559		[REDACTED]	EMC Corporation
15084604		[REDACTED]	EMC Corporation
15084672		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
15084739		[REDACTED]	EMC Corporation
15084790		[REDACTED]	EMC Corporation
15084810		[REDACTED]	EMC Corporation
15084819		[REDACTED]	EMC Corporation
15084996		[REDACTED]	EMC Corporation
15085123		[REDACTED]	EMC Corporation
15085142		[REDACTED]	EMC Corporation
15085148		[REDACTED]	EMC Corporation
15085168		[REDACTED]	EMC Corporation
15085172		[REDACTED]	EMC Corporation
15085173		[REDACTED]	EMC Corporation
15085181		[REDACTED]	EMC Corporation
15085188		[REDACTED]	EMC Corporation
15085234		[REDACTED]	EMC Corporation
15085276		[REDACTED]	EMC Corporation
15085282		[REDACTED]	EMC Corporation
15085292		[REDACTED]	EMC Corporation
15085876		[REDACTED]	EMC Corporation
15085908		[REDACTED]	EMC Corporation
15085937		[REDACTED]	EMC Corporation
15085964		[REDACTED]	EMC Corporation
15086276		[REDACTED]	EMC Corporation
15086390		[REDACTED]	EMC Corporation
15086429		[REDACTED]	EMC Corporation
15086439		[REDACTED]	EMC Corporation
15086503		[REDACTED]	EMC Corporation
15086508		[REDACTED]	EMC Corporation
15086514		[REDACTED]	EMC Corporation
15086519		[REDACTED]	EMC Corporation
15086547		[REDACTED]	EMC Corporation
15086565		[REDACTED]	EMC Corporation
15086581		[REDACTED]	EMC Corporation
15086593		[REDACTED]	EMC Corporation
15086629		[REDACTED]	EMC Corporation
15086632		[REDACTED]	EMC Corporation
15086644		[REDACTED]	EMC Corporation
15086647		[REDACTED]	EMC Corporation
15086747		[REDACTED]	EMC Corporation
15086758		[REDACTED]	EMC Corporation
15086780		[REDACTED]	EMC Corporation
15086807		[REDACTED]	EMC Corporation
15086839		[REDACTED]	EMC Corporation
15086859		[REDACTED]	EMC Corporation
15086877		[REDACTED]	EMC Corporation
15086946		[REDACTED]	EMC Corporation
15086966		[REDACTED]	EMC Corporation
15086979		[REDACTED]	EMC Corporation
15086989		[REDACTED]	EMC Corporation
15087000		[REDACTED]	EMC Corporation
15087067		[REDACTED]	EMC Corporation
15087188		[REDACTED]	EMC Corporation
15087792		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
15087806		[REDACTED]	EMC Corporation
15087817		[REDACTED]	EMC Corporation
15088029		[REDACTED]	EMC Corporation
15092250		[REDACTED]	EMC Corporation
15095920		[REDACTED]	EMC Corporation
15095953		[REDACTED]	EMC Corporation
15096622		[REDACTED]	EMC Corporation
15096646		[REDACTED]	EMC Corporation
15096683		[REDACTED]	EMC Corporation
15096883		[REDACTED]	EMC Corporation
15096978		[REDACTED]	EMC Corporation
15097589		[REDACTED]	EMC Corporation
15097598		[REDACTED]	EMC Corporation
15097978		[REDACTED]	EMC Corporation
15098845		[REDACTED]	EMC Corporation
15135817		[REDACTED]	EMC Corporation
15136190		[REDACTED]	EMC Corporation
15136327		[REDACTED]	EMC Corporation
15136425		[REDACTED]	EMC Corporation
15136574		[REDACTED]	EMC Corporation
15138807		[REDACTED]	EMC Corporation
15139881		[REDACTED]	EMC Corporation
15143941		[REDACTED]	EMC Corporation
15150263		[REDACTED]	EMC Corporation
15155475		[REDACTED]	EMC Corporation
15165437		[REDACTED]	EMC Corporation
15166741		[REDACTED]	EMC Corporation
15167222		[REDACTED]	EMC Corporation
15168642		[REDACTED]	EMC Corporation
15174175		[REDACTED]	EMC Corporation
15175630		[REDACTED]	EMC Corporation
15176656		[REDACTED]	EMC Corporation
15180406		[REDACTED]	EMC Corporation
15180438		[REDACTED]	EMC Corporation
15181347		[REDACTED]	EMC Corporation
15188006		[REDACTED]	EMC Corporation
15190056		[REDACTED]	EMC Corporation
15190448		[REDACTED]	EMC Corporation
15190518		[REDACTED]	EMC Corporation
15191039		[REDACTED]	EMC Corporation
15191324		[REDACTED]	EMC Corporation
15191361		[REDACTED]	EMC Corporation
15191766		[REDACTED]	EMC Corporation
15192212		[REDACTED]	EMC Corporation
15192352		[REDACTED]	EMC Corporation
15193611		[REDACTED]	EMC Corporation
15194019		[REDACTED]	EMC Corporation
15194173		[REDACTED]	EMC Corporation
15194189		[REDACTED]	EMC Corporation
15194327		[REDACTED]	EMC Corporation
15194890		[REDACTED]	EMC Corporation
15195854		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
15195864		[REDACTED]	EMC Corporation
15195919		[REDACTED]	EMC Corporation
15196110		[REDACTED]	EMC Corporation
15196152		[REDACTED]	EMC Corporation
15196163		[REDACTED]	EMC Corporation
15196261		[REDACTED]	EMC Corporation
15196283		[REDACTED]	EMC Corporation
15197580		[REDACTED]	EMC Corporation
15197863		[REDACTED]	EMC Corporation
15198046		[REDACTED]	EMC Corporation
15198284		[REDACTED]	EMC Corporation
15198404		[REDACTED]	EMC Corporation
15199689		[REDACTED]	EMC Corporation
29/133035	D501011	DISK CARTRIDGE	EMC Corporation
29/141540	D462987	BOOK COVER WITH HANDLES	EMC Corporation
29167918	D486494	FRONT PANEL FOR ELECTRONIC CABINET (DESIGN)	EMC Corporation
29193835	D496050	FRONT PANEL FOR ELECTRONIC CABINET (DESIGN)	EMC Corporation
29195342	D516929	AUTHENTICATION DEVICE	EMC Corporation
29195343	D511983	SECURITY DEVICE	EMC Corporation
29213687	D513007	FRONT PANEL FOR AN ELECTRONIC CABINET	EMC Corporation
29214508	D517440	SECURITY DEVICE	EMC Corporation
29243882	D534448	AUTHENTICATION DEVICE	EMC Corporation
29259339	D570851	FRONT PANEL FOR AN ELECTRONIC CABINET	EMC Corporation
29478002	D748661	DISPLAY SCREEN WITH GRAPHICAL USER INTERFACE	EMC Corporation
29486559		[REDACTED]	EMC Corporation
29486566		[REDACTED]	EMC Corporation
29486571		[REDACTED]	EMC Corporation
29492424	D743399	FLASH MODULE	EMC Corporation
62088427		[REDACTED]	EMC Corporation
62093899		[REDACTED]	EMC Corporation
62107156		[REDACTED]	EMC Corporation
62148984		[REDACTED]	EMC Corporation
62151747		[REDACTED]	EMC Corporation
62163782		[REDACTED]	EMC Corporation
62215624		[REDACTED]	EMC Corporation
62222436		[REDACTED]	EMC Corporation
90005180	RE5692129	MANAGING APPLICATION PROGRAMS IN A COMPUTER NETWORK BY USING A DATABASE OF APPLICATION OBJECTS	EMC Corporation
9374221		DISTRIBUTED PROTECTION OF CREDENTIAL STORES UTILIZING MULTIPLE KEYS DERIVED FROM A MASTER KEY	EMC Corporation
9389965		SYSTEM AND METHOD FOR IMPROVING PERFORMANCE OF BACKUP STORAGE SYSTEM WITH FUTURE ACCESS PREDICTION	EMC Corporation
9395935		INTER-STORAGE PROCESSOR STORAGE POOL JOB STATUS COMMUNICATION	EMC Corporation
9396061		AUTOMATED REPAIR OF STORAGE SYSTEM COMPONENTS VIA DATA ANALYTICS	EMC Corporation

Application Number	Registration Number	Title	Owner
9396071		SYSTEM AND METHOD FOR PRESENTING VIRTUAL MACHINE (VM) BACKUP INFORMATION FROM MULTIPLE BACKUP SERVERS	EMC Corporation
9396207		FINE GRAINED TIERED STORAGE WITH THIN PROVISIONING	EMC Corporation
9396243		HASH-BASED REPLICATION USING SHORT HASH HANDLE AND IDENTITY BIT	EMC Corporation
9396341		DATA ENCRYPTION IN A DE-DUPLICATING STORAGE IN A MULTI-TENANT ENVIRONMENT	EMC Corporation
9396349		METHOD AND APPARATUS FOR SHARING DATA FROM A SECURED ENVIRONMENT	EMC Corporation
9397992		AUTHENTICATION USING COLOR-SHAPE PAIRINGS	EMC Corporation
9398005		MANAGING SEED PROVISIONING	EMC Corporation
9398016		CACHE-FREE AND LOCK-FREE HANDLING OF SECURITY INFORMATION FOR MULTIPLE DISTRIBUTED OBJECTS IN PROTECTION STORAGE SYSTEMS	EMC Corporation
9398092		FEDERATED RESTORE OF CLUSTER SHARED VOLUMES	EMC Corporation
9398720		CHASSIS WITH AIRFLOW AND THERMAL MANAGEMENT	EMC Corporation
9400610		METHOD FOR CLEANING A DELTA STORAGE SYSTEM	EMC Corporation
9400611		DATA MIGRATION IN CLUSTER ENVIRONMENT USING HOST COPY AND CHANGED BLOCK TRACKING	EMC Corporation
9400613		INTELLIGENT PAIRING FOR SNAPSHOT BASED BACKUPS	EMC Corporation
9400741		RECLAIMING SPACE FROM FILE SYSTEM HOSTING MANY PRIMARY STORAGE OBJECTS AND THEIR SNAPSHOTS	EMC Corporation
9400792		FILE SYSTEM INLINE FINE GRAINED TIERING	EMC Corporation
9401838		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
9401905		TRANSFERRING SOFT TOKEN AUTHENTICATION CAPABILITIES TO A NEW DEVICE	EMC Corporation
9405583		RESOURCE PROVISIONING BASED ON LOGICAL PROFILES AND PIECEWISE OBJECTIVE FUNCTIONS	EMC Corporation
9407759		TELEPHONIC COMMUNICATION REDIRECTION AND COMPLIANCE PROCESSING	EMC Corporation
9413825		MANAGING FILE OBJECTS IN A DATA STORAGE SYSTEM	EMC Corporation
9413856		DETECTING TIME ZONES USING HISTORICAL DATE SAMPLING	EMC Corporation
09261906	6148414	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
09374640	6182161	METHOD AND APPARATUS FOR BUILDING SOFTWARE NETS USING AN ARRAY STRUCTURE	EMC Corporation

Application Number	Registration Number	Title	Owner
09399581	6385674	SYSTEMS AND METHODS FOR DYNAMIC ALIGNMENT OF ASSOCIATED PORTIONS OF A CODE WORD FROM A PLURALITY OF ASYNCHRONOUS SOURCES	EMC Corporation
09428157	6321294	METHOD AND APPARATUS FOR CONVERTING BETWEEN LOGICAL AND PHYSICAL MEMORY SPACE IN A RAID SYSTEM	EMC Corporation
09578530	6389559	CONTROLLER FAIL-OVER WITHOUT DEVICE BRING-UP	EMC Corporation
09578830	6351831	STORAGE NETWORK CABLING VERIFICATION SYSTEM	EMC Corporation
09657258	6912668	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
09718647	6732290	RECOVERY SYSTEM FOR RAID WRITE	EMC Corporation
09777139	7062648	SYSTEM AND METHOD FOR REDUNDANT ARRAY NETWORK STORAGE	EMC Corporation
09777149	6810398	SYSTEM AND METHOD FOR UNORCHESTRATED DETERMINATION OF DATA SEQUENCES USING STICKY BYTE FACTORING TO DETERMINE BREAKPOINTS IN DIGITAL SEQUENCES	EMC Corporation
09777150	6704730	HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
09781920	7194504	SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION AND TRANSCRIPTION TECHNIQUES	EMC Corporation
09782613	6826711	SYSTEM AND METHOD FOR DATA PROTECTION WITH MULTIDIMENSIONAL PARITY	EMC Corporation
09815824	7299290	METHOD AND SYSTEM FOR PROVIDING MULTIMEDIA INFORMATION ON DEMAND OVER WIDE AREA NETWORKS	EMC Corporation
10006929	7266706	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
10046070	6857059	STORAGE VIRTUALIZATION SYSTEM AND METHODS	EMC Corporatio
10198728	7404206	NETWORK SECURITY DEVICES AND METHODS	EMC Corporation
10302716	7194656	SYSTEMS AND METHODS FOR IMPLEMENTING CONTENT SENSITIVE ROUTING OVER A WIDE AREA NETWORK (WAN)	EMC Corporation
11031628	7577817	STORAGE VIRTUALIZATION SYSTEM AND METHODS	EMC Corporation
11082178	7246260	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
11177924	7975018	SYSTEMS AND METHODS FOR PROVIDING DISTRIBUTED CACHE COHERENCE	EMC Corporation
11261943	7783716	SYSTEMS AND METHODS FOR IMPLEMENTING CONTENT SENSITIVE ROUTING OVER A WIDE AREA NETWORK (WAN)	EMC Corporation
11486754	7475207	MAINTAINING WRITE ORDER FIDELITY ON A MULTI-WRITER SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
12899315	9031993	CUSTOMIZABLE LIBRARY FOR INFORMATION TECHNOLOGY DESIGN AND MANAGEMENT USING EXPERT KNOWLEDGE BASE	EMC Corporation
12899435	8880682	INTEGRATED FORENSICS PLATFORM FOR ANALYZING IT RESOURCES CONSUMED TO DERIVE OPERATIONAL AND ARCHITECTURAL RECOMMENDATIONS	EMC Corporation
13727677	9063861	HOST BASED HINTS	EMC Corporation
13926218	9146878	STORAGE RECOVERY FROM TOTAL CACHE LOSS USING JOURNAL-BASED REPLICATION	EMC Corporation
14496262	9026729	DATA RECOVERY AFTER TRIPLE DISK FAILURE	EMC Corporation
13720003	8994514	EVENT INDICATOR CREATION USING FIRST AND SECOND SETS OF VALUES	EMC Corporation
14042142	9131624	RACK-MOUNTABLE IT DEVICE	EMC Corporation
13/536384	8949255	METHODS AND APPARATUS FOR CAPTURE AND STORAGE OF SEMANTIC INFORMATION WITH SUB-FILES IN A PARALLEL COMPUTING SYSTEM	EMC Corporation
13536289	9298733	STORING FILES IN A PARALLEL COMPUTING SYSTEM BASED ON USER OR APPLICATION SPECIFICATION	EMC Corporation
13536315	8825652	SMALL FILE AGGREGATION IN A PARALLEL COMPUTING SYSTEM	EMC Corporation
13536331	9087075	STORING FILES IN A PARALLEL COMPUTING SYSTEM USING LIST-BASED INDEX TO IDENTIFY REPLICA FILES	EMC Corporation
13536358	9165014	METHODS AND APPARATUS FOR MULTI-RESOLUTION REPLICATION OF FILES IN A PARALLEL COMPUTING SYSTEM USING SEMANTIC INFORMATION	EMC Corporation
13536369	8868576	STORING FILES IN A PARALLEL COMPUTING SYSTEM BASED ON USER-SPECIFIED PARSER FUNCTION	EMC Corporation
13676000	9286261	ARCHITECTURE AND METHOD FOR A BURST BUFFER USING FLASH TECHNOLOGY	EMC Corporation
13676019	9158540	METHOD AND APPARATUS FOR OFFLOADING COMPUTE RESOURCES TO A FLASH CO-PROCESSING APPLIANCE	EMC Corporation
14143771	9245048	PARALLEL SORT WITH A RANGED, PARTITIONED KEY-VALUE STORE IN A HIGH PERFORMANCE COMPUTING ENVIRONMENT	EMC Corporation
11193729	7920050	PROXY DEVICE FOR ENHANCED PRIVACY IN AN RFID SYSTEM	EMC Corporation
13/730058	9317521	CLOUD OBJECT STORE FOR CHECKPOINTS OF HIGH PERFORMANCE COMPUTING APPLICATIONS USING DECOUPLING MIDDLEWARE	EMC Corporation
13174177	9009385	CO-RESIDENCY DETECTION IN A CLOUD-BASED SYSTEM	EMC Corporation
13336692	8689282	SECURITY POLICY ENFORCEMENT FRAMEWORK FOR CLOUD-BASED INFORMATION PROCESSING SYSTEMS	EMC Corporation
13/730097	9069778	CLOUD OBJECT STORE FOR ARCHIVE STORAGE OF HIGH PERFORMANCE COMPUTING DATA USING DECOUPLING MIDDLEWARE	EMC Corporation

Application Number	Registration Number	Title	Owner
13073461	8732702	FILE SYSTEM FOR STORAGE AREA NETWORK	EMC Corporation
13731663	9128739	DETERMINING INSTANCES TO MAINTAIN ON AT LEAST ONE CLOUD RESPONSIVE TO AN EVALUATION OF PERFORMANCE CHARACTERISTICS	EMC Corporation
13/731663	9128739	DETERMINING INSTANCES TO MAINTAIN ON AT LEAST ONE CLOUD RESPONSIVE TO AN EVALUATION OF PERFORMANCE CHARACTERISTICS	EMC Corporation
000189063	000189063	SECURITY DEVICE	EMC Corporation
000189071	000189071	AUTHENTICATION DEVICE	EMC Corporation
000316609	0100316609	SECURITY DEVICE	EMC Corporation
0306153.8	2383450	SYSTEM AND METHOD FOR HEIRARCHICAL DATA STORAGE	EMC Corporation
1695CHE2015		FAILOVER IN A SAN ENVIRONMENT	EMC Corporation
2000-321951	3712932	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE SYSTEM	EMC Corporation
2001929	2001929	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
2002750	2002750	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
200410098531.5		METHOD AND APPARATUS FOR DATA RETENTION IN A STORAGE SYSTEM	EMC Corporation
2030438	2030438	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
2056235	2056235	ON-LINE RESTORATION OF REDUNDANCY INFORMATION IN A REDUNDANT ARRAY SYSTEM	EMC Corporation
2058734	2058734	Storage Device Array Architecture with Copyback Cache	EMC Corporation
2091993	2091993	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
2148105	2148105	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
2172075	2172075	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
2182791	2182791	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
2223933	2223933	Method for managing globally distributed software components	EMC Corporation
2226189	2226189	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
2226360	2226360	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
28304186	2109004	APPARATUS AND METHOD FOR SYNCHRONIZING SEPARATE TIME OPERATOR	EMC Corporation
3-338882	3071017	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
395488	1167971	EXTERNAL MICROCIDE OPERATION IN A MULTI-LEVEL MICROPROCESSOR	EMC Corporation

Application Number	Registration Number	Title	Owner
401467		ARITHMETIC UNIT FOR USE IN DATA PROCESSING SYSTEMS	EMC Corporation
401513	1180002	Magnetic Disk Drive Having a Movable Drive Motor	EMC Corporation
403453	1174768	DIGITAL DATA PROCESSING SYSTEM-FHP	EMC Corporation
403454	1174766	DIGITAL DATA PROCESSING SYSTEM- FHP	EMC Corporation
403455	1174767	DIGITAL COMPUTER SYSTEM HAVING UNIQUE MEANS OF REFERRING TO OPERANDS AND ABILITY TO EXECUTE A PLURALITY OF INTERNAL LANGUAGES	EMC Corporation
403456	1179063	DATA PROCESSING SYSTEM HAVING A MEMORY USING OBJECT-BASED INFORMATION AND A PROTECTION SCHEME FOR DETERMINING ACCESS RIGHTS TO SUCH INFORMATION	EMC Corporation
403457	1173172	DATA PROCESSING SYSTEM USING OBJECT-BASED INFORMATION AND A PROTECTION SCHEME FOR DETERMINING ACCESS RIGHTS TO SUCH INFORMATION AND USING MULTILEVEL MICROCODE TECHNIQUES	EMC Corporation
404845	1180449	FIXED POINT AND FLOATING POINT COMPUTATION UNITS USING COMMONLY SHARED CONTROL FIELDS	EMC Corporation
406715	1173177	APPARATUS AND METHOD FOR SIMULTANEOUSLY DISPLAY OF CHARACTERS OF VARIABLE SIZE	EMC Corporation
406721	1189645	APPARATUS AND METHOD FOR SIMULTANEOUS DISPLAY OF CHARACTERS OF VARIABLE SIZE AND DENSITY	EMC Corporation
410514	1188284	Flexible Magnetic Disk Drive Using a Rigid Cartridge	EMC Corporation
42734/97	696346	Method and system for integrating additional functionality into a login system	EMC Corporation
439800	1204218	DIGITAL DATA PROCESSING SYSTEM HAVING DUAL-PURPOSE SCRATCHPAD AND ADDRESS TRANSLATION MEMORY	EMC Corporation
4452989	630635	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
4-504448	3129732	Storage Device Array Architecture with Copyback Cache	EMC Corporation
453646	1178714	DIGITAL DATA PROCESSING SYSTEM-FHP	EMC Corporation
459145	1207915	DATA PROCESSING SYSTEM HAVING DUAL PROCESSORS	EMC Corporation
467561	1200317	FIXED POINT AND FLOATING POINT COMPUTATION UNITS USING COMMONLY SHARED CONTROL FIELDS	EMC Corporation
488882	1246257	SYSTEM FOR GENERATING DISPLAY DATA	EMC Corporation
505280/1997	3279319	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
5114761989	3021503	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
514515/91	3156083	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
519325/1996	2868315	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation

Application Number	Registration Number	Title	Owner
523998	1270957	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
54578/94	673393	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
62704	62704	DATA PROCESSING SYSTEM	EMC Corporation
63879	63879	EXTERNAL MICROCIDE OPERATION IN A MULTI-LEVEL MICROPROCESSOR	EMC Corporation
65123	65123	DATA PROCESSING SYSTEM USING OBJECT-BASED INFORMATION AND A PROTECTION SCHEME FOR DETERMINING ACCESS RIGHTS TO SUCH INFORMATION AND USING MULTILEVEL MICROCODE TECHNIQUES	EMC Corporation
6568686	587087	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
69806914.5	69806914.5	AN AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
700894/1993	137406	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
704437/1996	256594	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
75541	75541	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV....	EMC Corporation
75542	75542	DPS HAVING A UNIQUE MEMORY SYSTEM (EAGLE)	EMC Corporation
75543	75543	EAGLE DATA PROCESSING SYSTEM	EMC Corporation
75544	75544	DPS HAVING UNIQUE INSTRUCTION RESPONSIVE MEANS	EMC Corporation
80 14929	2 486 291	MANAGEMENT OF MASS MEMORY	EMC Corporation
81300560.0	35334	MICROECLIPSE DATA PROCESSING SYSTEM	EMC Corporation
81305587.8	P3176135.6	EXTERNAL MICROCIDE OPERATION IN A MULTI-LEVEL MICROPROCESSOR	EMC Corporation
81305587.8	057788	EXTERNAL MICROCIDE OPERATION IN A MULTI-LEVEL MICROPROCESSOR	EMC Corporation
81305587.8	0057788	EXTERNAL MICROCIDE OPERATION IN A MULTI-LEVEL MICROPROCESSOR	EMC Corporation
82302080.5	0064826	ARITHMETIC UNIT FOR USE IN DATA PROCESSING SYSTEMS	EMC Corporation
82302080.5	0064826	ARITHMETIC UNIT FOR USE IN DATA PROCESSING SYSTEMS	EMC Corporation
82302998.8	0067667	FIXED POINT AND FLOATING POINT COMPUTATION UNITS USING COMMONLY SHARED CONTROL FIELDS	EMC Corporation
82302998.8	0067667	FIXED POINT AND FLOATING POINT COMPUTATION UNITS USING COMMONLY SHARED CONTROL FIELDS	EMC Corporation
83200684.5	97977	DATA PROCESSING SYSTEM "ALPHA" MICROECLIPSE	EMC Corporation
84200987.0	0137525	ARITHMETIC UNIT FOR USE IN DATA PROCESSING SYSTEMS	EMC Corporation
84200987.0	0137525	ARITHMETIC UNIT FOR USE IN DATA PROCESSING	EMC Corporation

Application Number	Registration Number	Title	Owner
		SYSTEMS	
84200991.2	0137526	ARITHMETIC UNIT FOR USE IN A DATA PROCESSING SYSTEM FOR COMPUTING EXPONENT RESULTS AND DETECTING OVERFLOW AND UNDERFLOW CONDITIONS THEREOF	EMC Corporation
84200991.2	0137526	ARITHMETIC UNIT FOR USE IN A DATA PROCESSING SYSTEM FOR COMPUTING EXPONENT RESULTS AND DETECTING OVERFLOW AND UNDERFLOW CONDITIONS THEREOF	EMC Corporation
84201482.1	0150522	DATA PROCESSING SYSTEM	EMC Corporation
84201482.1	150522	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV….	EMC Corporation
84310/91	660939	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
85 17645	2 590 700	DISC INTERFACE LOGIC	EMC Corporation
8-505969	2941947	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
85200462.1	164138	MICROECLIPSE DATA PROCESSING SYSTEM	EMC Corporation
85304505.2	0173429	DATA PROCESSING SYSTEM WITH UNIFIED I/O CONTROL AND ADAPTED FOR DISPLAY OF GRAPHICS	EMC Corporation
85304505.2	0173429	DATA PROCESSING SYSTEM WITH UNIFIED I/O CONTROL AND ADAPTED FOR DISPLAY OF GRAPHICS	EMC Corporation
8619369.5	2182226	DISTRIBUTED SWITCHING ARCHITECTURE	EMC Corporation
86309239.1	E71754	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	P3683481.5	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING THE GENERATION OF SEPARATE, FREE-RUNNING, TIME-DEPENDENT CODES	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
87108428	108847	Head-Gimble Protection for a Disk Drive	EMC Corporation
89311715.0	68926436T2	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89311715.0	0369707	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89311715.0	0369707	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89311715.0	0369707	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89311715.0	0369707	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89912316.0	68928316.4	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
89912316.0	0441840	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
89912316.0	0441840	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
90005180	RE5692129	MANAGING APPLICATION PROGRAMS IN A COMPUTER NETWORK BY USING A DATABASE OF APPLICATION OBJECTS	EMC Corporation
90313205.8	0438877	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
90313205.8	0438877	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
90313205.8	0438877	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
90313205.8	0438877	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
91310909.6	69129444	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91310909.6	0492808	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91310909.6	0492808	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91310909.6	0492808	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91310909.6	0492808	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91312104.2	69126416.3	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91312104.2	0493984	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91312104.2	0493984	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91312104.2	0493984	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91312104.2	0493984	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91908123.2	69128284.6	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
91908123.2	0532514	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
91908123.2	0532514	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
91908123.2	0532514	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
91908123.2	0532514	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
93.1062	302986	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
93005211.24	2108621	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
931276	101432	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
9792058-1	42285	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
98912005.0	0972240	AN AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
98912005.0	0972240	AN AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
AT(EP)90916922.9	AT(EP)0497889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
AU1992495	AU681500	METHOD AND APPARATUS FOR UTILIZING A TOKEN FOR RESOURCE ACCESS	EMC Corporation
AU2004239738	AU2004239738	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
AU2004272083	AU2004272083	SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
AU2004300140	AU2004300140	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
AU2005283167	AU2005283167	METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
AU2011209673	AU2011209673	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
AU2011223767	AU2011223767	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
AU5627898	AU739898	METHOD OF AND APPARATUS FOR PROVIDING SECURE DISTRIBUTED DIRECTORY SERVICES AND PUBLIC KEY INFRASTRUCTURE	EMC Corporation
AU6720890	AU642362	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
AU7981691	AU649190	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
BE(EP)90916922.9	BE(EP)0497889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
BE(EP)91910198.1	BE(EP)549984	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
BR1020140104909		HETEROSCEDASTIC DATA COMPRESSION USING ARIMA-GARCH MODEL ESTIMATION	EMC Corporation
BR1120120186434		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation

Application Number	Registration Number	Title	Owner
BR112012022088 8		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
CA2072150	CA2072150	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
CA2094026	CA2094026	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION$METHODE ET APPAREIL D'IDENTIFICATION DE PERSONNES	EMC Corporation
CA2183629	CA2183629	METHOD AND APPARATUS FOR UTILIZING A TOKEN FOR RESOURCE ACCESS	EMC Corporation
CA2223941	CA2223941	RESERVED CYLINDER FOR SCSI DEVICE WRITE-BACK CACHE	EMC Corporation
CA2316355	CA2316355	System And Method For Monitoring Quality Of Service Over Network	EMC Corporation
CA2318908	CA2318908	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
CA2363726	CA2363726	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
CA2454203	CA2454203	NETWORK SECURITY DEVICES AND METHODS	EMC Corporation
CA2549092	CA2549092	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
CA2642145	CA2642145	SYSTEMS AND METHODS FOR OBTAINING ULTRA-HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
CA2698210	CA2698210	SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
CA2751180		SYSTEM AND METHOD FOR SECURE AND RELIABLE MULTI-CLOUD DATA REPLICATION	EMC Corporation
CA2759612		METHOD AND SYSTEM FOR SECURING DATA	EMC Corporation
CA2766731		METHOD AND SYSTEM FOR CLOUD BASED STORAGE	EMC Corporation
CA2787933		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
CA2791566		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
CA2808516		SYSTEM AND METHOD FOR DATA DEDUPLICATION FOR DISK STORAGE SUBSYSTEMS	EMC Corporation
CH(EP)90916922 .9	CH(EP)0497 889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
CH(EP)91910198 .1	CH(EP)0555 219	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
CH83200684.5	CH0097977	DATA PROCESSING SYSTEM "ALPHA" MICROECLIPSE	EMC Corporation
CN 201610141381.4		METHOD AND APPARATUS FOR DATA STORAGE BASED ON APPLICATION OPTIMIZATION	EMC Corporation
CN00804532.1	CN00804532. 1	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation

Application Number	Registration Number	Title	Owner
CN01820889.4	CN ZL01820889.4	RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SYSTEMS	EMC Corporation
CN01821116.X	ZL01821116.X	METHOD AND APPARATUS FOR BACKING UP AND RESTORING COMPUTER DATA	EMC Corporation
CN01821130.5	CN ZL01821130	METHOD OF IMPROVING THE AVAILABILITY OF COMPUTER CLUSTERING SYSTEMS THROUGH THE USE OF A NETWORK MEDIUM LINK STATE	EMC Corporation
CN02804805.9	CN ZL02804805.9	METHOD FOR COMPUTING UNIQUE INDEX OF ELECTRONIC MAIL MESSAGE TO EFFECT DUPLICATION OF STORAGE	EMC Corporation
CN02806662.6	ZL02806662.6	NETWORK FILE SHARING METHOD AND SYSTEM	EMC Corporation
CN02809378.X	CN ZL 02809378.X	SELECTION OF A RESOURCE IN A DISTRIBUTED COMPUTER SYSTEM	EMC Corporation
CN02812792.7	CN ZL02812792.7	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
CN02816665.5	ZL02816665.5	SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
CN02818424.6	ZL02818424.6	EFFICIENT MANAGEMENT OF LARGE FILES	EMC Corporation
CN02818844.6	ZL02818844.6	SHARING OBJECTS BETWEEN COMPUTER SYSTEMS	EMC Corporation
CN02818848.9		EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
CN02823706.4	CN02823706.4	PRESERVING A SNAPSHOT OF SELECTED DATA OF A MASS STORAGE SYSTEM	EMC Corporation
CN03800377.5	CN363382	COPY-ON WRITE SNAPSHOT FOR VIRTUAL STORAGE DEVICE	EMC Corporation
CN03800378.3	CN03800378.3	VIRTUAL STORAGE DEVICES	EMC Corporation
CN03801721.0	CN03801721.0	DYNAMIC RDF GROUPS	EMC Corporation
CN200380100380.6	ZL200380100380.6	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
CN200410098532.X	CN200410098532.X	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
CN200480008082.9	CN200480008082.9	VIRTUAL ORDERED WRITES	EMC Corporation
CN200480030360.0		EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC KEY GENERATIONS	EMC Corporation
CN200480030394.X		SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
CN200480033059.5	ZL200480033059.5	SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
CN200480038039.7	CN443505	METHOD FOR TRANSFERRING DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
CN200510089040.9	CN479193	METHODS AND APPARATUS FOR ACCESSING CONTENT IN A VIRTUAL POOL ON A CONTENT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
CN200510107957.7	CN436890	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
CN200580031384.2	ZL20058003 1384.2	STORING DATA REPLICAS REMOTELY	EMC Corporation
CN200580033052.8	ZL20058003 3052.8	INDEX PROCESSING	EMC Corporation
CN200580033141.2	ZL20058003 3141.2	FILE INDEX PROCESSING	EMC Corporation
CN200580035170.2		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
CN200580044663.2	ZL20058004 4663.2	BACKUP INFORMATION MANAGEMENT	EMC Corporation
CN200580046178.9	ZL20058004 6178.9	CONTENT ADDRESSED STORAGE DEVICE AND METHOD FOR STORING DATA THEREIN	EMC Corporation
CN200580046233.4	ZL20058004 6233.4	IMPLEMENTING APPLICATION SPECIFIC MANAGEMENT POLICIES ON A CONTENT ADDRESSED STORAGE DEVICE	EMC Corporation
CN200580048139.2	CN10120866 8B	SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
CN200580048140.5	CN10057346 2C	SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
CN200680002191.9	CN20068000 2191.9	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
CN200680002192.3	ZL20068000 2192.3	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
CN200680003967.9	CN1153416	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
CN200680005222.6	ZL20068000 5222.6	METHOD OF DISTRIBUTING DERIVATIVE SEEDS (AMENDED)	EMC Corporation
CN200680012117.5	ZL20068001 2117.5	TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
CN200680023506.8	ZL20068002 3506.8	REDIRECTING AND MIRRORING OF TELEPHONIC COMMUNICATIONS	EMC Corporation
CN200680029860.1	ZL20068002 9860.1	INFORMATION PROTECTION METHOD AND SYSTEM	EMC Corporation
CN200680030146.4	ZL20068003 0146.4	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
CN200680031467.6	CN10125348 4B	CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
CN200680047701.4	CN848333	CONTINUOUS BACKUP	EMC Corporation
CN200710089364.1	ZL20071008 9364.1	SYSTEM AND METHOD OF INDEXING UNIQUE ELECTRONIC MAIL MESSAGES AND USES OF THE SAME	EMC Corporation
CN200780009902.X	ZL20078009 902.X	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
CN200780011007.1	CN1178990	ACCESSING DATA STORAGE DEVICES	EMC Corporation

Application Number	Registration Number	Title	Owner
CN200780016456.5	CN1360387	METHODS AND APPARATUS FOR TRANSFERRING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
CN200780016805.3	CN101449269B	AUTOMATED PRIORITY RESTORES	EMC Corporation
CN200780021765.1	ZL200780021765.1	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
CN200810173557.X	CN101515273B	SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
CN200810189560.0	ZL200810189560.0	AUTHENTICATED SERVICE VIRTUALIZATION	EMC Corporation
CN200880012226.6	ZL200880012226.6	SEEDING REPLICATION	EMC Corporation
CN200880017055.6	ZL200880017055.6	AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
CN200880019270.X	ZL200880019270.X	CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
CN200880100725.0	ZL200880100725.0	SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
CN200880103418.8	ZL200880103418.8	SYSTEM AND METHOD FOR PROVIDING WRITE-ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
CN200880105823.3	ZL200880105823.3	DE-DUPLICATION IN VIRTUALIZED SERVER AND VIRTUALIZED STORAGE ENVIRONMENTS	EMC Corporation
CN200880113184.5	ZL200880113184.5	POLICY BASED FILE MANAGEMENT	EMC Corporation
CN200980133628.6	ZL200980133628.6	METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
CN200980145334.5	ZL200980145334.5	DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
CN201010255371.6		SYSTEM AND METHOD OF FILE LOCKING WITHIN A NETWORK FILE SYSTEM FEDERATED NAMESPACE	EMC Corporation
CN201010297739.5		MONITORING CIRCUIT	EMC Corporation
CN201010508441.4		PROVIDING SECURITY MECHANISMS FOR VIRTUAL MACHINE IMAGES	EMC Corporation
CN201010601491.7	ZL201010601491.7	APPARATUSES AND METHODS FOR INFORMATION TECHNOLOGY RESOURCE ALLOCATION AND USAGE TRACKING IN CLOUD SYSTEMS	EMC Corporation
CN201010601493.6	ZL201010601493.6	METHOD AND DEVICE FOR HARDENING A SOFTWARE EXECUTION IN RANDOM ACCESS STORAGE DEVICE	EMC Corporation
CN201010603127.4	ZL201010603127.4	STORAGE SPACE RECLAIMING METHOD ON WINDOWS PLATFORM FOR VIRTUAL PROVISIONING	EMC Corporation
CN201010603144.8	ZL201010603144.8	METHOD TO ROBUSTLY ELECT THE MASTER USING SHARED-DISK QUORUM DEVICES IN A CLUSTER WITH DYNAMIC NUMBER OF NODES AND UNCERTAIN CONNECTIVITY	EMC Corporation
CN201010612937.6	ZL201010612937.6	HOUSING SYSTEM FOR RECEPTACLES	EMC Corporation

Application Number	Registration Number	Title	Owner
CN201080015183.4	CN102439560A	DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
CN201080028493.X		SYSTEM AND METHOD FOR PROVIDING LONG-TERM STORAGE FOR DATA	EMC Corporation
CN201080036014.9		SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION OF SEGMENTS	EMC Corporation
CN201080042904.0		SNAPSHOTTING OF A PERFORMANCESTORAGE SYSTEM IN A SYSTEM FOR PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	EMC Corporation
CN201080063921.2		SYSTEMS AND METHODS FOR FACILITATING DATA DISCOVERY	EMC Corporation
CN201110069907.X	ZL201110069907.X	FILE SYSTEM FOR STORAGE AREA NETWORK	EMC Corporation
CN201110166629.X		METHOD AND APPARATUS TO CONSTRUCT A SECURE COMPUTING ENVIRONMENT FROM TRUSTED BOOTABLE STORAGE	EMC Corporation
CN201110289091.1	ZL201110289091.1	IMPROVE CACHE COHERENCE THROUGH DELEGATION AND REFERRAL IN CLUSTER FILE SYSTEM	EMC Corporation
CN201110322410.4	ZL201110322410.4	IMPLEMENTING APPLICATION SPECIFIC MANAGEMENT POLICIES ON A CONTENT ADDRESSED STORAGE DEVICE	EMC Corporation
CN201110429998.3		METHOD AND APPARATUS FOR REALTIME DATA PROCESSING	EMC Corporation
CN201110430012.4		METHOD AND APPARATUS FOR INDICATING ALIVENESS OF NODES IN CLUSTER	EMC Corporation
CN201110456748.9		APPARATUS AND METHOD FOR MANAGING DATA BACKUP JOBS	EMC Corporation
CN201110456770.3	ZL201110456770.3	METHOD AND APPARATUS FOR OVER-TEMPERATURE PROTECTION OF DEVICES	EMC Corporation
CN201180013029.8		INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
CN201180041638.4		DATA ACCESS DURING DATA RECOVERY	EMC Corporation
CN201180046629.4		OPTIMIZED RECOVERY	EMC Corporation
CN201180046759.8		TRANSMITTING FILESYSTEM CHANGES OVER A NETWORK	EMC Corporation
CN201180063279.2		EFFICIENT STORAGE TIERING	EMC Corporation
CN201210102386.8		CONVENIENT EVALUATION AND COMPARISON PLATFORM FOR DATABASE PARTITIONING SCHEMES	EMC Corporation
CN201210103120.5	ZL201210103120.5	HYPERVISOR COORDINATED VIRTUAL CLUSTER SNAPSHOT	EMC Corporation
CN201210103128.1		METHOD AND APPARATUS FOR SAVING SNAPSHOT IN A FILESYSTEM	EMC Corporation
CN201210103131.3		METHOD, DEVICE AND COMPUTER PROGRAM FOR ACCELERATING SPEED OF BRING SNAPSHOT SERVICE BACK ONLINE	EMC Corporation
CN201210103132		METHOD AND APPARATUS FOR MAINTAINING	EMC Corporation

Application Number	Registration Number	Title	Owner
.8		SOFTWARE SYSTEM	
CN201210169887.8	ZL201210169887.8	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
CN201210206505.4		CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
CN201210236447.X		METHOD AND SYSTEM FOR RECLAIMING STORAGE SPACE	EMC Corporation
CN201210299545.8	CN102999543	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
CN201210366772.8		INTERACTIVE VISUAL DATA MINING FOR INCREASING CLASSIFICATION ACCURACY	EMC Corporation
CN201210375612.X		METHOD AND SYSTEM FOR MANAGING VIRTUAL MACHINE DISKS	EMC Corporation
CN201210387802.3		METHOD AND SYSTEM FOR DATABASE PARTITIONING	EMC Corporation
CN201210403383.8	ZL201210403383.8	TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
CN201210417663.4		METHODS AND APPARATUSES FOR DIAGNOSING AND REMEDIATION OF FAULTS IN SYSTEMS	EMC Corporation
CN201210422261.3	ZL201210422261.3	AUTOMATED PRIORITY RESTORES AND ASSOCIATED DEVICES/COMPUTER PROGRAM PRODUCTS	EMC Corporation
CN201210439999.0		ANALYSIS SYSTEM FOR INTELLIGENT CUSTOMER SERVICE BASED ON COMMON SEQUENCE PATTERN	EMC Corporation
CN201210440761.X		METHOD AND APPARATUS OF PROVIDING CACHING SERVICE IN NETWORK ARCHITECTURES	EMC Corporation
CN201210519142.X		METHOD AND APPARATUS FOR IDENTIFYING IMAGE CONTENT	EMC Corporation
CN201210571064.8		APPARATUS AND METHOD FOR SEARCHING INFORMATION	EMC Corporation
CN201210595674.1		SYSTEM AND METHOD FOR OPTIMIZING VIRTUAL DATA CENTER PROVISIONING WITH DOMAIN-KNOWLEDGE	EMC Corporation
CN201210595746.2		VPN AUTHENTICATION METHOD BASED ON QR CODE	EMC Corporation
CN201210595747.7		METHOD AND SYSTEM FOR DATA PROTECTION	EMC Corporation
CN201210596218.9		METHOD AND APPARATUS FOR MANAGING MEMORY SPACE	EMC Corporation
CN201210596219.3		METHOD, SYSTEM AND APPARATUS FOR SAFELY OPERATING COMPUTER	EMC Corporation
CN201280024354.9		SYSTEM AND METHOD FOR MAINTAINING CONSISTENT POINTS IN FILE SYSTEMS USING A PRIME DEPENDENCY LIST	EMC Corporation
CN201280025403.0		RESOURCE EFFICIENT SCALE-OUT FILE SYSTEMS	EMC Corporation
CN201280025415.3		TIME-BASED DATA PARTITIONING	EMC Corporation
CN201280062095.9		EFFICIENT BACKUP REPLICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
CN201310060863.3		METHOD, APPARATUS AND SYSTEM FOR COLLECTING DATA IN INTERNET OF THINGS	EMC Corporation
CN201310078391.4		METHOD AND APPARATUS FOR PARALLEL COMPUTING	EMC Corporation
CN201310086342.5		METHOD AND SYSTEM FOR DETERMINING CORRECTNESS OF AN APPLICATION	EMC Corporation
CN201310095686.2		METHOD AND APPARATUS FOR DATA COPY	EMC Corporation
CN201310095687.7		METHOD AND APPARATUS FOR DATA MANAGEMENT IN MULTI-TENANT DISTRIBUTIVE ENVIRONMENT	EMC Corporation
CN201310095688.1		METHOD AND APPARATUS FOR DATABASE SEARCH	EMC Corporation
CN201310262708.X		METHOD AND APPARATUS FOR DOCUMENT RECOMMENDATION	EMC Corporation
CN201310272835.8		DATA TRANSFER METHOD AND APPARTUS	EMC Corporation
CN201310272881.8		APPARATUS AND METHOD FOR MEASURING PERFORMANCE OF A STORAGE SYSTEM	EMC Corporation
CN201310338314.8		METHOD AND SYSTEM FOR PROFILE MANAGEMENT AND ACCESS CONTROL IN HETEROGENEOUS CONVERGENT COMMUNICATION NETWORKS	EMC Corporation
CN201310441156.9		METHOD AND APPARATUS FOR TROUBLESHOOTING BASED ON LOG SIMILARITY	EMC Corporation
CN201310453061.9		HIDDEN FAULT DETECTION CIRCUIT AND METHOD FOR DETECTING HIDDEN FAULT WITH HIDDEN FAULT DETECTION CIRCUIT	EMC Corporation
CN201310466038.3		METHOD AND DEVICE FOR REMOVING CACHE DATA	EMC Corporation
CN201310466056.1		METHOD AND APPARATUS FOR FILE SYSTEM	EMC Corporation
CN201310724704.9		METHOD AND APPARATUS FOR CONFIGURING A DATA CENTER	EMC Corporation
CN201310724705.3		METHOD AND APPARATUS FOR FAULT HANDLING	EMC Corporation
CN201310724717.6		DATA COPY AVOIDANCE ACROSS A STORAGE	EMC Corporation
CN201310737050.3		METHOD AND APPARATUS FOR OPINION DATA MANAGEMENT	EMC Corporation
CN201310750589.2		METHOD AND APPARATUS FOR MANAGING NETWORK ATTACHED STORAGE	EMC Corporation
CN201310750628.9		METHOD AND APPARATUS FOR MANAGING MEMORY	EMC Corporation
CN201310750662.6		AN APPARATUS AND METHOD FOR A NETWORK STORAGE NODE, A NETWORK STORAGE NODE USING THE SAME, AND A NETWORK STORAGE SYSTEM	EMC Corporation
CN201310755993.9		INCLUDING KERNEL OBJECT INFORMATION IN A USER DUMP	EMC Corporation

Application Number	Registration Number	Title	Owner
CN201310755994.3		METHOD AND SYSTEM FOR PROVIDING VIRTUAL STORAGE POOLS TO TARGET APPLICATIONS	EMC Corporation
CN201310755995.8		STORAGE DEVICE AND METHOD THEREFOR	EMC Corporation
CN201310756036.8		METHOD AND APPARATUS FOR DATA MINING	EMC Corporation
CN201310756039.1		APPARATUS AND METHOD FOR FACILITATING ACCESS TO DATA IN DISTRIBUTED STORAGE SYSTEMS	EMC Corporation
CN201310756078.1		METHOD AND APPARATUS FOR MANAGING RESOURCE ALLOCATION IN HIERARCHICAL QUOTA SYSTEMS	EMC Corporation
CN201380010077.0		SYSTEMS AND METHODS INVOLVING VIRTUAL MACHINE HOST ISOLATION OVER A NETWORK	EMC Corporation
CN201380050816.9		SYSTEM AND METHOD FOR FULL VIRTUAL MACHINE BACKUP USING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
CN201380054172.0		FORMAT IDENTIFICATION FOR FRAGMENTED BYTE ALIGNED INTEGER IMAGE DATA	EMC Corporation
CN201380054188.1		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
CN201410135582.4		METHOD AND APPARATUS FOR AUTOMATICALLY RELOCATING DATA BETWEEN STORAGE ARRAYS	EMC Corporation
CN201410135607.0		APPARATUS, METHOD AND SYSTEM FOR MANAGING POWER	EMC Corporation
CN201410135626.3		APPARATUS AND METHOD FOR FACILITATING MANAGING OF RESOURCES	EMC Corporation
CN201410135651.1		METHOD AND APPARATUS OF STORAGE EXPANSION IN VIRTUAL STORAGE SYSTEM	EMC Corporation
CN201410135722.8		METHOD AND APPARATUS FOR ACCESS DATA	EMC Corporation
CN201410135820.1		METHOD AND APPARATUS FOR MONITORING THE HEALTH CONDITION OF A HARD DISK	EMC Corporation
CN201410136587.9		METHOD AND APPARATUS FOR DYNAMIC STORAGE TIERING	EMC Corporation
CN201410407394.2		SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
CN201410520353.4		METHOD AND SYSTEM FOR GENERATING TWO-DIMENSIONAL CODE	EMC Corporation
CN201410527596.0		METHOD AND APPARATUS FOR DETERMINING A FAILURE POSITION IN A STORAGE SYSTEM	EMC Corporation
CN201410527635.7		METHOD AND APPARATUS FOR ACCELERATING DATA RECONSTRUCTION FOR A DISK ARRAY	EMC Corporation
CN201410527708.2		METHOD AND APPARATUS FOR IMPROVING PERFORMANCE OF A DECLUSTERED DISK ARRAY	EMC Corporation
CN201410562076.3		METHOD AND APPARATUS FOR ENABLING NON-VOLATILE RANDOM ACCESS OF DATA	EMC Corporation
CN201410562464.1		METHOD AND APPARATUS FOR PROCESSING INPUT/OUTPUT OPERATION REQUEST	EMC Corporation
CN201410562465		DATA CACHE DEVICE AND METHOD FOR DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
.6		CACHING	
CN201410562531.X		METHOD AND APPARATUS FOR DISK DATA MANAGEMENT	EMC Corporation
CN201410573345.6		METHOD AND APPARATUS FOR ASSIGNING LOCK RESOURCE FOR OBJECTS	EMC Corporation
CN201410813707.4		COMPUTING DEVICE AND METHOD FOR OBTAINING FAULT RELATED INFORMATION	EMC Corporation
CN201410813708.9		METHOD AND APPARATUS FOR MANAGING RESOURCES BASED ON QUOTA	EMC Corporation
CN201410813709.3		METHOD AND APPARATUS FOR MANAGEMENT OF STORAGE DEVICES	EMC Corporation
CN201410813967.1		METHOD AND SYSTEM FOR AUTOMATICALLY TESTING FIRMWARE	EMC Corporation
CN201410813970.3		SYSTEM AND METHOD FOR MANAGING HOTPLUG OF PERIPHERAL COMPONENT INTERCONNECT DEVICE	EMC Corporation
CN201410854536.X		METHOD AND COMPUTING DEVICE FOR SOFTWARE TEST	EMC Corporation
CN201480006056.6		DATA ANALYTICS PLATFORM OVER PARALLEL DATABASES AND DISTRIBUTED FILE SYSTEMS	EMC Corporation
CN201480071862.1		PARALLEL ON-PREMISES AND CLOUD-BASED AUTHENTICATION	EMC Corporation
CN201510003757.0		METHOD AND APPARATUS FOR ANALYZING USER BEHAVIOR	EMC Corporation
CN201510003758.5		METHOD AND APPARATUS FOR MONITORING A TARGET OBJECT BY A PLURALITY OF CAMERAS	EMC Corporation
CN201510003759.X		METHOD AND APPARATUS FOR TEXT COMPRESSION AND DECOMPRESSION	EMC Corporation
CN201510004540.1		METHOD AND SYSTEM FOR HARD DISK MOVEMENT RECOGNITION	EMC Corporation
CN201510004571.7		METHOD AND APPARATUS FOR IMPROVING SETTING OF QUALITY OF SERVICE	EMC Corporation
CN201510004776.5		METHOD AND APPARATUS FOR REUSING STORAGE BLOCKS OF A FILE SYSTEM	EMC Corporation
CN201510004778.4		METHOD AND APPARATUS FOR PROCESSING TRANSACTIONS IN A SYNCHRONIZED REPLICATION SYSTEM	EMC Corporation
CN201510004779.9		METHOD AND SYSTEM FOR PROVIDING ACCESS TO RESOURCES	EMC Corporation
CN201510004780.1		METHOD AND APPARATUS FOR CONTROLLING SHARING OF RESOURCES AMONG A PLURALITY OF NODES	EMC Corporation
CN201510004936.6		METHOD AND APPARATUS FOR CROSS-LAYER ORCHESTRATION OF RESOURCES AND MULTI-LAYER ARCHITECTURE DATACENTER	EMC Corporation
CN201510004937.0		METHOD AND APPARATUS FOR PROVIDING STORAGE SERVICE TO A TENANT IN A CLOUD STORAGE ENVIRONMENT	EMC Corporation
CN201510004939.X		A METHOD FOR PROCESSING INTELLIGENT RICH-MEDIA AND SYSTEM THEREOF	EMC Corporation
CN201510004940		METHOD AND APPARATUS FOR FAILURE	EMC Corporation

Application Number	Registration Number	Title	Owner
.2		RECOVERY IN STORAGE DEVICE	
CN201510035650.4		METHOD AND SYSTEM FOR SERVICE-AWARE PARITY PLACEMENT IN A STORAGE SYSTEM	EMC Corporation
CN201510035668.4		METHOD AND SYSTEM FOR SERVICE-AWARE DATA PLACEMENT IN A STORAGE SYSTEM	EMC Corporation
CN201510178736 2		METHOD AND APPARATUS FOR FAILING BACK BLOCK OBJECTS IN BATCH	EMC Corporation
CN201510178760 6		METHOD AND SYSTEM FOR PROVIDING SECURE ACCESS TO DATA IN MOBILE DEVICES	EMC Corporation
CN201510181573 3		METHOD, COALESCING CONFIGURATION ENGINE, COALESCING CONFIGURATION TOOL, AND FILE SYSTEM FOR STORAGE SYSTEM	EMC Corporation
CN201510181882 0		METHOD AND SYSTEM FOR DETECTING AND HANDLING ERRORS IN BUS FABRIC	EMC Corporation
CN201510184287 2		METHOD AND APPARATUS FOR SCALING OUT STORAGE DEVICES AND SCALED-OUT STORAGE DEVICES	EMC Corporation
CN201510184340 9		METHOD AND APPARATUS OF CONSTRUCTING SCALABLE STORAGE DEVICES, AND SCALED STORAGE DEVICES	EMC Corporation
CN201510184385 6		METHOD AND APPARATUS FOR EXTENDING CACHE OF STORAGE SYSTEM	EMC Corporation
CN201510184593 6		METHOD AND APPARATUS FOR IMPLEMENTING MULTIPLE CONTENT MANAGEMENT SERVICES OPERATIONS	EMC Corporation
CN201510184900 0		DATA STORAGE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
CN201510185150 9		METHODS AND APPARATUSES FOR CONTENT RESOURCE MANAGEMENT	EMC Corporation
CN201510185152 8		APPARATUS AND METHOD FOR TESTING STORAGE NETWORK	EMC Corporation
CN201510338000.7		MIGRATING PRIVATE INFRASTRUCTURE SERVICES TO A CLOUD	EMC Corporation
CN201510342013.1		SOFTWARE OVERLAYS FOR DISAGGREGATED COMPONENTS	EMC Corporation
CN201510353440.X		METHOD AND DEVICE FOR MANAGING STORAGE ARRAY CONFIGURATION	EMC Corporation
CN201510353628.4		CONTENT FABRIC FOR A DISTRIBUTED FILE SYSTEM	EMC Corporation
CN201510358868.3		CLOUDBOOK	EMC Corporation
CN201510358888.0		DETERMINING SERVER LOCATION IN A DATA CENTER	EMC Corporation
CN201510358972.2		APPLICATION AND INFORMATION MOVEMENT IN A CLOUD ENVIRONMENT	EMC Corporation
CN201510359095.0		METHOD AND APPARATUS FOR DETECTING UNRESPONSIVENESS OF A PROCESS	EMC Corporation
CN201510359347.X		DYNAMICALLY COMPOSED COMPUTE NODES COMPRISING DISAGGREGATED COMPONENTS	EMC Corporation
CN201510360058.1		METHOD AND APPARATUS FOR SOT-SWITCH IN STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
CN201510363519 0.0		CACHE DATA PROCESSING METHOD AND APPARATUS	EMC Corporation
CN201510363535 .X		VNX2 DRIVE MOVEMENT MANAGEMENT MECHANISM WITH PORTABLE DRIVE	EMC Corporation
CN201510363636 .7		DETERMINING THE PHYSICAL LOCATION OF A DEVICE	EMC Corporation
CN201510364946 .0		A DIGITAL DYNAMIC TESTING MODLE	EMC Corporation
CN201510364956 .4		METHOD AND APPARATUS OF AUTOMATIC ASSIGNMENT OF A DUMP	EMC Corporation
CN201510477813 .4		SYSTEM AND METHOD FOR SECURE MULTI-TENANCY IN DATADOMAIN OPERATING SYSTEM (DDOS), A PURPOSE BUILT BACKUP APPLIANCE (PBBA) OPERATING SYSTEM	EMC Corporation
CN201510564036 7		LEVELING IO	EMC Corporation
CN201510564838 .8		METHOD AND APPARATUS FOR COST-BASED LOAD BALANCING FOR PORT SELECTION	EMC Corporation
CN201510573799 8		REMOTE POWER MANAGEMENT DEVICES AND MANAGEMENT METHODS	EMC Corporation
CN201510587474 .5		METHOD AND APPARATUS FOR ENSURING DATA CONSISTENCY	EMC Corporation
CN201510589748 .4		METHOD AND APPARATUS OF LOG STORAGE OPTIMIZATION	EMC Corporation
CN201510590352 .1		METHOD AND APPARATUS FOR WHITE-BOX TESTING	EMC Corporation
CN201510590780 .4		CLOUD CONSISTENCY TECHNOLOGY	EMC Corporation
CN201510591086 .4		SERVER MANAGEMENT METHOD AND MANAGEMENT SYSTEM	EMC Corporation
CN201510592027 .9		METHOD AND APPARATUS FOR OPERATING SHINGLED MAGNETIC RECORDING DEVICE	EMC Corporation
CN201510595959 9		METHOD AND APPARATUS FOR SELECTING AN INCREMENTAL BACKUP APPROACH	EMC Corporation
CN201510604922 .8		INCREMENTAL BACKUP METHOD AND APPARATUS	EMC Corporation
CN201510608751 .6		METHOD AND APPARATUS FOR DATA STORAGE SYSTEM	EMC Corporation
CN201510609728 .9		METHOD AND APPARATUS FOR REDUCING CACHE DEVICE ONLINE	EMC Corporation
CN201510612283 .X		A LOCATING METHOD AND A LOCATING DEVICE	EMC Corporation
CN201510614150 .6		METHOD AND APPARATUS FOR PROCESSING A MEDIA TYPE IN REST SOFTWARE ARCHITECTURE	EMC Corporation
CN201510614231 .6		METHOD AND APPARATUS FOR DETERMINING A PHYSICAL LOCATION OF A DEVICE	EMC Corporation
CN201510618564 .6		METHOD AND APPARATUS FOR LOCKING FILE IN MEMORY	EMC Corporation
CN201510622273 .4		METHOD AND DEVICE FOR CHECKING FALSE SHARING IN DATA BLOCK DELETION	EMC Corporation

Application Number	Registration Number	Title	Owner
CN201510622302.7		METHOD AND DEVICE FOR FINGERPRINT BASED STATUS DETECTION IN A DISTRIBUTED PROCESSING SYSTEM	EMC Corporation
CN201510622723.X		A METHOD AND DEVICE FOR RETRIEVING TEST CASE BASED ON CODE COVERAGE	EMC Corporation
CN201510622808.8		STORAGE METHOD AND DEVICE FOR SSD DRIVES	EMC Corporation
CN201510623730.1		USING A FLAG TO SELECTIVELY PERMIT CONFIGURATION CHANGES TO A DATA STORAGE OBJECT HAVING AN ACTIVATED FEATURE	EMC Corporation
CN201510624888.0		METHOD AND APPARATUS FOR REDUNDANT ARRAYS OF INDEPENDENT DISKS	EMC Corporation
CN201510628051.3		APPARATUS FOR DATA STORAGE DEVICE AND METHOD THEREOF	EMC Corporation
CN201510640198.4		MEMORY CENTRIC DATABASE ARCHITECTURE	EMC Corporation
CN201510642171.9		CONVERTING COMPLEX STRUCTURE OBJECTS INTO FLATTENED DATA	EMC Corporation
CN201510663235.3		METHOD AND APPARATUS FOR RECLAIMING MEMORY BLOCKS IN SNAPSHOT STORAGE SPACE	EMC Corporation
CN201510664336.2		METHOD AND APPARATUS FOR PRESENTING STATUS OF STORAGE CLUSTER	EMC Corporation
CN201510847327.7		METHOD AND APPARATUS FOR SIMULATING SLOW STORAGE DISK	EMC Corporation
CN201510882689.X		METHODS AND APPARATUS FOR RATIONAL COMPRESSION AND DECOMPRESSION OF NUMBERS	EMC Corporation
CN201510929192.9		METHOD AND APPARATUS FOR PROVIDING ACCESS OF CONTENT RESOURCES	EMC Corporation
CN201510975001.2		METHOD AND APPARATUS FOR PATH SELECTION OF STORAGE SYSTEMS	EMC Corporation
CN201510981602.4		METHOD AND APPARATUS FOR CONTROLLING READING DATA FROM STORAGE SYSTEMS	EMC Corporation
CN201510982223.7		METHOD AND DEVICE FOR DETERMINING CAUSES OF PERFORMANCE DEGRADATION FOR STORAGE SYSTEMS	EMC Corporation
CN201510983346.2		METHOD AND APPARATUS FOR MULTI-LEVEL DATA PROTECTION IN STORAGE SYSTEMS	EMC Corporation
CN201510994736.X		IMPROVING BACKUP PERFORMANCE USING DATA ALLOCATION OPTIMIZATION	EMC Corporation
CN201511000869.7		DE-DUPLICATING DISTRIBUTED FILE SYSTEM USING CLOUD-BASED OBJECT STORE	EMC Corporation
CN201511001195.2		METHOD AND DEVICE FOR DISTRIBUTED DATA PROCESSING	EMC Corporation
CN201511001586.4		METHOD AND APPARATUR FOR SUPPLYING POWER TO A PROCESSOR	EMC Corporation
CN201511016976.9		METHOD AND APPARATUS FOR DETERMINING DOCUMENT SET SIMILAR TO TARGET DOCUMENT AMONG MULTIPLE DOCUMENTS	EMC Corporation
CN201511017523.8		METHOD AND APPARATUS FOR FACILITATING STORAGE SYSTEM RECOVERY AND RELEVANT	EMC Corporation

Application Number	Registration Number	Title	Owner
		STORAGE SYSTEM	
CN201511017541.6		APPARATUS AND METHOD FOR DATA PROCESSING	EMC Corporation
CN201511017667.3		METHOD AND APPARATUS FOR STORAGE SYSTEM	EMC Corporation
CN201511018824.2		METHOD AND APPARATUS FOR COMPUTING DEVICE	EMC Corporation
CN201511019081.0		DISK DRIVE SIMULATION METHOD AND APPARATUS	EMC Corporation
CN201511019083.X		METHOD AND APPARATUS FOR CONTROLLING READING AND WRITING DISK ARRAYS	EMC Corporation
CN201511020927.2		METHOD AND APPARATUS FOR MANAGING DATA ACCESS	EMC Corporation
CN201511021163.9		METHOD AND APPARATUS FOR FACILITATING WEAR LEVELING OF SSD	EMC Corporation
CN201511021242.X		METHOD AND DEVICE FOR CACHE ARRAY EXPANSION	EMC Corporation
CN201511021593.0		METHOD AND APPARATUS FOR OPERATING HYBRID STORAGE DEVICE	EMC Corporation
CN201511021598.3		METHOD AND DEVICE FOR RECOVERING DATA REPLICATION BETWEEN STORAGE DEVICES	EMC Corporation
CN201511023162.8		METHOD AND DEVICE FOR DATA REPLICATION	EMC Corporation
CN201511030883.1		METHOD AND DEVICE FOR CHARGING A BATTERY PACK	EMC Corporation
CN201511030884.6		BACKUP COMMUNICATION METHOD AND APPARATUS	EMC Corporation
CN201511031818.0		METHOD AND APPARATUS FOR CLOUD SYSTEM	EMC Corporation
CN201511036301.0		RESOLVING WRITE PRESSURE USING EXISTING BACKUP APPLIANCE AS ADDITIONAL PRIMARY STORAGE	EMC Corporation
CN201610103823.6		METHOD AND APPARATUS FOR ENSURING RELIABILITY OF A MAPPED REDUNDANT ARRAY OF INDEPENDENT DISKS	EMC Corporation
CN201610105872.3		METHOD AND APPARATUS FOR DATA PROCESSING	EMC Corporation
CN201610134634.5		DATA MOVEMENT AMONG DISTRIBUTED DATA CENTERS	EMC Corporation
CN201610136881.9		METHOD AND APPARATUS FOR CONTROLLING A NETWORK NODE	EMC Corporation
CN201610141383.3		METHOD AND APPARATUS FOR VIDEO SURVEILLANCE	EMC Corporation
CN201610141843.2		METHOD AND APPARATUS FOR DATA MOVING OF STORAGE DEVICES	EMC Corporation
CN201610144505.4		METHOD AND APPARATUS FOR DATA STORAGE SERVICE	EMC Corporation
CN201610148027.4		METHOD AND APPARATUS FOR MANAGING FAILURE OF DEVICE	EMC Corporation
CN201610148028.9		METHOD AND DEVICE FOR DATA BACKUP	EMC Corporation

Application Number	Registration Number	Title	Owner
CN201610148041.4		RACK-MOUNTED SERVER	EMC Corporation
CN201610149678.5		METHOD AND DEVICE OF POSITIONING	EMC Corporation
CN201610150685.7		METHOD AND APPARATUS FOR STORAGE SYSTEM	EMC Corporation
CN201610151098.X		METHOD AND APPARATUS FOR CLASSIFYING FAILURE	EMC Corporation
CN201610151489.1		EVALUATION FOR REBUILDING PERFORMANCE OF REDUNDANT ARRAY OF INDEPENDENT DISKS	EMC Corporation
CN201610154088.1		STORAGE MANAGEMENT METHOD AND STORAGE DEVICE	EMC Corporation
CN201610154141.8		DEVICE AND METHOD FOR TESTING CONDITION OF A BATTERY	EMC Corporation
CN201610154144.1		METHOD AND APPARATUS OF STORAGE MANAGEMENT	EMC Corporation
CN201610154618.2		METHOD AND APPARATUS FOR PROCESSING OBJECTS TO BE SEARCHED	EMC Corporation
CN201610158006.0		METHOD AND DEVICE FOR SEARCHING CHARACTER STRING	EMC Corporation
CN201610159112.0		CONVERGING OF DATA MANAGEMENT AND DATA ANALYTICS	EMC Corporation
CN201610159266.X		METHOD AND DEVICE FOR HANDLING ERRORS IN STORAGE SYSTEM	EMC Corporation
CN201610162002.X		METHOD AND APPARATUS FOR STORING DATA	EMC Corporation
CN201610162005.3		METHOD AND APPARATUS FOR REBUILDING REDUNDANT ARRAY OF INDEPENDENT DISKS	EMC Corporation
CN201610162398.8		METHOD AND APPARATUS FOR DELIVERING SOFTWARE SOLUTIONS	EMC Corporation
CN201610162636.5		METHOD, DEVICE, AND COMPUTER PROGRAM PRODUCT FOR TESTING CODE	EMC Corporation
CN201610162663.2		HARD DISK ASSEMBLY, CHASSIS ASSEMBLY, AND SERVER DEVICE	EMC Corporation
CN201610162742.3		FULL TEXT SEARCH BASED ON CATEGORIZING	EMC Corporation
CN201610180426.9		VIRTUAL POINT IN TIME ACCESS BETWEEN SNAPSHOTS	EMC Corporation
CN201610184567.8		METHOD AND SYSTEM FOR MALWARE DETECTION IN VIRTUAL MACHINES	EMC Corporation
CN20161019113.1		CREATING REPLICAS AT USER-DEFINED POINTS IN TIME	EMC Corporation
CN201610204131.0		METHOD AND SYSTEM FOR SYNCHRONIZING AN INDEX OF DATA BLOCKS STORED IN A STORAGE SYSTEM USING A SHARED STORAGE MODULE	EMC Corporation
CN201610204618.9		CONSISTENT TRANSITION FROM ASYNCHRONOUS TO SYNCHRONOUS REPLICATION IN HASH-BASED STORAGE SYSTEMS	EMC Corporation
CN201610214445.9		SECURITY DETECTION	EMC Corporation
CN201610228110.2		METHOD AND SYSTEM FOR PROVIDING ACCESS OF A STORAGE SYSTEM USING A SHARED	EMC Corporation

Application Number	Registration Number	Title	Owner
		STORAGE MODULE AS A TRANSPORT MECHANISM	
CN201610262843.8		REMOTE ACCESS TESTING SYSTEM AND METHOD	EMC Corporation
CN201610417408.8		METHODS AND APPARATUS FOR MANAGING A STORAGE SYSTEM	EMC Corporation
CN201610417576.7		STORAGE DEVICE AND METHOD FOR SUPPLYING POWER TO STORAGE DEVICE	EMC Corporation
CN201610417578.6		METHOD AND DEVICE FOR POWER SUPPLY TO PROCESSOR	EMC Corporation
CN201610421617.X		METHOD AND DEVICE FOR DATA BACKUP	EMC Corporation
CN201610422872.6		ROD FOR USE IN RACK AND HOLDING DEVICE FOR USE IN COOPERATION WITH RACK	EMC Corporation
CN201610428405.4		METHOD AND SYSTEM FOR MANAGING MEMORY IN STORAGE DEVICE	EMC Corporation
CN201610429398.X		METHOD AND DEVICE FOR REPRODUCING I/O FOR STORAGE SYSTEM	EMC Corporation
CN201610431451.X		METHOD AND SYSTEM FOR MANAGING STORAGE DEVICE	EMC Corporation
CN201610431589.X		METHOD AND SYSTEM FOR MANAGING MEMORY IN STORAGE DEVICE	EMC Corporation
CN201610431737.8		METHOD FOR FILTERING DOCUMENTS AND ELECTRONIC DEVICE	EMC Corporation
CN201610431738.2		I/O CARD FOR STORAGE DEVICE AND STORAGE DEVICE	EMC Corporation
CN201610440621.0		GOVERNED PLACEMENT OF DATA ANALYTIC RESULTS	EMC Corporation
CN201610451127.4		A METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR FAULT PROCESSING	EMC Corporation
CN201610452126.1		METHOD AND APPARATUS FOR VIRTUAL MACHINE	EMC Corporation
CN201610453751.8		DATA PROCESSING METHOD AND DEVICE	EMC Corporation
CN201610454208.X		METHOD AND DEVICE FOR PROCESSING A MULTI-LANGUAGE TEXT	EMC Corporation
CN201610454286.X		METHOD AND APPARATUS FOR SELECTING RAID LEVEL FOR MAPPED RAID	EMC Corporation
CN201610454287.4		METHOD AND DEVICE FOR COMPRESSING METADATA FOR FILE SYSTEM	EMC Corporation
CN201610454607.6		METHOD AND APPARATUS FOR ADJUSTING THROUGHPUT OF STORAGE DEVICE	EMC Corporation
CN201610454617.X		METHOD AND DEVICE OF STORAGE MANAGEMENT	EMC Corporation
CN201610454623.5		METHOD AND DEVICE FOR MANAGING INPUT/OUTPUT (I/O) OF STORAGE DEVICE	EMC Corporation
CN201610454922.9		METHOD AND DEVICE FOR FAILOVER	EMC Corporation
CN201610457468.2		METHOD AND DEVICE OF MANAGING A DOCUMENT INDEX	EMC Corporation
CN201610459022		METHOD AND SYSTEM FOR MANAGING STORAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
.3		SYSTEM	
CN201610459148.0		RESOURCE ORCHESTRATION METHOD AND DEVICE USING OBJECT-ORIENTED LANGUAGE	EMC Corporation
CN201610459336 3		TRUST OVERLAYS FOR DISAGGREGATED INFRASTRUCTURES	EMC Corporation
CN201610459343.3		METHOD AND SYSTEM FOR MANAGING STORAGE SYSTEM	EMC Corporation
CN201610459374.9		DATA ANALYSIS IN A STORAGE SYSTEM	EMC Corporation
CN201610459979.8		METHOD AND SYSTEM FOR LOCKING STORAGE AREA IN STORAGE SYSTEM	EMC Corporation
CN201610461042.4		METHOD AND SYSTEM FOR TRANSMITTING MESSAGE IN STORAGE SYSTEM	EMC Corporation
CN201610461439.3		DISTRIBUTED WORK FLOW USING DATABASE REPLICATION	EMC Corporation
CN201610471278.6		DATA STORAGE SYSTEM HAVING SEGREGATED CONTROL PLANE AND/OR SEGREGATED DATA PLANE ARCHITECTURE	EMC Corporation
CN201610471525.2		COMPUTING ERASURE METADATA AND DATA LAYOUT PRIOR TO STORAGE USING A PROCESSING PLATFORM	EMC Corporation
CN201610489109.5		DYNAMIC RESILIENCE IN FLASH ACCELERATION TIERS	EMC Corporation
CN201610496812.9		DELEGATED MEDIA TRANSLATION LAYER IN A STORAGE APPLIANCE	EMC Corporation
CN201610619574.6		DETERMINING PHYSICAL LOCATION OF ELECTRONIC DEVICE	EMC Corporation
DE(EDV1)19960 636330	DE(EDV1)69 636330D	SYSTEM AND METHOD FOR ON-LINE, REAL-TIME, DATA MIGRATION	EMC Corporation
DE(EDV1)60224 598.2	DE(EP)60224 598.2-08	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
DE(EDV1)84201 482.1	DE(EDV1)31 77097.5	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV....	EMC Corporation
DE(EDV1)84201 484.7	DE(EDV1)31 77242	DATA PROCESSING SYSTEM HAVING A UNIQUE ADDRESS TRANSLATION UNIT	EMC Corporation
DE(EP)00307999.3	DE60048191.3	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
DE(EP)00311737.1	DE(EP)60047 398.8	FIBRE CHANNEL DATA STORAGE SYSTEM FAIL-OVER MECHANISM	EMC Corporation
DE(EP)00911736.7	DE(EP)60034 327.8	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
DE(EP)00948778.6	DE(EP)60028 778.5	SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
DE(EP)00959718.8	DE60041002.1	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
DE(EP)01102501.2		CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
DE(EP)02024812.6	DE(EP)60239 179.2-08	DYNAMIC RDF	EMC Corporation

Application Number	Registration Number	Title	Owner
DE(EP)02795496.5	DE(EP)60242766.5	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
DE(EP)02795657.2	DE(EP)1461720	DYNAMIC FILE ACCESS CONTROL AND MANAGEMENT	EMC Corporation
DE(EP)03783599.8	DE(EP)60344333.8	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
DE(EP)04002583.5	DE(EP)60049269.9	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
DE(EP)04010899.5	DE(EP)602004005785.1	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation
DE(EP)04104115.3	DE(EP)602004003874.1	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
DE(EP)04106294.4	DE(EP)602004010056.0	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation
DE(EP)04753325.2	DE602004022660.2	SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
DE(EP)04760929.2	DE(EP)602004012996.8	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
DE(EP)04801039.1	DE(EP)602004039379.5	DATA STORAGE SYSTEM	EMC Corporation
DE(EP)04810425.1	DE602004042006.9	METHOD FOR PROVIDING A FLAT VIEW OF A HIERARCHICAL NAMESPACE WITHOUT REQUIRING UNIQUE LEAF NAMES	EMC Corporation
DE(EP)04813591.7	DE602004022589.4-08	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING	EMC Corporation
DE(EP)04813604.8	DE(EP)602004043766.2	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
DE(EP)05101066.8	DE(EP)602005000026.1	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
DE(EP)05106967.2	DE(EP)602005016867.2	PRIVILEGED NETWORK ROUTING	EMC Corporation
DE(EP)05712935.5	DE(EP)602005039474.5	METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
DE(EP)05854600.3	DE(EP)1828920	CONSUMER INTERNET AUTHENTICATION SERVICE	EMC Corporation
DE(EP)06115645.1	DE(EP)602006012250.0	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK SERVICE	EMC Corporation
DE(EP)06123514.9	DE(EP)602006040590.1	TECHNIQUES FOR PRESERVING AND MANAGING IDENTITIES IN AN AUDIT LOG	EMC Corporation
DE(EP)06718171.9	DE(EP)602006037099.7	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
DE(EP)06718172.7	DE(EP)602006037100.4	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
DE(EP)06735936.4	DE(EP)602006032381.6	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
DE(EP)07103070.4	DE(EP)602007029596.3	REGISTRATION OF PEER-TO-PEER SERVICES	EMC Corporation

Application Number	Registration Number	Title	Owner
DE(EP)07117897.4	DE(EP)602007028054.0	MULTIPLE SECURITY ACCESS MECHANISMS FOR A SINGLE IDENTIFIER	EMC Corporation
DE(EP)07755303.0	DE602007039243.8	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
DE(EP)07757004.2		SYSTEMS AND METHODS FOR OBTAINING ULTRA-HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
DE(EP)08102532.2	DE(EP)602008000602.6	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
DE(EP)08163057.6	DE(EP)602005026343.8	KEY DISTRIBUTION	EMC Corporation
DE(EP)10161223.2	DE(EP)602010001909.8	SYSLOG MESSAGE ROUTING SYSTEMS AND METHODS	EMC Corporation
DE(EP)1996930609.1	DE(EP)69622253	SYSTEM FOR MIGRATING DATA BY SELECTING A FIRST OR SECOND TRANSFER MEANS BASED ON THE STATUS OF A DATA ELEMENT MAP	EMC Corporation
DE(EP)19996007631	DE(EP)699076311	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
DE(EP)20006031499	DE(EP)60031499	METHOD FOR TRANSMITTING FIBRE-CHANNEL AND NON-FIBRE CHANNEL SIGNALS THROUGH COMMON CABLE	EMC Corporation
DE(EP)60016371	DE(EP)60016371	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
DE(EP)60018803.5-08	DE(EP)1244966	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
DE(EP)60022196	DE(EP)60022196	DATA STORAGE SYSTEM	EMC Corporation
DE(EP)602004012987.9	DE(EP)602004012987.9	DATA STORAGE SYSTEM	EMC Corporation
DE(EP)602005047587.7	DE(EP)1569085	METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
DE(EP)6020060266.8	DE(EP)1915708	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
DE(EP)602007044632.5	DE(EP)1926259	CONTROL OF COMMUNICATION PORTS OF COMPUTING DEVICES USING POLICY-BASED DECISIONS	EMC Corporation
DE(EP)602008012601.3	DE(EP)2045997	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
DE(EP)602011023507.9	DE(EP)2622456	OPTIMIZED RECOVERY	EMC Corporation
DE(EP)60203773.5-08	DE(EP)60203773	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
DE(EP)60212922.2-08	DE(EP)60212922 T2	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
DE(EP)60247854.5	DE(EP)1507207	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
DE(EP)60302027.5	DE(EP)60302027.5	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
DE(EP)69727083	DE(EP)69727083	DATA VALIDATION SYSTEM FOR A GROUP OF DATA STORAGE DISKS	EMC Corporation

Application Number	Registration Number	Title	Owner
DE(EP)69800808 1-08	DE(EP)69800 808	RELIABLE ARRAY OF DISTRIBUTED COMPUTING NODES	EMC Corporation
DE(EP)69831944	DE(EP)69831 944	APPARATUS AND METHOD FOR BACKUP OF A DISK STORAGE SYSTEM	EMC Corporation
DE(EP)69919404	DE(EP)69919 404	ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
DE(EP)69927258	DE(EP)69927 258	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
DE(EP)69930307. 9-08	DE(EP)69930 307	DATA STORAGE SYSTEM	EMC Corporation
DE(EP)87401108. 3	DE(EP)37737 41.4	COMMUT 16	EMC Corporation
DE(EP)90311828. 9	DE(EP)04834 21	NETWORK COMMUNICATION SYSTEM	EMC Corporation
DE(EP)90916922. 9	DE(EP)69024 367.7	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
DE(EP)91910198. 1	DE(EP)69133 047608	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
DE(EP)93301620. 6	DE(EP)69318 600.3	ON-LINE MODULE REPLACEMENT IN A MULTLIPLE MODULE DATA PROCESSING SYSTEM	EMC Corporation
DE(EP)93301685. 9	DE(EP)69323 225.0	HIGH AVAILABILITY DISK ARRAYS	EMC Corporation
DE(EP)93301686. 7	DE(EP)69320 388.9	IMPROVEMENTS FOR HIGH AVAILABILITY DISK ARRAYS	EMC Corporation
DE(EP)93925165. 8	DE(EP)69326 775.5	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
DE(EP)94901649. 7	DE(EP)69322 415.00	INRUSH CURRENT LIMITER	EMC Corporation
DE(EP)94914223. 6	DE(EP)06954 43	REMOTE DATA MIRRORING	EMC Corporation
DE(EP)95920589. 9	DE(EP)69523 588.5	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
DE(EP)95928682. 4	DE(EP)69507 940.9	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
DE(EP)95944494. 4	DE(EP)69500 424.7	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
DE(EP)96919202. 0	DE(EP)96919 009.4	RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
DE(EP)96919430. 7	DE(EP)69601 868.3	METHOD FOR MANAGING GLOBALLY DISTRIBUTED SOFTWARE COMPONENTS	EMC Corporation
DE(EP)96923601. 7	DE(EP)69601 374.6	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
DE(EP)96923633. 0	DE(EP)69616 329.2	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
DE(EP)96925331. 9	DE(EP)69619 531.3	DYNAMIC LOAD BALANCING	EMC Corporation
DE(EP)96928861. 2	DE(EP)96932 406.7	DATA STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
DE(EP)97907877.1	DE(EP)0883845	ORTHOGONAL SIGNAL MULTIPLEXING SYSTEM	EMC Corporation
DE(EP)97910942.8	DE(EP)0938705	FAIL-OVER SWITCHING SYSTEM	EMC Corporation
DE(EP)97927901.5	DE(EP)69710578.4	METHOD FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SET	EMC Corporation
DE(EP)97942453.8	DE(EP)69708932.0	FILE TRANSFER UTILITY WHICH EMPLOYS AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
DE(EP)97944532.7	DE(EP)0950220	DYNAMICALLY UPGRADEABLE DISK ARRAY SYSTEM AND METHOD	EMC Corporation
DE(EP)98307410.5	DE(EP)0932096	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
DE(EP)99941177.0	DE(EP)69921289.8-08	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
DE10048402.6	DE10048402	DATA STORAGE SYSTEM	EMC Corporation
DE10084964.4	DE10084964	SYSTEM AND METHOD FOR SECURE STORAGE, TRANSFER AND RETRIEVAL OF CONTENT ADDRESSABLE INFORMATION	EMC Corporation
DE10124482.7	DE10124482	FAULT TOLERANT, LOW LATENCY SYSTEM RESOURCE WITH HIGH LEVEL LOGGING OF SYSTEM RESOURCE TRANSACTIONS AND CROSS-SERVER MIRRORED HIGH LEVEL LOGGING OF SYSTEM RESOURCE TRANSACTIONS	EMC Corporation
DE10197063.3-31	DE10197063	METHOD AND APARATUS FOR PREVENTING UNAUTHORIZED ACCESS BY A NETWORK DEVICE	EMC Corporation
DE102004064269.9		METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
DE10297001.7	DE10297001	INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
DE10392181.8		DYNAMIC RDF GROUPS	EMC Corporation
DE112004002315.7		VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
DE200310393595	DE10393595	METHOD AND APPARATUS FOR PROVISIONING STORAGE RESOURCES	EMC Corporation
DE20051036291.5		TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
DE60042055.8-08	DE60042055.8-08	APPARATUS FOR ENABLING INDEPENDENT ACCESS TO REPLICATED DATA	EMC Corporation
DE60042225.9	DE60042225.9	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
DE91309497.5	DE69130279.0	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
DE91906246.3	DE69132511.1	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
DE99900240.5	DE69902749.7	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation

Application Number	Registration Number	Title	Owner
DE99967760.2	EP1058889	DATA STORAGE SYSTEM	EMC Corporation
EDV84201484.7	EDV149858	DATA PROCESSING SYSTEM HAVING A UNIQUE ADDRESS TRANSLATION UNIT	EMC Corporation
EP(DV)04002583.5	EP1426863	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
EP(DV)09164519.2		METHODS AND APPARATUS FOR TRANSFERRING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
EP(DV1)06113558.8	EP(DV1)1684178	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
EP(DV1)20010203306.4	EP(DV1)1160654	SYSTEM AND METHOD FOR ON-LINE, REAL-TIME, DATA MIGRATION	EMC Corporation
EP00125969.6	EP1122629	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
EP00125969.6	EP1122629	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
EP00125969.6	EP1122629	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
EP00307999.3	EP1093051	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
EP00311601.9	EP1111509	APPARATUS FOR ENABLING INDEPENDENT ACCESS TO REPLICATED DATA	EMC Corporation
EP00311737.1	EP1113363	FIBRE CHANNEL DATA STORAGE SYSTEM FAIL-OVER MECHANISM	EMC Corporation
EP00910144.5	EP1149475	FUZZY COMMITMENT SCHEME	EMC Corporation
EP00911736.7	EP1171820	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
EP00944952.1	EP1194852	DATA STORAGE SYSTEM	EMC Corporation
EP00948778.6	EP1201070	SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
EP00959718.8	EP1250649	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
EP00959781.6	EP1125201	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
EP00978803.5	EP1244966	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
EP01102501.2		CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
EP01910598.0		SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION ADN TRANSCRIPTION TECHNIQUES	EMC Corporation
EP01910686.3		HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
EP01923278.4		SYSTEM AND METHOD FOR DATA PROTECTION WITH MULTIDIMENSIONAL PARITY	EMC Corporation
EP01977554.3		SYSTEM FOR IDENTIFYING COMMON DIGITAL SEQUENCES	EMC Corporation
EP01991440.7	DE60136739.1-08	METHOD OF "SPLIT BRAIN" PREVENTION IN COMPUTER CLUSTER SYSTEMS	EMC Corporation
EP01991440.7	EP1344133	METHOD OF "SPLIT BRAIN" PREVENTION IN COMPUTER CLUSTER SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
EP02024809.2	EP1313018	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
EP02024812.6	EP1313016	DYNAMIC RDF	EMC Corporation
EP02024812.6	EP1313016	DYNAMIC RDF	EMC Corporation
EP02024813.4	EP1313017	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
EP02706240.5		SYSTEM AND METHOD OF INDEXING UNIQUE ELECTRONIC MAIL MESSAGES AND USES FOR THE SAME	EMC Corporation
EP02749653.8	DE60232414.9	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
EP02749653.8	EP1402420	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
EP02749653.8	EP1402420	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
EP02749653.8	EP1402420	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
EP02756944.1		SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
EP02786369.5		EFFICIENT MANAGEMENT OF LARGE FILES	EMC Corporation
EP02795496.5	EP1430400	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
EP02795657.2	EP1461720	DYNAMIC FILE ACCESS CONTROL AND MANAGEMENT	EMC Corporation
EP02795657.2	EP1461720	DYNAMIC FILE ACCESS CONTROL AND MANAGEMENT	EMC Corporation
EP03019062.3	EP1416685	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
EP03783599.8	EP1563411	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
EP03790117.0		IDENTITY AUTHENTICATION SYSTEM AND METHOD	EMC Corporation
EP04010899.5	EP1499074	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation
EP04025641.4	EP1507207	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
EP04104115.3	EP1521419	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
EP04106294.4	EP1555780	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation
EP04715092.5	EP1609071	DATA STORAGE SYSTEM	EMC Corporation
EP04749593.2		METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
EP04753325.2	EP1629383	SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation

Application Number	Registration Number	Title	Owner
EP04753325.2	EP1629383	SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
EP04753325.2	EP1629383	SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
EP04760929.2	EP1625690	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
EP04783839.6		SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
EP04801039.1	EP1695221	DATA TRANSFERRING METHOD	EMC Corporation
EP04810425.1	EP1680730	METHOD FOR PROVIDING A FLAT VIEW OF A HIERARCHICAL NAMESPACE WITHOUT REQUIRING UNIQUE LEAF NAMES	EMC Corporation
EP04813591.7	EP1704560	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
EP04813591.7	EP1074560	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
EP04813591.7	EP1704560	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
EP04813604.8	EP1704668	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
EP05004139.1	EP1569085	METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
EP05101066.8	EP1585285	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
EP05106967.2	EP1624644	PRIVILEGED NETWORK ROUTING	EMC Corporation
EP05109790.5	EP1650926	AUTOMATICALLY GRANTING ROOT ACCESS TO ADMINISTRATORS, WITHOUT REQUIRING THE ROOT PASSWORD	EMC Corporation
EP05712935.5	EP1719283	METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
EP05767801.3		SYSTEMS AND METHODS FOR PROVIDING DISTRIBUTED CACHE COHERENCE	EMC Corporation
EP05779993.4		SYSTEM AND METHOD OF FRAUD REDUCTION	EMC Corporation
EP05812016.3		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
EP05824350.2		CONTENT ADDRESSED STORAGE DEVICE CONFIGURED TO MAINTAIN CONTENT ADDRESS MAPPING	EMC Corporation
EP05854600.3	EP1828920	CONSUMER INTERNET AUTHENTICATION SERVICE	EMC Corporation
EP05854771.2		BACKUP INFORMATION MANAGEMENT	EMC Corporation
EP05855107.8		SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
EP05855407.2		SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
EP06115645.1	EP1748598	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK	EMC Corporation

Application Number	Registration Number	Title	Owner
		SERVICE	
EP06123514.9	EP1811417	TECHNIQUES FOR PRESERVING AND MANAGING IDENTITIES IN AN AUDIT LOG	EMC Corporation
EP06256154.3		METHOD AND SYSTEM FOR MULTI-LEVEL SECURE PERSONAL PROFILE MANAGEMENT AND ACCESS CONTROL TO THE ENTERPRISE MULTI-MODAL COMMUNICATION ENVIRONMENT IN HETEROGENEOUS CONVERGENT COMMUNICATION NETWORKS	EMC Corporation
EP06711236.7		SYSTEM AND METHOD FOR DETECTING AND MITIGATING DNS SPOOFING TROJANS	EMC Corporation
EP06711344.9		SYSTEM AND METHOD FOR DETECTING A PROXY BETWEEN A CLIENT AND SERVER	EMC Corporation
EP06718171.9	EP1836621	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
EP06718172.7	EP1836622	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
EP06735324.3		DERIVATIVE SEEDS	EMC Corporation
EP06735936.4	EP1854012	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
EP06750264.1	DE(EP)60200 6015311.2	METHODS AND APPARATUS FOR STORING CONTENT IN A FILE SYSTEM	EMC Corporation
EP06750264.1	EP1894127	METHODS AND APPARATUS FOR STORING CONTENT IN A FILE SYSTEM	EMC Corporation
EP06750265.8		METHODS AND APPARATUS FOR MANAGING THE REPLICATION OF CONTENT	EMC Corporation
EP06785805.0		CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
EP06796124.3	EP1946514	SYSTEM AND METHOD FOR CONDUCTING SECURE TRANSACTIONS	EMC Corporation
EP06801147.7	EP1915708	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
EP06801780.5		INFORMATION PROTECTION METHOD AND SYSTEM	EMC Corporation
EP06803964.3		AUTHENTICATION METHOD AND APPARATUS UTILIZING PROOF-OF-AUTHENTICATION MODULE	EMC Corporation
EP06816670.1		SYSTEM AND METHOD FOR DETECTING FRAUDULENT TRANSACTIONS	EMC Corporation
EP06848312.2	DE60200601 1058.8	CONTINUOUS BACKUP USING A MIRROR DEVICE	EMC Corporation
EP06848312.2	EP1969472	CONTINUOUS BACKUP USING A MIRROR DEVICE	EMC Corporation
EP06848312.2	EP1969472	CONTINUOUS BACKUP USING A MIRROR DEVICE	EMC Corporation
EP07100979.9		FEDERATION AND ATTESTATION OF ONLINE REPUTATIONS	EMC Corporation
EP07103070.4	EP1838069	REGISTRATION OF PEER-TO-PEER SERVICES	EMC Corporation
EP07104609.8	EP1796001	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
EP07117897.4	EP1918845	MULTIPLE SECURITY ACCESS MECHANISMS FOR A SINGLE IDENTIFIER	EMC Corporation
EP07120346.7	EP1926259	CONTROL OF COMMUNICATION PORTS OF COMPUTING DEVICES USING POLICY-BASED	EMC Corporation

Application Number	Registration Number	Title	Owner
		DECISIONS	
EP0775225		TRACKING OBJECTS MODIFIED BETWEEN BACKUP OPERATIONS	EMC Corporation
EP07755303.0	EP2013740	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
EP07757004.2		SYSTEMS AND METHODS FOR OBTAINING ULTRA-HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
EP07758941.4		HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
EP07762088.8		AUTOMATED PRIORITY RESTORES	EMC Corporation
EP08102532.2	EP1988486	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
EP08163057.6	EP2012460	KEY DISTRIBUTION	EMC Corporation
EP08164542.6	EP2045997	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
EP08726953.6		AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
EP08727213.4		CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
EP08727318.1		SEEDING REPLICATION	EMC Corporation
EP08796521.6		SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
EP08827264.6		SYSTEM AND METHOD FOR PROVIDING WRITE-ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
EP08829858.3		DE-DUPLICATION IN VIRTUALIZED SERVER AND VIRTUALIZED STORAGE ENVIRONMENTS	EMC Corporation
EP08843327.1		POLICY BASED FILE MANAGEMENT	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09156290.0		RESTRICTED USE INFORMATION CARDS	EMC Corporation
EP09812030.6		METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
EP09826391.6		DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
EP09839371.3		METHOD AND APPARATUS FOR PROCESSING DISTRIBUTED DATA	EMC Corporation
EP10161223.2	EP2252038	SYSLOG MESSAGE ROUTING SYSTEMS AND METHODS	EMC Corporation
EP10736429.1		SYSTEM AND METHOD FOR SECURE AND RELIABLE MULTI-CLOUD DATA REPLICATION	EMC Corporation
EP10740101.0		DATA PROCESSING SYSTEM USING CACHE-AWARE MULTIPATH DISTRIBUTION OF STORAGE COMMANDS AMONG CACHING STORAGE CONTROLLERS	EMC Corporation

Application Number	Registration Number	Title	Owner
EP10759144.8		DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
EP10786489.4		SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION OF SEGMENTS	EMC Corporation
EP10792440.9		SYSTEM AND METHOD FOR PROVIDING LONG-TERM STORAGE FOR DATA	EMC Corporation
EP10819153.7		SNAPSHOTTING OF A PERFORMANCE STORAGE SYSTEM IN A SYSTEM FOR PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	EMC Corporation
EP10838050.2		SYSTEMS AND METHODS FOR FACILITATING DATA DISCOVERY	EMC Corporation
EP11153041.6		SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
EP11737579.0		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
EP11751217.8		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
EP11753708.4		INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
EP11807550.6		SYSTEM AND METHOD FOR DATA DEDUPLICATION FOR DISK STORAGE SUBSYSTEMS	EMC Corporation
EP11829826.4	EP2622456	OPTIMIZED RECOVERY	EMC Corporation
EP11853216.7		EFFICIENT STORAGE TIERING	EMC Corporation
EP12763802.1		SYSTEM AND METHOD FOR MAINTAINING CONSISTENT POINTS IN FILE SYSTEMS USING A PRIME DEPENDENCY LIST	EMC Corporation
EP12764154.6		TIME-BASED DATA PARTITIONING	EMC Corporation
EP12765938.1		RESOURCE EFFICIENT SCALE-OUT FILE SYSTEMS	EMC Corporation
EP12858776.3		EFFICIENT BACKUP REPLICATION	EMC Corporation
EP13831514.8		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
EP13831701.1		FORMAT IDENTIFICATION FOR FRAGMENTED BYTE ALIGNED INTEGER IMAGE DATA	EMC Corporation
EP14753812.8		DATA ANALYTICS PLATFORM OVER PARALLEL DATABASES AND DISTRIBUTED FILE SYSTEMS	EMC Corporation
EP14876123.2		PARALLEL ON-PREMISES AND CLOUD-BASED AUTHENTICATION	EMC Corporation
EP15152142.4		METHOD AND SYSTEM FOR SERVICE-AWARE DATA PLACEMENT IN A STORAGE SYSTEM	EMC Corporation
EP15159736.6		USING SERVER SIDE FONT PREPARATION TO ACHIEVE WYSIWYG AND CROSS PLATFORM FIDELITY ON WEB BASED WORD PROCESSOR	EMC Corporation
EP15179359.3		SYSTEM AND METHOD FOR SECURE MULTI-TENANCY IN DATADOMAIN OPERATING SYSTEM (DDOS), A PURPOSE BUILT BACKUP APPLIANCE (PBBA) OPERATING SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
EP15187450.0		METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
EP1996930609.1	EP0789877	SYSTEM FOR MIGRATING DATA BY SELECTING A FIRST OR SECOND TRANSFER MEANS BASED ON THE STATUS OF A DATA ELEMENT MAP	EMC Corporation
EP20000311748.8	EP1113462	METHOD FOR TRANSMITTING FIBRE-CHANNEL AND NON-FIBRE CHANNEL SIGNALS THROUGH COMMON CABLE	EMC Corporation
EP2002702693	EP1421732	TRANSACTION SYSTEM	EMC Corporation
EP2004793792		EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC KEY GENERATIONS	EMC Corporation
EP87401108.3	EP0246168	COMMUT 16	EMC Corporation
EP90311828.9	EP0483421	NETWORK COMMUNICATION SYSTEM	EMC Corporation
EP90916922.9	EP0497889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
EP91309497.5	EP0482819	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
EP91906246.3	EP0521924	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
EP91910198.1	EP0555219	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
EP93301620.6	EP0559454	ON-LINE MODULE REPLACEMENT IN A MULTLIPLE MODULE DATA PROCESSING SYSTEM	EMC Corporation
EP93301685.9	EP0559487	HIGH AVAILABILITY DISK ARRAYS	EMC Corporation
EP93301686.7	EP0559488	IMPROVEMENTS FOR HIGH AVAILABILITY DISK ARRAYS	EMC Corporation
EP93925165.8	EP0667998	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
EP94901649.7	EP0720783	INRUSH CURRENT LIMITER	EMC Corporation
EP94914223.6	EP0695443	REMOTE DATA MIRRORING	EMC Corporation
EP95920589.9	EP0760939	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
EP95928682.4	EP0730766	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
EP95944494.4	EP0745239	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
EP96919202.0	EP0830651	RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
EP96919430.7	EP0827607	Method for managing globally distributed software components	EMC Corporation
EP96923601.7	EP0836781	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
EP96923633.0	EP0838055	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
EP96925331.9	EP0842464	DYNAMIC LOAD BALANCING	EMC Corporation
EP96928861.2	EP0856172	DATA STORAGE SYSTEM	EMC Corporation
EP97907877.1	EP0883845	ORTHOGONAL SIGNAL MULTIPLEXING SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
EP97910701.8	EP1019820	DATA VALIDATION SYSTEM FOR A GROUP OF DATA STORAGE DISKS	EMC Corporation
EP97910942.8	EP0938705	FAIL-OVER SWITCHING SYSTEM	EMC Corporation
EP97927901.5	EP0902923	METHOD FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SET	EMC Corporation
EP97942453.8	EP1010072	FILE TRANSFER UTILITY WHICH EMPLOYS AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
EP97944532.7	EP0950220	DYNAMICALLY UPGRADEABLE DISK ARRAY SYSTEM AND METHOD	EMC Corporation
EP98307410.5	EP0932096	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
EP98923431.5	EP983548	APPARATUS AND METHOD FOR BACKUP OF A DISK STORAGE SYSTEM	EMC Corporation
EP98952004.4	EP1019841	REDUNDANT, DISTRIBUTED NETWORK SYSTEMS	EMC Corporation
EP99900240.5	EP1049988	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
EP99900245.4	EP1049989	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
EP99941177.0	EP1025483	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
EP99966711.6	EP1058888	DATA STORAGE SYSTEM	EMC Corporation
EP99967756.0	EP1145125	ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
EP99967760.2	EP1058889	DATA STORAGE SYSTEM	EMC Corporation
EP99973704.2	EP1071993	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
ES(EP)90916922.9	ES(EP)0497889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
FR(EDV1)01203306.4	FR(EDV1)1160654	SYSTEM AND METHOD FOR ON-LINE, REAL-TIME, DATA MIGRATION	EMC Corporation
FR(EDV1)84201482.1	FR(EDV1)0150522	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV....	EMC Corporation
FR(EP)00307999.3	FR(EP)1093051	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
FR(EP)00959718.8	FR(EP)1250649	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
FR(EP)01991440.7	FR(EP)1344133	METHOD OF "SPLIT BRAIN" PREVENTION IN COMPUTER CLUSTER SYSTEMS	EMC Corporation
FR(EP)02795496.5	FR(EP)1430400	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
FR(EP)03019062.3	FR(EP)1416685	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
FR(EP)03783599.8	FR(EP)1563411	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
FR(EP)04002583.5	FR(EP)1426863	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation

Application Number	Registration Number	Title	Owner
FR(EP)04010899.5	FR(EP)1499074	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation
FR(EP)04104115.3	FR(EP)1521419	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
FR(EP)04106294.4	FR(EP)1555780	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation
FR(EP)04810425.1	FR(EP)1680730	METHOD FOR PROVIDING A FLAT VIEW OF A HIERARCHICAL NAMESPACE WITHOUT REQUIRING UNIQUE LEAF NAMES	EMC Corporation
FR(EP)04813604.8	FR(EP)1704668	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
FR(EP)05004139.1	FR(EP)1569085	METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
FR(EP)05101066.8	FR(EP)1585285	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
FR(EP)05109790.5	FR(EP)1650926	AUTOMATICALLY GRANTING ROOT ACCESS TO ADMINISTRATORS, WITHOUT REQUIRING THE ROOT PASSWORD	EMC Corporation
FR(EP)05712935.5	FR(EP)1719283	METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
FR(EP)05854600.3	FR(EP)1828920	CONSUMER INTERNET AUTHENTICATION SERVICE	EMC Corporation
FR(EP)06115645.1	FR(EP)1748598	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK SERVICE	EMC Corporation
FR(EP)06123514.9	FR(EP)1811417	TECHNIQUES FOR PRESERVING AND MANAGING IDENTITIES IN AN AUDIT LOG	EMC Corporation
FR(EP)06735936.4	FR(EP)1854012	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
FR(EP)06801147.7	FR(EP)1915708	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
FR(EP)07103070.4	FR(EP)1838069	REGISTRATION OF PEER-TO-PEER SERVICES	EMC Corporation
FR(EP)07117897.4	FR(EP)1918845	MULTIPLE SECURITY ACCESS MECHANISMS FOR A SINGLE IDENTIFIER	EMC Corporation
FR(EP)07120346.7	FR(EP)1926259	CONTROL OF COMMUNICATION PORTS OF COMPUTING DEVICES USING POLICY-BASED DECISIONS	EMC Corporation
FR(EP)07755303.0	FR(EP)2013740	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
FR(EP)07757004.2		SYSTEMS AND METHODS FOR OBTAINING ULTRA-HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
FR(EP)08102532.2	FR(DE)1988486	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
FR(EP)08163057.6	FR(EP)2012460	KEY DISTRIBUTION	EMC Corporation
FR(EP)08164542.6	FR(EP)2045997	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
FR(EP)10161223.	FR(EP)22520	SYSLOG MESSAGE ROUTING SYSTEMS AND	EMC Corporation

Application Number	Registration Number	Title	Owner
2	38	METHODS	
FR(EP)11829826.4	FR(EP)2622456	OPTIMIZED RECOVERY	EMC Corporation
FR(EP)1996930609.1	FR(EP)0789877	SYSTEM FOR MIGRATING DATA BY SELECTING A FIRST OR SECOND TRANSFER MEANS BASED ON THE STATUS OF A DATA ELEMENT MAP	EMC Corporation
FR(EP)87401108.3	FR(EP)0246168	COMMUT 16	EMC Corporation
FR(EP)90916922.9	FR(EP)0497889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
FR(EP)91309497.5	FR(EP)0482819	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
FR(EP)91910198.1	FR(EP)0555219	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
FR(EP)93925165.8	FR(EP)0667998	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
FR(EP)95928682.4	FR(EP)0730766	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
FR(EP)95944494.4	FR(EP)0745239	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
FR(EP)96919202.0	FR(EP)0830651	RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
FR(EP)96919430.7	FR(EP)0827607	Method for managing globally distributed software components	EMC Corporation
FR(EP)96923601.7	FR(EP)0836781	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
FR(EP)96923633.0	FR(EP)0838055	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
FR(EP)98307410.5	FR(EP)0932096	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
FR(EP)98952004.4	FR(EP)1019841	REDUNDANT, DISTRIBUTED NETWORK SYSTEMS	EMC Corporation
FR(EP05106967.2	FR(EP16246 44	PRIVILEGED NETWORK ROUTING	EMC Corporation
FR91906246.3	FR0521924	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
GB(DV)8903669.3	GB(DV)2213025	DISTRIBUTED SWITCHING ARCHITECTURE	EMC Corporation
GB(DV1)0411918.6	GB(DV1)2400268	INTEGRATED PROCEDURE FOR PARTITIONING NETWORK DATA SERVICES AMONG MULTIPLE SUBSCRIBERS	EMC Corporation
GB(DV1)0421666.9	GB(DV1)2403117	METHOD AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation
GB(DV1)0504583.6	GB(DV1)2409743	MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
GB(DV1)070266	GB(DV1)243	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation

Application Number	Registration Number	Title	Owner
9.3	4894		
GB(DV1)070762 5.0	GB(DV1)243 6746	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
GB(DV2)070266 8.5	GB(DV2)243 4893	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
GB(EDV)071046 09.8	EP1796001	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
GB(EDV1)01203 306.4	GB(EDV1)11 60654	SYSTEM AND METHOD FOR ON-LINE, REAL-TIME, DATA MIGRATION	EMC Corporation
GB(EDV1)06113 558.8	GB(EP)1684 178	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
GB(EDV1)84201 484.7	GB(EDV1)01 49858	DATA PROCESSING SYSTEM HAVING A UNIQUE ADDRESS TRANSLATION UNIT	EMC Corporation
GB(EP)00307999 .3	GB(EP)1093 051	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
GB(EP)00311601 .9	GB(EP)1111 509	APPARATUS FOR ENABLING INDEPENDENT ACCESS TO REPLICATED DATA	EMC Corporation
GB(EP)00311737 .1	GB(EP)1113 363	FIBRE CHANNEL DATA STORAGE SYSTEM FAIL-OVER MECHANISM	EMC Corporation
GB(EP)00911736 .7	GB(EP)1171 820	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
GB(EP)00948778 .6	GB(EP)1201 070	SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
GB(EP)00959718 .8	GB(EP)1250 649	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
GB(EP)00959781 .6	GB(EP)1125 201	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
GB(EP)00978803 .5	GB(EP)1244 966	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
GB(EP)01102501 .2		CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
GB(EP)01991440 .7	GB(EP)1344 133	METHOD OF "SPLIT BRAIN" PREVENTION IN COMPUTER CLUSTER SYSTEMS	EMC Corporation
GB(EP)02024809 .2	GB(EP)1313 018	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
GB(EP)02702693 .9	GB(EP)1421 732	TRANSACTION SYSTEM	EMC Corporation
GB(EP)02795496 .5	GB(EP)1430 400	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
GB(EP)03019062 .3	GB(EP)1416 685	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
GB(EP)03783599 .8	(GB)EP1563 411	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
GB(EP)04002583 .5	GB(EP)1426 863	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
GB(EP)04010899 .5	GB(EP)1499 074	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation

Application Number	Registration Number	Title	Owner
GB(EP)04025641.4	GB(EP)1507207	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
GB(EP)04104115.3	GB(EP)1521419	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
GB(EP)04106294.4	GB(EP)1555780	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation
GB(EP)04715092.5	GB(EP)1609071	DATA STORAGE SYSTEM	EMC Corporation
GB(EP)04760929.2	GB(EP)1625690	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
GB(EP)04801039.1	GB(EP)1695221	DATA STORAGE SYSTEM	EMC Corporation
GB(EP)04810425.1	GB(EP)1680730	METHOD FOR PROVIDING A FLAT VIEW OF A HIERARCHICAL NAMESPACE WITHOUT REQUIRING UNIQUE LEAF NAMES	EMC Corporation
GB(EP)04813604.8	GB(EP)1704668	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
GB(EP)05004139.1	GB(EP)1569085	METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
GB(EP)05101066.8	GB(EP)1585285	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
GB(EP)05106967.2	GB(EP)1624644	PRIVILEGED NETWORK ROUTING	EMC Corporation
GB(EP)05109790.5	GB(EP)1650926	AUTOMATICALLY GRANTING ROOT ACCESS TO ADMINISTRATORS, WITHOUT REQUIRING THE ROOT PASSWORD	EMC Corporation
GB(EP)05712935.5	GB(EP)1719283	METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
GB(EP)05854600.3	GB(EP)1828920	CONSUMER INTERNET AUTHENTICATION SERVICE	EMC Corporation
GB(EP)06115645.1	GB(EP)1748598	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK SERVICE	EMC Corporation
GB(EP)06123514.9	GB(EP)1811417	TECHNIQUES FOR PRESERVING AND MANAGING IDENTITIES IN AN AUDIT LOG	EMC Corporation
GB(EP)06718171.9	GB(EP)1836621	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
GB(EP)06718172.7	GB(EP)1836622	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
GB(EP)06735936.4	GB(EP)1854012	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
GB(EP)06750264.1	GB(EP)1894127	METHODS AND APPARATUS FOR STORING CONTENT IN A FILE SYSTEM	EMC Corporation
GB(EP)06801147.7	GB(EP)1915708	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
GB(EP)07103070.4	GB(EP)1838069	REGISTRATION OF PEER-TO-PEER SERVICES	EMC Corporation
GB(EP)07117897.4	GB(EP)1918845	MULTIPLE SECURITY ACCESS MECHANISMS FOR A SINGLE IDENTIFIER	EMC Corporation

Application Number	Registration Number	Title	Owner
GB(EP)07120346.7	GB(EP)1926259	CONTROL OF COMMUNICATION PORTS OF COMPUTING DEVICES USING POLICY-BASED DECISIONS	EMC Corporation
GB(EP)07755303.0	GB(EP)2013740	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
GB(EP)07757004.2		SYSTEMS AND METHODS FOR OBTAINING ULTRA-HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
GB(EP)08102532.2	GB(EP)1988486	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
GB(EP)08163057.6	GB(EP)2012460	KEY DISTRIBUTION	EMC Corporation
GB(EP)08164542.6	GB(EP)2045997	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
GB(EP)10161223.2	GB(EP)2252038	SYSLOG MESSAGE ROUTING SYSTEMS AND METHODS	EMC Corporation
GB(EP)11829826.4	GB(EP)2622456	OPTIMIZED RECOVERY	EMC Corporation
GB(EP)1996930609.1	GB(EP)0789877	SYSTEM FOR MIGRATING DATA BY SELECTING A FIRST OR SECOND TRANSFER MEANS BASED ON THE STATUS OF A DATA ELEMENT MAP	EMC Corporation
GB(EP)2002024813	GB(EP)1313017	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
GB(EP)8307410.5	GB(EP)0932096	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
GB(EP)90916922.9	GB(EP)0497889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
GB(EP)91309497.5	GB(EP)0482819	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
GB(EP)91910198.1	GB(EP)0555219	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
GB(EP)93925165.8	GB(EP)0667998	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
GB(EP)94914223.6	GB(EP)0695443	REMOTE DATA MIRRORING	EMC Corporation
GB(EP)95928682.4	GB(EP)0730766	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
GB(EP)95944494.4	GB(EP)0745239	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
GB(EP)96919202.0	GB(EP)0830651	RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
GB(EP)96919430.7	GB(EP)0827607	Method for managing globally distributed software components	EMC Corporation
GB(EP)96923601.7	GB(EP)0836781	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
GB(EP)96923633.0	GB(EP)0838055	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation

Application Number	Registration Number	Title	Owner
GB(EP)97927901.5	GB(EP)0902923	METHOD FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SET	EMC Corporation
GB(EP)97942453.8	GB(EP)1010072	FILE TRANSFER UTILITY WHICH EMPLOYS AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
GB(EP)98952004.4	GB(EP)1019841	REDUNDANT, DISTRIBUTED NETWORK SYSTEMS	EMC Corporation
GB(EP)99900245.4	GB(EP)1049989	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
GB(EP)99941177.0	GB(EP)1025483	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
GB(EP)99966711.6	GB(EP)1058888	DATA STORAGE SYSTEM	EMC Corporation
GB(EP)99967756.0	GB(EP)1145125	ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
GB(EP)99973704.2	GB(EP)1071993	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
GB0012368.7	GB2346995	METHOD FOR IMPROVING PERFORMANCE OF LARGE DATABASES	EMC Corporation
GB0023575.4	GB2360377	DATA STORAGE SYSTEM	EMC Corporation
GB0024421.0	GB2353122	METHOD AND APPARATUS FOR ASYNCHRONOUSLY UPDATING A MIRROR OF A SOURCE DEVICE	EMC Corporation
GB0100445.6	GB2363492	METHOD AND APPARATUS FOR PROVIDING DATA MANAGEMENT FOR A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
GB0100446.4	GB2354617	METHOD & APPARATUS FOR AUTHENTICATING CONNECTIONS TO A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
GB0108066.2	GB2366424	DATA STORAGE SYSTEM	EMC Corporation
GB0108069.6	GB2366425	DATA STORAGE SYSTEM	EMC Corporation
GB0108075.3	GB2366049	DATA STORAGE SYSTEM	EMC Corporation
GB0109796.3	GB2359159	METHOD AND APPARATUS FOR IDENTIFYING CHANGES TO A LOGICAL OBJECT BASED ON CHANGES TO THE LOGICAL OBJECT AT A PHYSICAL LEVEL	EMC Corporation
GB0114064.9	GB2359170	METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM BASED ON THE STATE OF PREVIOUS I/O OPERATIONS (As Amended)	EMC Corporation
GB0127444.8	GB2364806	FAULT TOLERANT PARITY GENERATION	EMC Corporation
GB0201491.8	GB2368430	METHOD AND APPARATUS FOR ENHANCING RECOVERY OPERATIONS IN DISK ARRAY STORAGE DEVICES (Consistent Split and Consistent Snap)	EMC Corporation
GB0204624.1	GB2382179	SYSTEM AND METHOD FOR SECURE STORAGE, TRANSFER AND RETRIEVAL OF CONTENT ADDRESSABLE INFORMATION	EMC Corporation
GB0210551.8	GB2378022	DATA STORAGE SYSTEM WITH IMPROVED NETWORK INTERFACE	EMC Corporation
GB0214780.9	GB2374175	METHODS AND APPARATUS FOR ACCESSING SHARED DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
GB0219742.4	GB282185	METHODS AND APPARATUS FOR REPRESENTING RESOURCES IN A COMPUTING SYSTEM ENVIRONMENT	EMC Corporation
GB0222838.5	GB2377354	METHODS AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation
GB0228432.1	GB2379776	MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
GB0306151	GB2383677	METHOD AND APPARATUS FOR RECONFIGURING STRIPED LOGICAL DEVICES IN A DISK ARRAY STORAGE	EMC Corporation
GB0306155.3	GB2383658	ADAPTIVE PRE-FETCHING OF DATA FROM A DISK	EMC Corporation
GB0306158.7	GB2384083	SELECTION OF A RESOURCE IN A DISTRIBUTED COMPUTER SYSTEM	EMC Corporation
GB0306159.5	GB2387463	REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation
GB0312217.3	GB2385446	METHOD AND APARATUS FOR PREVENTING UNAUTHORIZED ACCESS BY A NETWORK DEVICE	EMC Corporation
GB0312298.3	GB2386291	INTEGRATED PROCEDURE FOR PARTITIONING NETWORK DATA SERVICES AMONG MULTIPLE SUBSCRIBERS	EMC Corporation
GB0316189.0	GB2391745	NETWORK ADAPTER AND METHOD OF USING SAME	EMC Corporation
GB0327608.6	GB2393295	INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
GB0410972.4	GB2398203	DYNAMIC RDF GROUPS	EMC Corporation
GB0515989.2	GB2416888	METHODS AND APPARATUS FOR ACCESSING CONTENT IN A VIRTUAL POOL ON A CONTENT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
GB0517063.4	GB2413670	VIRTUAL ORDERED WRITES	EMC Corporation
GB0519952.6	GB2418754	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
GB0609391.8	GB2423173	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
GB91906246.3	GB0521924	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
GB99900240.5	GB1049988	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
HK(EP)01100515.5	HK(EP)1031262	RELIABLE ARRAY OF DISTRIBUTED COMPUTING NODES	EMC Corporation
HK(EP)99100509.6	HK(EP)1015487	DATA STORAGE SYSTEM	EMC Corporation
IE(EP)03019062.3	IE(EP)1416685	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
IE(EP)04010899.5	IE(EP)1499074	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation
IE(EP)04104115.3	IE(EP)1521419	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
IE(EP)04106294.4	IE(EP)1555780	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation

Application Number	Registration Number	Title	Owner
IE(EP)05101066.8	IE(EP)1585285	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
IE(EP)05106967.2	IE(EP)1624644	PRIVILEGED NETWORK ROUTING	EMC Corporation
IE(EP)05109790.5	IE(EP)1650926	AUTOMATICALLY GRANTING ROOT ACCESS TO ADMINISTRATORS, WITHOUT REQUIRING THE ROOT PASSWORD	EMC Corporation
IE(EP)06115645.1	IE(EP)1748598	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK SERVICE	EMC Corporation
IE(EP)08102532.2	IE(EP)1988486	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
IE(EP)08163057.6	IE(EP)2012460	KEY DISTRIBUTION	EMC Corporation
IE(EP)93925165.8	IE(EP)0667998	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
IE(EP)96919430.7	IE(EP)0827607	Method for managing globally distributed software components	EMC Corporation
IE(EP)96923601.7	IE(EP)0836781	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
IE(EP)96923633.0	IE(EP)0838055	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
IE(EP)96937753.0	IE(EP)0857390	STAGGERED STREAM SUPPORT FOR VIDEO ON DEMAND	EMC Corporation
IL(DV1)183096	IL(DIV1)183096	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
IL105895	IL105895	SYSTEM AND METHOD FOR DYNAMICALLY CONTROLLING CACHE MANAGEMENT	EMC Corporation
IL139069	IL139069	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
IL174987	IL174987	APPARATUS AND METHOD FOR INFORMATION RECOVERY QUALITY ASSESSMENT IN A COMPUTER SYSTEM	EMC Corporation
IN00578KOLNP2004	IN240911	DYNAMIC RDF GROUPS	EMC Corporation
IN01283KOLNP2003	IN222138	VIRTUAL STORAGE DEVICES	EMC Corporation
IN120KOL2005		METHOD OF ACCESSING UNIT OF DATA STORED IN A STORAGE ENVIRONMENT INCLUDING A PLURALITY OF STORAGE CLUSTERS	EMC Corporation
IN1260DELNP2010		SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
IN1281KOLNP2003	IN233768	VIRTUAL STORAGE DEVICES	EMC Corporation
IN1335KOLNP2010		POLICY BASED FILE MANAGEMENT	EMC Corporation
IN1381KOLNP2003	IN218982	METHOD FOR SELECTING A RESOURCE FROM A PLURALITY OF RESOURCES (as amended 2 August 2006)	EMC Corporation

Application Number	Registration Number	Title	Owner
IN1492KOLNP2006	IN255670	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
IN1554KOLNP2007	IN268379	METHODS AND APPARATUS FOR MANAGING THE STORAGE OF CONTENT IN A FILE SYSTEM	EMC Corporation
IN1617CHE2015		STORAGE SYSTEM UPGRADE	EMC Corporation
IN1648KOLNP2005	IN225420	METHOD OF ORDERING DATA WRITES	EMC Corporation
IN201641010710		STORAGE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
IN2390/DELNP/2009		SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS IN A MULTI-PATH ENVIRONMENT	EMC Corporation
IN2616KOLNP2007	IN267258	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
IN2619KOLNP2007	IN263976	METHOD OF DELETING FIRST CONTENT UNIT FROM STORAGE SYSTEM AND STORAGE SYSTEM THAT STORES FIRST CONTENT UNIT	EMC Corporation
IN3121CHENP2011		DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
IN3418KOLNP2006		LOW COST FLEXIBLE NETWORK ACCESSED STORAGE ARCHITECTURE	EMC Corporation
IN3755KOLNP2008	IN268895	ACCESSING DATA STORAGE DEVICES	EMC Corporation
IN3788KOLNP2006		METHODS AND APPARATUS FOR MANAGING THE REPLICATION OF CONTENT	EMC Corporation
IN3920KOLNP2008		METHODS AND APPARATUS FOR TRANSFERRING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
IN4442CHE2013		CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SYSTEM HAVING A RULES ENGINE FOR PROCESSING SALES PROGRAM RULES	EMC Corporation
IN500KOL2005	IN252579	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
IN6007CHENP2009		AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
IN6568CHENP2011		DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
IN6638CHE2015		ACCESSING A VIRTUAL VOLUME ON A STORAGE ARRAY	EMC Corporation
IN6639CHE2015		PROVIDING STORAGE TECHNOLOGY INFORMATION TO IMPROVE DATABASE PERFORMANCE	EMC Corporation
IN6704CHE2014		PASSIVE SAN DISCOVERY	EMC Corporation
IN6909DEL2009		SEEDING REPLICATION	EMC Corporation
IN7172DELNP2009		CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
IN749KOL2004	IN255523	METHOD AND APPARATUS FOR DATA RETENTION IN A STORAGE SYSTEM	EMC Corporation
IN750KOL2004	IN212609	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
IN7560/DELNP/2008		SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS	EMC Corporation

Application Number	Registration Number	Title	Owner
IN970CHENP2010		SYSTEM AND METHOD FOR PROVIDING WRITE-ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
INPCT2001871KOL	IN219545	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
IT(EP)90916922.9	IT(EP)0497889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
IT(EP)91309497.5	IT(EP)0482819	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
IT91906246.3	IT0521924	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
JP H09-533646	JP3958795	SYSTEM FOR CURRENTLY UPDATING THE DATABASE BY ONE HOST AND READING THE DATABASE BY DIFFERENT HOST FOR THE PURPOSE OF IMPLEMENTING DECISION SUPPORT FUNCTIONS	EMC Corporation
JP(DV)2007-193889	JP4512620	METHODS AND APPARATUS FOR REPRESENTING RESOURCES IN A COMPUTING SYSTEM ENVIRONMENT	EMC Corporation
JP(DV1)2005092587	JP4405935	METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM	EMC Corporation
JP(DV1)2006-052397	JP4322260	HIERARCHICAL METHOD AND DEVICE FOR IDENTIFYING CHANGE IN DEVICE CHARACTERISTIC	EMC Corporation
JP(DV1)2007-056645	JP(DV1)4543051	REMOTE DATA FACILITY OVER AN IP NETWORK	EMC Corporation
JP(DV1)2009-000128	JP5198294	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
JP09-543030		METHOD AND APPARATUS FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SET	EMC Corporation
JP16346696	JP3953549	MULTIPROCESSOR CLUSTER MEMBERSHIP MANAGER FRAMEWORK	EMC Corporation
JP16351596	JP3836187	OPERATING SYSTEM FOR A NON-UNIFORM MEMORY ACCESS MULTIPROCESSOR SYSTEM	EMC Corporation
JP2000-130681	JP3796391	EXTENT-BASED FILE SYSTEMS WITH VERSATILE INDIRECTION OR MULTIPLE VOLUMES	EMC Corporation
JP2000-236261	JP3712922	METHOD FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
JP2000-291217	JP4727800	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STORED RECORDS	EMC Corporation
JP2000-321949	JP3860407	LOAD BALANCING ON DISK ARRAY STORAGE DEVICE	EMC Corporation
JP2000-330866	JP3839655	SEGMENTING CACHE TO PROVIDE VARYING SERVICE LEVELS	EMC Corporation

Application Number	Registration Number	Title	Owner
JP2000-404617	JP3741609	METHOD AND DEVICE FOR PROCESSING DATA TO ACCESS INDEPENDENTLY OF DUPLICATED DATA	EMC Corporation
JP2000-513192	JP4109416	DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
JP2000-557189	JP3745961	METHOD & APPARATUS FOR AUTHENTICATING CONNECTIONS TO A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
JP2000-557195	JP3779154	METHOD AND APPARATUS FOR PROVIDING DATA MANAGEMENT FOR A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
JP2000-558454	JP3697395	METHOD & APPARATUS FOR STORING DIVERSE DATA STRUCTURES	EMC Corporation
JP2000-567999	JP3860714	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
JP2000-582895	JP3866038	METHOD AND APPARATUS FOR IDENTIFYING CHANGES TO A LOGICAL OBJECT BASED ON CHANGES TO THE LOGICAL OBJECT AT A PHYSICAL LEVEL	EMC Corporation
JP2000-591519	JP	DATA STORAGE SYSTEM	EMC Corporation
JP2000-600177	JP3769190	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
JP20010532367		SYSTEM AND METHOD FOR SECURE ELECTRONIC TRANSACTIONS	EMC Corporation
JP20010560836	JP4856344	SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION ADN TRANSCRIPTION TECHNIQUES	EMC Corporation
JP20010560878	JP4846156	HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
JP2001-099638	JP4309600	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH PLURAL DIRECTORS ON A COMMON PRINTED CIRCUIT BOARD AND REDUNDANT SWITCHING NETWORKS	EMC Corporation
JP2001-099693	JP4350319	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH PLURAL DIRECTORS ON A COMMON PRINTED CIRCUIT BOARD	EMC Corporation
JP2001-507187	JP4191927	METHOD AND APPARATUS FOR IDENTIFYING NETWORK DEVICES ON A STORAGE NETWORK	EMC Corporation
JP2001-517262	JP4430846	REMOTE MIRRORING SYSTEM, DEVICE, AND METHOD	EMC Corporation
JP2001-520635	JP3732440	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
JP2001-535759	JP5039263	MULTIPLE STORAGE ARRAY CONTROL	EMC Corporation
JP2001-541946	JP3718471	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
JP2001-552230	JP3968242	METHODS AND APPARATUS FOR ACCESSING SHARED DATA	EMC Corporation
JP2001-576582	JP4166472	METHOD AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
JP2002-283820	JP4040411	METHODS AND APPARATUS FOR REPRESENTING RESOURCES IN A COMPUTING SYSTEM ENVIRONMENT	EMC Corporation
JP2002-330684	JP3779257	METHOD FOR REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
JP2002-330916		HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
JP2002-507375	JP4885406	DATA STORAGE SYSTEM HAVING POINT-TO-POINT CONFIGURATION	EMC Corporation
JP2002-509878	JP3730620	METHOD AND APPARATUS FOR ENHANCING RECOVERY OPERATIONS IN DISK ARRAY STORAGE DEVICES (Consistent Split and Consistent Snap)	EMC Corporation
JP2002-511077	JP3749224	MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
JP2002-540319	JP4263477	SYSTEM FOR IDENTIFYING COMMON DIGITAL SEQUENCES	EMC Corporation
JP2002-541538	JP3810738	ADAPTIVE PRE-FETCHING OF DATA FROM A DISK	EMC Corporation
JP2002551706	JP4500490	METHOD OF IMPROVING THE AVAILABILITY OF COMPUTER CLUSTERING SYSTEMS THROUGH THE USE OF A NETWORK MEDIUM LINK STATE	EMC Corporation
JP2002-551742	JP4142438	RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SYSTEMS	EMC Corporation
JP2002574508	JP4348087	NETWORK FILE SHARING METHOD AND SYSTEM	EMC Corporation
JP20030517804	JP4504677	SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
JP2003-509318	4744804	INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
JP2003-538922	JP4264001	ENFORCING QUALITY OF SERVICE IN A STORAGE NETWORK	EMC Corporation
JP2003-550066	JP4181044	PRESERVING A SNAPSHOT OF SELECTED DATA OF A MASS STORAGE SYSTEM	EMC Corporation
JP2003-580998	JP4364650	DATA STORAGE SYSTEM	EMC Corporation
JP20040553414	JP4639084	CRYPTOGRAPHIC METHODS AND APPARATUS FOR SECURE AUTHENTICATION	EMC Corporation
JP20040553816	JP4464279	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
JP2004-355472	JP4372671	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
JP2004549924	JP4648003	METHOD AND APPARATUS FOR PROVISIONING STORAGE RESOURCES	EMC Corporation
JP2004-563677		AUTOMATED MEDIA MANAGEMENT	EMC Corporation
JP2004-563678		RESOURCE ALLOCATION AWARE QUEUING OF REQUESTS FOR MEDIA RESOURCES	EMC Corporation
JP2005189105		TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
JP20060525528		DATA MESSAGE MIRRORING AND REDIRECTION	EMC Corporation
JP2006526341	JP4778899	SYSTEM AND METHOD FOR RISK BASED	EMC Corporation

Application Number	Registration Number	Title	Owner
		AUTHENTICATION	
JP2006526361	JP5058600	SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
JP2006533412		SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
JP2006535304		EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC KEY GENERATIONS	EMC Corporation
JP2007-549485	4705649	SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
JP2007-549511	JP4712816	SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
JP2007-551371	JP5081631	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
JP2007-556314	JP4790731	DERIVATIVE SEEDS	EMC Corporation
JP2008-502972	JP5215840	ASYNCHRONOUS EVENT NOTIFICATION	EMC Corporation
JP2008-519541	JP4712873	CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
JP2008548759	JP5133260	CONTINUOUS BACKUP	EMC Corporation
JP20090261303	JP5096441	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
JP2009-501704		METHOD AND SYSTEM FOR ARCHIVING DATA	EMC Corporation
JP2010-531015	JP5504165	ACCESS METHOD, CLIENT, COMPUTER SOFTWARE, AND SYSTEM FOR DATA FILE OBJECT*	EMC Corporation
JP2011212673		SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION ADN TRANSCRIPTION TECHNIQUES	EMC Corporation
JP2011-547873	JP5335934	METHOD AND APPARATUS FOR PROCESSING DISTRIBUTED DATA	EMC Corporation
JP2012-014358	JP5451785	SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
JP2012-178384	JP5512760	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
JP2012-503418	JP5693560	DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
JP2012-523067	JP5373199	DATA PROCESSING SYSTEM USING CACHE-AWARE MULTIPATH DISTRIBUTION OF STORAGE COMMANDS AMONG CACHING STORAGE CONTROLLERS	EMC Corporation
JP2012-97071		METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
JP2015191066		METHOD AND SYSTEM FOR IMPROVING FLASH STORAGE UTILIZATION USING READ-THRESHOLD TABLES	EMC Corporation
JP2015555452	JP5932171	METHOD AND SYSTEM FOR OBJECT-BASED TRANSACTIONS IN A STORAGE SYSTEM	EMC Corporation
JP28922898	JP3583931	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
JP33929191	JP2959901	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation

Application Number	Registration Number	Title	Owner
JP3-506033	JP2859960	DATA STORAGE APPARATUS AND METHOD	EMC Corporation
JP5033541997	JP3083853	METHOD FOR MANAGING GLOBALLY DISTRIBUTED SOFTWARE COMPONENTS	EMC Corporation
JP55044398	JP3792258	APPARATUS AND METHOD FOR BACKUP OF A DISK STORAGE SYSTEM	EMC Corporation
JP9901413		Magnetic Recording Unit	EMC Corporation
JP9901414		Magnetic Recording Unit	EMC Corporation
JP9903193		Magnetic Recording Device	EMC Corporation
JP9905921		Card-Type Electronic Device	EMC Corporation
JPH10-500593	JP4583507	SUPPLEMENTARY COMMUNICATIONS BETWEEN HOST PROCESSOR AND MASS STORAGE CONTROLLER	EMC Corporation
KR10-1998-0700967	KR10-0406479	DATA STORAGE SYSTEM	EMC Corporation
KR10-1998-0703068	KR449981	STAGGERED STREAM SUPPORT FOR VIDEO ON DEMAND	EMC Corporation
KR10-1998-0707420	KR10-0674642	MULTI-HOST DECISION SUPPORT SYSTEM	EMC Corporation
KR10-2000-7004529	KR10-0655358	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
KR10-2000-7009605	KR10-0585414	DATA STORAGE SYSTEM	EMC Corporation
KR10-2000-7009616	KR0560552	DATA STORAGE SYSTEM	EMC Corporation
KR10-2000-7011519	KR10-0562820	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
KR10-2000-7015105	KR10-0585368	METHOD AND APPARATUS FOR PROVIDING DATA MANAGEMENT FOR A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
KR1020027010804	KR0860821	HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
KR1020037005977	KR878861	SYSTEM FOR IDENTIFYING COMMON DIGITAL SEQUENCES	EMC Corporation
KR1020037007295	KR608274	RESTORING MASS STORAGE DEVICE TO A PRIOR STATE IN RESPONSE TO PROCESSING INFORMATION	EMC Corporation
KR1020037007466	KR100643179	RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SYSTEMS	EMC Corporation
KR10-2003-7008210	KR0557399	METHOD OF IMPROVING THE AVAILABILITY OF COMPUTER CLUSTERING SYSTEMS THROUGH THE USE OF A NETWORK MEDIUM LINK STATE	EMC Corporation
KR10-2003-7016806	KR10-0577314	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
KR10-2004-7004501	KR10-962055	SHARING OBJECTS BETWEEN COMPUTER SYSTEMS	EMC Corporation
KR1020067007217	10-0807926	EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC KEY GENERATIONS	EMC Corporation
KR10-2007-7010921	KR10-1164700	CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
KR2000-7003200	KR10-	DYNAMIC MIRROR SERVICE POLICY	EMC Corporation

Application Number	Registration Number	Title	Owner
	0563147		
KR2004-7008199	KR0560726	PRESERVING A SNAPSHOT OF SELECTED DATA OF A MASS STORAGE SYSTEM	EMC Corporation
KR2007-7012377	KR10-1162398	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
KR701742/1995	KR0207815	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
KR98-700461	KR10-0379222	DYNAMIC LOAD BALANCING	EMC Corporation
NL(EDV1)84201482.1	NL(EDV1)0150522	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV....	EMC Corporation
PCT/US1996/010340		Method for managing globally distributed software components	EMC Corporation
PCT/US1996/011202		METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
PCT/US2007/061798		SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS	EMC Corporation
PCT2000003275		METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
PCT2001009440		METHOD AND SYSTEM FOR PROVIDING MULTIMEDIA INFORMATION ON DEMAND OVER WIDE AREA NETWORKS	EMC Corporation
PCTFR0101324		BACKUP AND RESTORE SYSTEM FOR DATA DERIVED FROM A PLURALITY OF HOST EQUIPMENT IN HETEROGENOUS ENVIRONMENT	EMC Corporation
PCTFR0102381		METHOD FOR SAVING COMPUTER DATA	EMC Corporation
PCTFR0102420		VIRTUAL STORAGE SYSTEM	EMC Corporation
PCTIB0001354		SYSTEM AND METHOD FOR SECURE STORAGE, TRANSFER AND RETRIEVAL OF CONTENT ADDRESSABLE INFORMATION	EMC Corporation
PCTIB2006004062		MAINTAINING WRITE ORDER FIDELITY ON A MULTI-WRITER SYSTEM	EMC Corporation
PCTIB2012003081		PROVISIONING STORAGE RESOURCES BASED ON AN EXPERT SYSTEM	EMC Corporation
PCTIB2012003084		POLAR CODES FOR EFFICIENT ENCODING AND DECODING IN REDUNDANT DISK ARRAYS	EMC Corporation
PCTIB2013001084		CONGESTION AVOIDANCE AND CONTROL FOR UPD BASED PROTOCOLS	EMC Corporation
PCTIB2013001089		MANAGING PROVISIONING OF STORAGE RESOURCES	EMC Corporation
PCTIB2013001091		LOSSLESS COLOR IMAGE COMPRESSION ADAPTIVELY USING SPATIAL PREDICTION OR INTER-COMPONENT PREDICTION	EMC Corporation
PCTIB2013001188		LOAD BALANCING ON DISKS IN RAID BASED ON LINEAR BLOCK CODES	EMC Corporation
PCTIB2013001206		OFFLOADING RAID UPDATE OPERATIONS TO DISK CONTROLLERS	EMC Corporation
PCTIB9900096		CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND	EMC Corporation

Application Number	Registration Number	Title	Owner
		TRANSFER	
PCTIB9900101		ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
PCTIL2002000186		TRANSACTION SYSTEM	EMC Corporation
PCTIL200300828		APPARATUS AND METHOD FOR INFORMATION RECOVERY QUALITY ASSESSMENT IN A COMPUTER SYSTEM	EMC Corporation
PCTIL2006000254		SYSTEM AND METHOD FOR DETECTING AND MITIGATING DNS SPOOFING TROJANS	EMC Corporation
PCTIL2006000376		SYSTEM AND METHOD FOR DETECTING A PROXY BETWEEN A CLIENT AND SERVER	EMC Corporation
PCTIL2006001125		SYSTEM AND METHOD FOR CONDUCTING SECURE TRANSACTIONS	EMC Corporation
PCTIL2012050314		METHODS AND SYSTEMS OF MANAGING A DISTRIBUTED REPLICA BASED STORAGE	EMC Corporation
PCTJP0003837		Card-Type Magnetic Recording Device	EMC Corporation
PCTJP0003911		Card Type Magnetic Recording Device	EMC Corporation
PCTJP1996002235		Magnetic Disk Cartridge	EMC Corporation
PCTRU2010000815		DYNAMIC COMPRESSION OF AN I/O BLOCK	EMC Corporation
PCTRU2011000196		RETRIEVING DATA FROM DATA STORAGE SYSTEMS	EMC Corporation
PCTRU2011000953		SUPERVISING A DATA STORAGE SYSTEM	EMC Corporation
PCTRU2012000520		REDUNDANT DISK ENCODING VIA ERASURE DECODING	EMC Corporation
PCTRU2012000521		DECISION PROCEDURE FOR CUSTOMER ISSUE RESOLUTION	EMC Corporation
PCTRU2012000784		ENVIRONMENTAL ALERT FOR COMPUTER SYSTEMS	EMC Corporation
PCTRU2012001019		STORAGE RESOURCE USAGE ANALYSIS FOR CUSTOMIZED APPLICATION OPTIONS	EMC Corporation
PCTRU2013000782		RESOURCE PROVISIONING BASED ON LOGICAL PROFILES AND OBJECTIVE FUNCTIONS	EMC Corporation
PCTRU2013000846		DYNAMIC MALICIOUS APPLICATION DETECTION IN STORAGE SYSTEMS	EMC Corporation
PCTRU2013000847		FLEXIBLE LICENSING ARCHITECTURE	EMC Corporation
PCTRU2013000906		RESOURCE PROVISIONING BASED ON LOGICAL PROFILES AND PIECEWISE OBJECTIVE FUNCTIONS	EMC Corporation
PCTRU2013001151		ASYNCHRONOUS NOTIFICATION METHOD FOR DATA STORAGE SYSTEMS	EMC Corporation
PCTRU2014000229		PROVISIONING RESOURCES FOR DATACENTERS	EMC Corporation
PCTRU2014000470		TECHNIQUES FOR AUTOMATICALLY FREEING SPACE IN A LOG-STRUCTURED STORAGE SYSTEM	EMC Corporation
PCTRU2014000728		POLICY BASED PROVISIONING OF STORAGE SYSTEM RESOURCES	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTRU2014000732		COMPLEXITY-ADAPTIVE COMPRESSION OF COLOR IMAGES USING BINARY ARITHMETIC CODING	EMC Corporation
PCTRU2014000971		METADATA STRUCTURES FOR LOW LATENCY AND HIGH THROUGHOUT INLINE DATA COMPRESSION	EMC Corporation
PCTRU2014001015		METHOD AND APPARATUS FOR IT APPLIANCE CONTROL	EMC Corporation
PCTRU2015		AUGMENTED REALITY SYSTEM AND METHOD	EMC Corporation
PCTRU2015000162		TECHNIQUES FOR SYNCHRONIZATION MANAGEMENT	EMC Corporation
PCTRU2015000178		SMART LOGGING OF TRACE DATA FOR STORAGE SYSTEMS	EMC Corporation
PCTRU2015000190		MANAGING CACHE COMPRESSION IN DATA STORAGE SYSTEMS	EMC Corporation
PCTRU2015000202		NETWORK ADDRESS SHARING IN A MULTITENTANT, MONOLITHIC APPLICATION ENVIRONMENT	EMC Corporation
PCTRU2015000408		METHOD, APPRATUS AND COMPUTER PROGRAM PRODUCT FOR EVALUATING DATA STORAGE SYSTEMS FOR ENERGY EFFICIENY	EMC Corporation
PCTRU2015000409		CACHE DATA PLACEMENT FOR COMPRESSION IN DATA STORAGE SYSTEMS	EMC Corporation
PCTRU2015000625		AUTOMATED LOAD BALANCING FOR STORAGE SYSTEMS BASED ON PREDICTIVE ANALYSIS OF WORKLOAD HISTORY	EMC Corporation
PCTRU2015000631		SELECTIVE COMPRESSION IN DATA STORAGE SYSTEMS	EMC Corporation
PCTRU2015000949		EFFICIENT DEDUPLICATION OF LOGICAL UNITS	EMC Corporation
PCTRU2016000176		BACKUP SERVER SELECTION BASED ON DATA COMMONALITY	EMC Corporation
PCTRU2016000181		VIRTUAL MACHINE STORAGE MANAGEMENT QUEUE	EMC Corporation
PCTRU2016000393		TECHNIQUES FOR ACCURATELY APPRISING A USER OF PROGRESS IN BOOTING A VIRTUAL APPLIANCE	EMC Corporation
PCTRU2016000406		ARRANGING SSD RESOURCES BASED ON ESTIMATED ENDURANCE	EMC Corporation
PCTSE2004001466		EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC KEY GENERATIONS	EMC Corporation
PCTUS0003522		A FUZZY COMMITMENT SCHEME LOGIQUE DE VALIDATION FLOUE	EMC Corporation
PCTUS0013733		FAULT TOLERANT PARITY GENERATION	EMC Corporation
PCTUS0017557		METHOD AND APPARATUS FOR IDENTIFYING NETWORK DEVICES ON A STORAGE NETWORK	EMC Corporation
PCTUS0017779		DATA STORAGE SYSTEM	EMC Corporation
PCTUS0017799		FIBRE CHANNEL BY-PASS	EMC Corporation
PCTUS0017942		DATA INTEGRITY MANAGEMENT FOR DATA STORAGE SYSTEMS	EMC Corporation
PCTUS0019654		SYSTEM AND METHOD FOR CERTIFICATE EXCHANGE	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS0019654		SYSTEM AND METHOD FOR CERTIFICATE EXCHANGE	EMC Corporation
PCTUS0019656		SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
PCTUS0019656		SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
PCTUS0024007		CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
PCTUS0024128		METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
PCTUS0024554		METHODS AND APPARATUS FOR FLEXIBLY ALLOCATING BANDWITH FOR A POINT-to-PONT, SERIAL, BIDIRECTIONAL COMMUNICAITON PATH	EMC Corporation
PCTUS0029807		METHOD AND APPARATUS FOR CONVERTING BETWEEN LOGICAL AND PHYSICAL MEMORY SPACE IN A RAID SYSTEM	EMC Corporation
PCTUS0041708		MULTIPLE STORAGE ARRAY CONTROL	EMC Corporation
PCTUS0104760		SYSTEM AND METHOD FOR REDUNDANT ARRAY NETWORK STORAGE	EMC Corporation
PCTUS0104763		HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
PCTUS0111792		METHOD AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation
PCTUS0112297		STORAGE NETWORK CABLING VERIFICATION SYSTEM	EMC Corporation
PCTUS0118809		MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
PCTUS0121589		METHOD AND APPARATUS FOR ENHANCING RECOVERY OPERATIONS IN DISK ARRAY STORAGE DEVICES (Consistent Split and Consistent Snap)	EMC Corporation
PCTUS0129145		METHOD AND APPARATUS FOR RECONFIGURING STRIPED LOGICAL DEVICES IN A DISK ARRAY STORAGE	EMC Corporation
PCTUS0129264		SWITCH-BASED ACCELERATION OF COMPUTER DATA STORAGE EMPLOYING AGGREGATIONS OF DISK ARRAYS	EMC Corporation
PCTUS0129532		SYSTEM AND METHOD FOR HEIRARCHICAL DATA STORAGE	EMC Corporation
PCTUS0141175		DATA STORAGE SYSTEM HAVING POINT-TO-POINT CONFIGURATION	EMC Corporation
PCTUS0146889		METHOD AND APARATUS FOR PREVENTING UNAUTHORIZED ACCESS BY A NETWORK DEVICE	EMC Corporation
PCTUS0147505		NETWORK ADAPTER AND METHOD OF USING SAME	EMC Corporation
PCTUS0149600		METHOD OF IMPROVING THE AVAILABILITY OF COMPUTER CLUSTERING SYSTEMS THROUGH THE USE OF A NETWORK MEDIUM LINK STATE	EMC Corporation
PCTUS02008159		NETWORK FILE SHARING METHOD AND SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS0204034		SYSTEM AND METHOD OF INDEXING UNIQUE ELECTRONIC MAIL MESSAGES AND USES FOR THE SAME	EMC Corporation
PCTUS0212444		INTEGRATED PROCEDURE FOR PARTITIONING NETWORK DATA SERVICES AMONG MULTIPLE SUBSCRIBERS	EMC Corporation
PCTUS0230635		VIRTUALIZATION IN A STORAGE SYSTEM	EMC Corporation
PCTUS0230841		SHARING OBJECTS BETWEEN COMPUTER SYSTEMS	EMC Corporation
PCTUS0230889		ENFORCING QUALITY OF SERVICE IN A STORAGE NETWORK	EMC Corporation
PCTUS0230914		POOLING AND PROVISIONING STORAGE RESOURCES IN A STORAGE NETWORK	EMC Corporation
PCTUS0230946		EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
PCTUS0230970		SERVERLESS STORAGE SERVICES	EMC Corporation
PCTUS0230974		STORAGE SWITCH FOR STORAGE AREA NETWORK	EMC Corporation
PCTUS0231928		EFFICIENT MANAGEMENT OF LARGE FILES	EMC Corporation
PCTUS0237309		PRESERVING A SNAPSHOT OF SELECTED DATA OF A MASS STORAGE SYSTEM	EMC Corporation
PCTUS03040223		RESOURCE ALLOCATION AWARE QUEUING OF REQUESTS FOR MEDIA RESOURCES	EMC Corporation
PCTUS0309112		DATA STORAGE SYSTEM	EMC Corporation
PCTUS0311158		VIRTUAL STORAGE DEVICES	EMC Corporation
PCTUS0311272		VIRTUAL STORAGE DEVICES	EMC Corporation
PCTUS0327442		DYNAMIC RDF GROUPS	EMC Corporation
PCTUS0337928		IDENTITY AUTHENTICATION SYSTEM AND METHOD	EMC Corporation
PCTUS0339930		AUTOMATED MEDIA LIBRARY CONFIGURATION	EMC Corporation
PCTUS0340222		AUTOMATED MEDIA MANAGEMENT	EMC Corporation
PCTUS05003686		METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
PCTUS05018102		SYSTEM AND METHOD OF FRAUD REDUCTION	EMC Corporation
PCTUS05035200		FILE INDEX PROCESSING	EMC Corporation
PCTUS05035212		INDEX PROCESSING	EMC Corporation
PCTUS05045921		CONSUMER INTERNET AUTHENTICATION SERVICE	EMC Corporation
PCTUS0905429		DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
PCTUS1000947		DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
PCTUS1348841		FORMAT IDENTIFICATION FOR FRAGMENTED BYTE ALIGNED INTEGER IMAGE DATA	EMC Corporation
PCTUS1991003034		METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
PCTUS1991003034		METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
PCTUS1991005679		FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS199101251		Method and Apparatus for Transferring Data through a Staging Memory	EMC Corporation
PCTUS199101252		DATA STORAGE APPARATUS AND METHOD	EMC Corporation
PCTUS199101310		METHOD AND APPARATUS FOR SCHEDULING ACCESS TO A CSMA COMMUNICATION MEDIUM	EMC Corporation
PCTUS1993010585		METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
PCTUS199404326		REMOTE DATA MIRRORING	EMC Corporation
PCTUS1995009469		COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
PCTUS1995016543		METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
PCTUS199506426		APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
PCTUS1996011263		System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
PCTUS199601973		INTEGRITY PROTECTION FOR PARITY CALCULATION FOR RAID PARITY CACHE	EMC Corporation
PCTUS199605342		METHOD AND APPARATUS FOR STORING AND RETRIEVING ERROR CHECK INFORMATION	EMC Corporation
PCTUS199607484		DISK ARRAY SYSTEM INCLUDING A DUAL-PORTED STAGING MEMORY AND CONCURRENT REDUNDANCY CALCULATION CAPABILITY	EMC Corporation
PCTUS199611781		DYNAMIC LOAD BALANCING	EMC Corporation
PCTUS199704366		SYSTEM FOR CURRENTLY UPDATING THE DATABASE BY ONE HOST AND READING THE DATABASE BY DIFFERENT HOST FOR THE PURPOSE OF IMPLEMENTING DECISION SUPPORT FUNCTIONS	EMC Corporation
PCTUS199708243		SUPPLEMENTARY COMMUNICATIONS BETWEEN HOST PROCESSOR AND MASS STORAGE CONTROLLER	EMC Corporation
PCTUS199913522		METHOD & APPARATUS FOR AUTHENTICATING CONNECTIONS TO A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
PCTUS199914974		Readable indelible mark on storage media	EMC Corporation
PCTUS199921690		Latent Illuminance Discrimination Marker with Reflective Layer for Data Storage Cartridges	EMC Corporation
PCTUS199929499		APPARATUS AND METHODS FOR OPERATING A COMPUTER STORAGE SYSTEM	EMC Corporation
PCTUS2000021193		REMOTE MIRRORING SYSTEM, DEVICE, AND METHOD	EMC Corporation
PCTUS2000031735		METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS2000041480		SYSTEM AND METHOD FOR SECURE ELECTRONIC TRANSACTIONS	EMC Corporation
PCTUS200100196		METHODS AND APPARATUS FOR ACCESSING SHARED DATA	EMC Corporation
PCTUS2001004564		SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION ADN TRANSCRIPTION TECHNIQUES	EMC Corporation
PCTUS2001004762		SYSTEM AND METHOD FOR INTELLIGENT, GLOBALLY DISTRIBUTED NETWORK STORAGE	EMC Corporation
PCTUS2001004768		SYSTEM AND METHOD FOR DISTRIBUTED MANAGEMENT OF DATA STORAGE	EMC Corporation
PCTUS2001012298		CONTROLLER FAIL-OVER WITHOUT DEVICE BRING-UP	EMC Corporation
PCTUS2001040119		SYSTEM AND METHOD FOR DATA PROTECTION WITH MULTIDIMENSIONAL PARITY	EMC Corporation
PCTUS2001050495		RESTORING MASS STORAGE DEVICE TO A PRIOR STATE IN RESPONSE TO PROCESSING INTERRUPTION	EMC Corporation
PCTUS200131306		SYSTEM FOR IDENTIFYING COMMON DIGITAL SEQUENCES	EMC Corporation
PCTUS200145082		REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation
PCTUS200145437		ADAPTIVE PRE-FETCHING OF DATA FROM A DISK	EMC Corporation
PCTUS200148991		DUAL CHANNEL RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SERVERS	EMC Corporation
PCTUS20020022848		NETWORK SECURITY DEVICES AND METHODS	EMC Corporation
PCTUS2002004877		METHOD OF AUTHENTICATING A PAYMENT ACCOUNT USER	EMC Corporation
PCTUS2002024728		SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
PCTUS2002037120		DYNAMIC FILE ACCESS CONTROL AND MANAGEMENT	EMC Corporation
PCTUS200214163		SELECTION OF A RESOURCE IN A DISTRIBUTED COMPUTER SYSTEM	EMC Corporation
PCTUS200216871		INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
PCTUS200220079		MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
PCTUS200230557		PACKET CLASSIFICATION IN A STORAGE SYSTEM	EMC Corporation
PCTUS200230912		PROTOCOL TRANSLATION IN A STORAGE SYSTEM	EMC Corporation
PCTUS2003025099		CRYPTOGRAPHIC METHODS AND APPARATUS FOR SECURE AUTHENTICATION	EMC Corporation
PCTUS200302785		Disk-Based Archival Data Storage System and Method	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS2003036699		SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
PCTUS20032399 8		METHOD AND APPARATUS FOR PROVISIONING STORAGE RESOURCES	EMC Corporation
PCTUS20040025 383		Method for embedding a server into a storage subsystem	EMC Corporation
PCTUS20040034 98		VIRTUAL ORDERED WRITES	EMC Corporation
PCTUS20040057 31		DATA STORAGE SYSTEM	EMC Corporation
PCTUS20040088 25		SOFT ADDRESSING FOR DISK DRIVE ENCLOSURES	EMC Corporation
PCTUS20040098 36		METHOD AND APPARATUS FOR MULTI-REALM SYSTEM MODELING	EMC Corporation
PCTUS20040099 46		METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
PCTUS20040143 79		METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
PCTUS20040218 46		SECURE SEED GENERATION PROTOCOL	EMC Corporation
PCTUS20040257 54		DATA STORAGE SYSTEM HAVING SHARED RESOURCE	EMC Corporation
PCTUS20040296 88		SYSTEM AND METHOD FOR AUTHENTICATION	EMC Corporation
PCTUS20040297 76		SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
PCTUS20040343 30		VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
PCTUS20040369 63		METHOD FOR MAPPING A FLAT NAMESPACE ONTO A HIERARCHICAL NAMESPACE USING LOCALITY OF REFERENCE CUES	EMC Corporation
PCTUS20040369 93		SYSTEM AND METHOD OF ADDRESSING EMAIL AND ELECTRONIC COMMUNICATION FRAUD	EMC Corporation
PCTUS20040378 87		DATA STORAGE SYSTEM	EMC Corporation
PCTUS20040412 40		TECHNIQUES FOR MAINTAINING OPERATION OF A DATA STORAGE SYSTEM DURING A FAILURE	EMC Corporation
PCTUS20040412 84		VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
PCTUS20040412 98		SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
PCTUS20041648 0		SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
PCTUS20042917 4		DATA MESSAGE MIRRORING AND REDIRECTION	EMC Corporation
PCTUS20042969 0		SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
PCTUS20050024 203		Systems and methods for providing distributed cache coherence	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS20050050 9		SYSTEMS AND METHODS FOR PARALLEL COMMUNICATION	EMC Corporation
PCTUS20050143 02		STORAGE SWITCH TRAFFIC BANDWIDTH CONTROL	EMC Corporation
PCTUS20050143 08		ONLINE INITIAL MIRROR SYNCHRONIZATION AND MIRROR SYNCHRONIZATION VERIFICATION IN STORAGE AREA NETWORKS	EMC Corporation
PCTUS20050227 95		LOW COST FLEXIBLE NETWORK ACCESSED STORAGE ARCHITECTURE	EMC Corporation
PCTUS20050259 38		TRACKING OBJECTS MODIFIED BETWEEN BACKUP OPERATIONS	EMC Corporation
PCTUS20050262 07		STORING DATA REPLICAS REMOTELY	EMC Corporation
PCTUS20050352 01		VIRTUAL ORDERED WRITES	EMC Corporation
PCTUS20050369 45		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS USING WEB SERVICES	EMC Corporation
PCTUS20050370 87		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
PCTUS20050370 88		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS	EMC Corporation
PCTUS20050403 76		IMPLEMENTING APPLICATION SPECIFIC MANAGEMENT POLICIES ON A CONTENT ADDRESSED STORAGE DEVICE	EMC Corporation
PCTUS20050403 77		CONTENT ADDRESSED STORAGE DEVICE CONFIGURED TO MAINTAIN CONTENT ADDRESS MAPPING	EMC Corporation
PCTUS20050461 11		BACKUP INFORMATION MANAGEMENT	EMC Corporation
PCTUS20050464 33		METHOD TO PERFORM PARALLEL DATA MIGRATION IN A CLUSTERED STORAGE ENVIRONMENT	EMC Corporation
PCTUS20050464 72		MULTI-FUNCTION EXPANSION SLOTS FOR A STORAGE SYSTEM	EMC Corporation
PCTUS20050464 90		SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
PCTUS20050468 40		SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
PCTUS20060010 64		METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
PCTUS20060010 65		METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
PCTUS20060010 73		ASYNCHRONOUS EVENT NOTIFICATION	EMC Corporation
PCTUS20060056 06		DERIVATIVE SEEDS	EMC Corporation
PCTUS20060064 74		CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
PCTUS20060084 24		SECTOR-EDGE CACHE	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS2006008426		ASYNCHRONOUS DETECTION OF LOCAL EVENT BASED POINT-IN-TIME STATE OF LOCAL-COPY IN THE REMOTE-COPY IN A DELTA-SET ASYNCHRONOUS REMOTE REPLICATION	EMC Corporation
PCTUS2006011129		TECHNIQUES FOR PROVIDING COMMUNICATION IN A DATA STORAGE SYSTEM USING A SINGLE IC FOR BOTH STORAGE DEVICE COMMUNICATIONS AND PEER-TO-PEER COMMUNICATIONS	EMC Corporation
PCTUS2006011784		DATA STORAGE SYSTEM HAVING MEMORY CONTROLLER WITH EMBEDDED CPU	EMC Corporation
PCTUS2006014180		METHODS AND APPARATUS FOR STORING CONTENT IN A FILE SYSTEM	EMC Corporation
PCTUS2006014181		METHODS AND APPARATUS FOR MANAGING THE STORAGE OF CONTENT (TIME BASED DIRECTORY STRUCTURES IN CENTERA)	EMC Corporation
PCTUS2006020927		MULTIPLEXING SYSTEM	EMC Corporation
PCTUS2006024535		STORAGE DATA ENCRYPTION	EMC Corporation
PCTUS2006025287		CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
PCTUS2006025435		REDIRECTING AND MIRRORING OF TELEPHONIC COMMUNICATIONS	EMC Corporation
PCTUS2006030865		SEARCHABLE BACKUPS	EMC Corporation
PCTUS2006031202		DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
PCTUS2006031487		SNAPSHOT INDEXING	EMC Corporation
PCTUS2006032221		INFORMATION PROTECTION METHOD AND SYSTEM	EMC Corporation
PCTUS2006032379		COMPLIANCE PROCESSING OF RIGHTS MANAGED DATA	EMC Corporation
PCTUS2006039638		FRAUDULENT TRANSACTIONS BY COLORING	EMC Corporation
PCTUS2006049539		CONTINUOUS BACKUP USING A MIRROR DEVICE	EMC Corporation
PCTUS2006049593		METHODS AND APPARATUS FOR CONFIGURING A STORAGE SYSTEM	EMC Corporation
PCTUS200614000		TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
PCTUS200625434		ENHANCED SERVICES PROVIDED USING COMMUNICATION REDIRECTION AND PROCESSING	EMC Corporation
PCTUS200636762		AUTHENTICATION METHOD AND APPARATUS UTILIZING PROOF-OF-AUTHENTICATION MODULE	EMC Corporation
PCTUS2007007533		METHODS AND APPARATUS FOR TRANSFERRING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
PCTUS2007007536		ACCESSING DATA STORAGE DEVICES	EMC Corporation
PCTUS2007007943		SMART CONTAINERS	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS2007008989		EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
PCTUS2007014148		DATABASE OFFLOAD PROCESSING	EMC Corporation
PCTUS2007062156		SYSTEMS AND METHODS FOR OBTAINING ULTRA-HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
PCTUS2007064440		HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
PCTUS2007068661		AUTOMATED PRIORITY RESTORES	EMC Corporation
PCTUS2007081018		CRYPTOGRAPHIC KEY MANAGEMENT SYSTEM FACILITATING SECURE ACCESS OF DATA PORTIONS TO CORRESPONDING GROUPS OF USERS	EMC Corporation
PCTUS2008004560		SEEDING REPLICATION	EMC Corporation
PCTUS2008011959		POLICY BASED FILE MANAGEMENT	EMC Corporation
PCTUS200803568		AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
PCTUS200804104		CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
PCTUS2008070097		SYSTEM AND METHOD FOR PROVIDING WRITE-ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
PCTUS2008075467		DE-DUPLICATION IN VIRTUALIZED SERVER AND VIRTUALIZED STORAGE ENVIRONMENTS	EMC Corporation
PCTUS200870955		SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
PCTUS2009000567		METHOD AND APPARATUS FOR PROCESSING DISTRIBUTED DATA	EMC Corporation
PCTUS2009038254		SYSTEM, METHOD, AND APPARATUS FOR SINGLE SIGN-ON AND MANAGING ACCESS TO RESOURCES ACROSS A NETWORK	EMC Corporation
PCTUS2009054965		METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
PCTUS200941786		MULTIPEER	EMC Corporation
PCTUS2010001639		SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION OF SEGMENTS	EMC Corporation
PCTUS2010001764		SYSTEM AND METHOD FOR PROVIDING LONG-TERM STORAGE FOR DATA	EMC Corporation
PCTUS2010002593		SNAPSHOTTING OF A PERFORMANCE STORAGE SYSTEM IN A SYSTEM FOR PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	EMC Corporation
PCTUS2010043821		DATA PROCESSING SYSTEM USING CACHE-AWARE MULTIPATH DISTRIBUTION OF STORAGE COMMANDS AMONG CACHING STORAGE CONTROLLERS	EMC Corporation
PCTUS2010052349		SYSTEMS AND METHODS FOR FACILITATING DATA DISCOVERY	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS201022466		SYSTEM AND METHOD FOR SECURE AND RELIABLE MULTI-CLOUD DATA REPLICATION	EMC Corporation
PCTUS2011000424		INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
PCTUS2011001604		TRANSMITTING FILESYSTEM CHANGES OVER A NETWORK	EMC Corporation
PCTUS2011022578		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
PCTUS2011026720		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
PCTUS2011053682		OPTIMIZED RECOVERY	EMC Corporation
PCTUS201142219		DATA ACCESS DURING DATA RECOVERY	EMC Corporation
PCTUS201144115		SYSTEM AND METHOD FOR SUB-BAND DATA DEDUPLICATION FOR DISK STORAGE SUBSYSTEMS	EMC Corporation
PCTUS201167145		EFFICIENT STORAGE TIERING	EMC Corporation
PCTUS2012028035		SYSTEM AND METHOD FOR MAINTAINING CONSISTENT POINTS IN FILE SYSTEMS USING A PRIME DEPENDENCY LIST	EMC Corporation
PCTUS2012028037		TIME-BASED DATA PARTITIONING	EMC Corporation
PCTUS2012028041		RESOURCE EFFICIENT SCALE-OUT FILE SYSTEMS	EMC Corporation
PCTUS2012070188		EFFICIENT BACKUP REPLICATION	EMC Corporation
PCTUS2013061478		SYSTEM AND METHOD FOR FULL VIRTUAL MACHINE BACKUP USING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
PCTUS201333280		STORAGE SYSTEM WITH INCREMENTAL MULTI-DIMENSIONAL RAID	EMC Corporation
PCTUS201348840		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
PCTUS201361768		IDENTITY AND ACCESS MANAGEMENT	EMC Corporation
PCTUS2014016596		DATA ANALYTICS PLATFORM OVER PARALLEL DATABASES AND DISTRIBUTED FILE SYSTEMS	EMC Corporation
PCTUS201471647		PARALLEL ON-PREMISES AND CLOUD-BASED AUTHENTICATION	EMC Corporation
PCTUS201566497		METHOD AND SYSTEM TO SEARCH LOGS THAT CONTAIN A MASSIVE NUMBER OF ENTRIES	EMC Corporation
PCTUS2016177700		DISASTER RECOVERY AS A SERVICE	EMC Corporation
PCTUS2016177702		SECURE CLOUD-BASED STORAGE OF DATA SHARED ACROSS FILE SYSTEM OBJECTS AND CLIENTS	EMC Corporation
PCTUS8904845		SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF	EMC Corporation

Application Number	Registration Number	Title	Owner
		REMOTE COMPUTERS	
PCTUS9002315		FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
PCTUS9003594		Method and Circuit for Programmably Selecting a Variable Sequence of Elements Using Write-Back (As amended)	EMC Corporation
PCTUS9003629		Method and Circuit for Decoding a Manchester Code Signal	EMC Corporation
PCTUS9006079		METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
PCTUS9101253		METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
PCTUS9101254		NON-VOLATILE MEMORY STORAGE OF WRITE OPERATION IDENTIFIER IN DATA STORAGE DEVICE	EMC Corporation
PCTUS9101255		Enhanced Interface Permitting Multiple-Byte Parallel Transfers of Control Information and Data on a Small Computer System Interface (SCSI) Communication Bus and a Mass Storage System Incorporating the Enhanced Interface	EMC Corporation
PCTUS9101256		Multi-Port Mass Storage Device Announcing its Active Paths without Deactivating its Ports in a Network Architecture	EMC Corporation
PCTUS9101257		Data Corrections Applicable to Redundant Array of Independent Disks	EMC Corporation
PCTUS9101276		DISK ARRAY SYSTEM	EMC Corporation
PCTUS9101716		Method for Storing Data from an External Processor in Storage Devices Through Buffer Devices (As Amended)	EMC Corporation
PCTUS9102314		APPARATUS AND METHOD FOR CONTROLLING DATA FLOW BETWEEN A COMPUTER AND MEMORY DEVICES	EMC Corporation
PCTUS9102316		Method and Apparatus For Controlling Reselection of a Bus by Overriding a Prioritization Protocol	EMC Corporation
PCTUS9102317		Resource Management in a Multiple Resource System	EMC Corporation
PCTUS9200059		Storage Device Array Architecture with Copyback Cache	EMC Corporation
PCTUS9305255		SYSTEM AND METHOD FOR DYNAMICALLY CONTROLLING CACHE MANAGEMENT	EMC Corporation
PCTUS9311345		INRUSH CURRENT LIMITER	EMC Corporation
PCTUS9503181		METHOD AND APPARATUS FOR UTILIZING A TOKEN FOR RESOURCE ACCESS PROCEDE ET APPAREIL D'UTILISATION D'UN JETON D'ACCES A DE	EMC Corporation
PCTUS9513324		SNAPSHOT OF DATA STORED ON A MASS STORAGE SYSTEM	EMC Corporation
PCTUS96013742		HIGH AVAILABILITY COMPUTER SYSTEM AND METHODS RELATED THERETO	EMC Corporation
PCTUS9609463		RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
PCTUS9609843		REAL-TIME DATA PROTECTION SYSTEM AND METHOD	EMC Corporation
PCTUS9613172		DATA STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS9613781		SYSTEM FOR MIGRATING DATA BY SELECTING A FIRST OR SECOND TRANSFER MEANS BASED ON THE STATUS OF A DATA ELEMENT MAP	EMC Corporation
PCTUS9617156		STAGGERED STREAM SUPPORT FOR VIDEO ON DEMAND	EMC Corporation
PCTUS9703000		SYSTEM FOR ORTHOGONAL SIGNAL MULTIPLEXING	EMC Corporation
PCTUS9709419		METHOD AND APPARATUS FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SET	EMC Corporation
PCTUS9715747		DATA VALIDATION SYSTEM FOR A GROUP OF DATA STORAGE DISKS	EMC Corporation
PCTUS9716195		FILE TRANSFER UTILITY WHICH EMPLOYS AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
PCTUS9717432		DYNAMICALLY UPGRADEABLE DISK ARRAY SYSTEM AND METHOD	EMC Corporation
PCTUS9718522		FAIL-OVER SWITCHING SYSTEM	EMC Corporation
PCTUS9718523		HIGH PERFORMANCE DATA PATH WITH XOR ON THE FLY	EMC Corporation
PCTUS9720406		SYSTEM AND METHOD FOR MAINTAINING A LOGICALLY CONSISTENT BACKUP USING MINIMAL DATA TRANSFER	EMC Corporation
PCTUS98019725		DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
PCTUS9802816		I/O CONTROLLER SOFTWARE USING GROUPS OF THREADS	EMC Corporation
PCTUS9805779		AN AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
PCTUS9809887		APPARATUS AND METHOD FOR BACKUP OF A DISK STORAGE SYSTEM	EMC Corporation
PCTUS9820532		RELIABLE ARRAY OF DISTRIBUTED COMPUTING NODES	EMC Corporation
PCTUS9824530		METHOD FOR IMPROVING PERFORMANCE OF LARGE DATABASES	EMC Corporation
PCTUS9904373		METHOD & APPARATUS FOR STORING DIVERSE DATA STRUCTURES	EMC Corporation
PCTUS9906719		METHOD AND APPARATUS FOR ASYNCHRONOUSLY UPDATING A MIRROR OF A SOURCE DEVICE	EMC Corporation
PCTUS9913358		ENHANCED BLOCK CIPHERS WITH DATA-DEPENDENT ROTATIONS	EMC Corporation
PCTUS9913358		ENHANCED BLOCK CIPHERS WITH DATA-DEPENDENT ROTATIONS	EMC Corporation
PCTUS9913628		METHOD AND APPARATUS FOR PROVIDING DATA MANAGEMENT FOR A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
PCTUS9918601		METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
PCTUS9923939		METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
PCTUS9926450		LOGICAL UNIT MAPPING IN A STORAGE AREA NETWORK (SAN) ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS9927569		METHOD AND APPARATUS FOR IDENTIFYING CHANGES TO A LOGICAL OBJECT BASED ON CHANGES TO THE LOGICAL OBJECT AT A PHYSICAL LEVEL	EMC Corporation
PCTUS9931105		METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM BASED ON THE STATE OF PREVIOUS I/O OPERATIONS (As Amended)	EMC Corporation
PCTUS9931178		DATA STORAGE SYSTEM	EMC Corporation
PCTUS9931208		ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
PCTUS9931213		DATA STORAGE SYSTEM	EMC Corporation
PI9106875-4	PI9106875	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
PI9307360-7	PI9307360-7	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
RU2013156784		PATH SELECTION TO READ OR WRITE DATA	EMC Corporation
RU2015109763		OBJECT ENCRYPTION	EMC Corporation
RU2015111013		METADATA REPRESENTATION AND STORAGE	EMC Corporation
RU2015139056		WEIGHTLESS DATA OBJECTS CONTENT VERIFICATION	EMC Corporation
RU2015139057		TRACING GARBAGE COLLECTOR FOR SEARCH TREES UNDER MULTIVERSION CONCURRENCY CONTROL	EMC Corporation
RU2015140625		BLOCK LEVEL DEDUPLICATION WITH BLOCK SIMILARITY	EMC Corporation
RU2015141116		DISK SYNCHRONIZATION	EMC Corporation
RU2015153847		COPYING GARBAGE COLLECTOR FOR B+ TREES UNDER MULTI-VERSION CONCURRENCY CONTROL	EMC Corporation
RU2015153848		MUTABLE DATA OBJECTS CONTENT VERIFICATION TOOL	EMC Corporation
RU2015153849		GARBAGE COLLECTION SCOPE DETECTION FOR DISTRIBUTED STORAGE	EMC Corporation
RU2015154486		CAPACITY EXHAUSTION PREVENTION FOR DISTRIBUTED STORAGE	EMC Corporation
RU2015154746		STATISTICS MANAGEMENT FOR SCALE-OUT STORAGE	EMC Corporation
RU2015155279		MULTI-STREAM OBJECT-BASED UPLOAD IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
RU2015155281		OPTIMIZATION OF NETWORK DATA TRANSFERS OVER A WIDE AREA NETWORK	EMC Corporation
RU2015155284		CONNECTION-ORIENTED COMMUNICATION DEVICES WITH ROUND TRIP TIME ESTIMATION	EMC Corporation
RU2015155753		ERASURE CODING FOR ELASTIC CLOUD STORAGE	EMC Corporation
RU2015155763		ACCELERATED GALOIS FIELD CODING FOR STORAGE SYSTEMS	EMC Corporation
RU2016108810		OPTIMIZED AUTO-TIERING	EMC Corporation
RU2016111896		ACCELERATED ERASURE CODING FOR STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
RU2016111898		SYSTEM AND METHOD FOR SYNCHRONIZATION IN A CLUSTER ENVIRONMENT	EMC Corporation
RU2016112119		WRITE CACHE SYSTEM AND METHOD	EMC Corporation
RU2016112133		MANAGING SSD WRITE QUOTAS IN DATA STORAGE SYSTEMS	EMC Corporation
RU2016112139		MANAGING SSD WEAR RATE IN HYBRID STORAGE ARRAYS	EMC Corporation
RU2016112181		SYSTEM AND METHOD FOR REFERENCE TRACKING GARBAGE COLLECTOR	EMC Corporation
RU2016112182		SYSTEM AND METHOD FOR QUASI-COMPACTING GARBAGE COLLECTION	EMC Corporation
RU2016124790		CLOUD STORAGE WRITE CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
RU2016124793		CONFIGURATION MANAGEMENT FOR CLOUD STORAGE SYSTEM AND METHOD	EMC Corporation
RU2016125443		EFFICIENT ERASURE CODING OF LARGE DATA OBJECTS	EMC Corporation
RU2016125850		INCREMENTAL ERASURE CODING FOR STORAGE SYSTEMS	EMC Corporation
RU2016125853		INCREMENTAL BLOOM FILTER REBUILD FOR B+ TREES UNDER MULTI-VERSION CONCURRENCY CONTROL	EMC Corporation
RU2016125855		DATA OBJECT RECOVERY FOR STORAGE SYSTEMS	EMC Corporation
SE(EP)91910198.1	SE(EP)0555219	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
SG2012055000	182716	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
SG201206053-9	183332	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
TW85108635	TW125576	INTEGRITY PROTECTION FOR PARITY CALCULATION FOR RAID PARITY CACHE	EMC Corporation
WO1999US14934		Readable Indelible Mark on Storage Media	EMC Corporation
WO2007US78395		SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS IN A MULTI-PATH ENVIRONMENT	EMC Corporation
11609560	7774565	METHODS AND APPARATUS FOR POINT IN TIME DATA ACCESS AND RECOVERY	EIDC
10512687	8205009	APPARATUS FOR CONTINUOUS COMPRESSION OF LARGE VOLUMES OF DATA	EIDC
11536160	7627687	METHODS AND APPARATUS FOR MANAGING DATA FLOW IN A CONTINUOUS DATA REPLICATION SYSTEM HAVING JOURNALING	EIDC
11536233	7627612	METHODS AND APPARATUS FOR OPTIMAL JOURNALING FOR CONTINUOUS DATA REPLICATION	EIDC
13404129	N/A	HYPERVISOR VIRTUAL SERVER SYSTEM HAS VIRTUAL DATA SERVICES APPLIANCE RECEIVING INTERCEPTED INPUT/OUTPUT REQUESTS FROM	EIDC

Application Number	Registration Number	Title	Owner
		TAPPING DRIVER	
15246816	N/A	SECURITY FOR NETWORK COMPUTING ENVIRONMENT USING CENTRALIZED SECURITY SYSTEM	EMC Corporation
15248404	N/A	STATUS MONITORING SYSTEM AND METHOD	EMC Corporation
15248462	N/A	DATA TIERING BASED ON DATA SERVICE STATUS	EMC Corporation
15248434	N/A	CLUSTER-BASED ADAPTIVE METHODS AND APPARATUS FOR GENERATING PRICE RECOMMENDATIONS USING ONLINE TESTING	EMC Corporation
62379966	N/A	INFRASTRUCTURE BEZEL SYSTEM	EMC Corporation
	N/A	METHOD AND SYSTEM FOR PROCESSING DATA	EMC Corporation
15249066	N/A	MANAGING DATA STORAGE	EMC Corporation
14991614	N/A	[REDACTED]	EMC Corporation
15164188	N/A	[REDACTED]	EMC Corporation
15187434	N/A	[REDACTED]	EMC Corporation
15115890	N/A	EFFICIENT DEDUPLICATION OF LOGICAL UNITS	EMC Corporation
15232652	N/A	METHOD FOR REPLICATING DATA IN A BACKUP STORAGE SYSTEM USING A COST FUNCTION	EMC Corporation
62377957	N/A	WWH SPARK	EMC Corporation
62378101	N/A	WWH Spark	EMC Corporation
62378129	N/A	WWH Spark	EMC Corporation
15246125	N/A	METADATA RECONCILIATION	EMC Corporation
15247321	N/A	STATUS MONITORING SYSTEM AND METHOD	EMC Corporation
15246816	N/A	SECURITY FOR NETWORK COMPUTING ENVIRONMENT USING CENTRALIZED SECURITY SYSTEM	EMC Corporation
15233461	N/A	POWER-SAVING MECHANISMS FOR A DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
15228544	N/A	A DISTRIBUTED CONSUMER CLOUD STORAGE SYSTEM	EMC Corporation
15237945	N/A	METHOD FOR GENERATING DYNAMIC VECTOR GRAPHICS	EMC Corporation
15236684	N/A	CALCULATING DATA RELEVANCE FOR VALUATION	EMC Corporation
15241692	N/A	DATA SERVICES FOR SOFTWARE DEFINED STORAGE SYSTEM	EMC Corporation
15235385	N/A	AUTOMATED TEST COVERAGE ANALYSIS, EXECUTION AND REPORTING	EMC Corporation
15122302	N/A	SELECTIVE COMPRESSION IN DATA STORAGE SYSTEMS	EMC Corporation
15251197	N/A	LEASE-BASED LEADER DESIGNATION FOR MULTIPLE PROCESSES	EMC Corporation
15241474	N/A	CREATING DISTRIBUTED STORAGE DURING PARTITIONS	EMC Corporation
62382851	N/A	Adaptive Learning Platform for the Design and Management of Corporate Education Training	EMC Corporation

SCHEDULE 2 TO PATENT ASSIGNMENT AGREEMENT

EXCLUDED PATENTS

TITLE	APP. NO.	APP. DATE	REG. NO.	REG. DATE	STATUS
Providing Session Services With Application Connectors	11391980	28-Mar-2006	7653732	26-Jan-2010	Granted
Synchronizing Resource Type And Property Structures	11644076	21-Dec-2006	8266103	11-Sep-2012	Granted
Synchronizing Resource Type And Property Structures	13557115	24-Jul-2012	8473456	25-Jun-2013	Granted
Synchronizing Resource Type And Property Structures	13899231	21-May-2013			Published
Method And System For Managing Versioned Structured Documents In A Database	13338444	28-Dec-2011	8527480	03-Sep-2013	Granted
Methods And Systems For Building A Search Service Application	13533002	26-Jun-2012	9098497	04-Aug-2015	Granted
Phrase Matching For Document Classification	12075339	11-Mar-2008	8401842	19-Mar-2013	Granted
Method And System For Providing A Networked Collaborative Work Environment	08893111	15-Jul-1997	6233600	15-May-2001	Granted
Method And Apparatus For Facilitating Communication Between Collaborators In A Networked Environment	09116069	15-Jul-1998	6230185	08-May-2001	Granted
Method And Apparatus For Controlling Access To A Product	09116558	15-Jul-1998	6314408	06-Nov-2001	Granted
Method And System For Providing A Networked Collaborative Work Environment	09703276	31-Oct-2000	7127501	24-Oct-2006	Granted
Computer Readable Electronic Records Automated Classification System	13369006	08-Feb-2012	8682893	25-Mar-2014	Granted
Computer Readable Electronic Records Automated Classification System	12315610	04-Dec-2008	8135710	13-Mar-2012	Granted
Computer Readable Electronic Records Automated Classification System	14173186	05-Feb-2014	9129003	08-Sep-2015	Granted
Computer Readable Electronic	14819341	05-Aug-2015			Published

Records Automated Classification System					
Computer Readable Electronic Records Automated Classification System	10378025	28-Feb-2003	7478088	13-Jan-2009	Granted
Computer Readable Electronic Records Automated Classification System	09592778	13-Jun-2000	6553365	22-Apr-2003	Granted
Extensible Portlet Templates	11325363	03-Jan-2006	7739310	15-Jun-2010	Granted
User Interface For Controls	11279706	13-Apr-2006	7783983	24-Aug-2010	Granted
Configurable Views Of Context-Relevant Content	11473544	22-Jun-2006	8909748	09-Dec-2014	Granted
Configurable Views Of Context-Relevant Content	14537712	10-Nov-2014			Pending
Web Page Content Editing	11638857	13-Dec-2006	9037983	19-May-2015	Granted
Dynamic Display Of Web Page Content For Editing And Review	11638081	13-Dec-2006	8555159	08-Oct-2013	Granted
Incorporated Web Page Content	11639038	13-Dec-2006	8156141	10-Apr-2012	Granted
Access Control For Business Process Data	11644340	22-Dec-2006	8086637	27-Dec-2011	Granted
Access Control For Business Process Data	13302913	22-Nov-2011			Published
Hierarchical Display Of Project Information In A Collaboration Environment	11712844	28-Feb-2007	7996774	09-Aug-2011	Granted
Hierarchical Display Of Project Information In A Collaboration Environment	13174379	30-Jun-2011			Allowed
Electronic Submission Preparation	11824303	29-Jun-2007	8065599	22-Nov-2011	Granted
Method And System For Providing Information Related To A Task In A Case Management System	13433499	29-Mar-2012			Pending
Synchronous Business Process Execution Engine For Action Orchestration In A Single Execution Transaction Context	13435997	30-Mar-2012	9250869	02-Feb-2016	Granted
A Synchronous Business Process Execution Engine For Action Orchestration	14975331	18-Dec-2015			Pending
Method And System For Managing Task Assignments	13424604	20-Mar-2012			Pending
Case Management Software Development	13529319	21-Jun-2012	8819620	26-Aug-2014	Granted

Method And System For Using OCR Data For Grouping And Classifying Documents	13432251	28-Mar-2012	8724907	13-May-2014	Granted
Scanner Web Service For Web Application And Scanner Driver Communication	13537726	29-Jun-2012	8994967	31-Mar-2015	Granted
Scanner Web Service For Web Application And Scanner Driver Communication	14634091	27-Feb-2015	9241030	19-Jan-2016	Granted
Systems And Methods For Health Information Messages Archiving	13536425	28-Jun-2012			Pending
Methods And Systems For Automated Assignment Of Protection To Physical Documents That Are Digitized	13538047	29-Jun-2012	8931044	06-Jan-2015	Granted
Method And System For Enabling Legacy Patients Clinical Documents For Open Sharing	13537921	29-Jun-2012			Allowed
Detecting Time Zones Using Historical Date Sampling	13630943	28-Sep-2012	9262414	16-Feb-2016	Granted
Detecting Time Zones Using Historical Date Sampling	14990683	07-Jan-2016			Pending
New Ui Paradigm For Enterprise Collaboration Applications On Touch Base Devices	14042521	30-Sep-2013			Pending
Method To Allow Switching Of User Interface Layout Based On Context And Configuration	14135511	19-Dec-2013			Pending
Hierarchical Case Model Access Roles And Permissions	14145048	31-Dec-2013			Pending
Composable Events For Dynamic User Interface Composition	14136232	20-Dec-2013			Pending
Dynamic Discovery And Management Of Page Fragments	14136255	20-Dec-2013			Pending
Composable Context Menus	14136287	20-Dec-2013	9170786	27-Oct-2015	Granted
Composable Context Menus	14842713	01-Sep-2015			Pending
Prevention Of Circular Event Publication In Publish/Subscribe Model Using Path Vector	14172196	04-Feb-2014			Pending
System And Method To Present A Summarized Task View In A Case Management System	14320213	30-Jun-2014			Pending
Mechanism To Package And	14585981	30-Dec-2014			Pending

Processing Reusable Themes For Web Applications					
Method And System For Navigation Control	14585842	30-Dec-2014			Pending
Mechanism For Webpage Composition	14670949	27-Mar-2015			Pending
Method And System For Implementing Custom UI Actions In A Web Application Using Hidden Containers	14586172	30-Dec-2014			Pending
Method And System For Implementing Context Based Display Of Objects In Web Applications Using Link Relationships	14586260	30-Dec-2014			Pending
Binding Traits To Case Nodes	14502281	30-Sep-14			Pending
Composite Index On Hierarchical Nodes In The Hierarchical Data Model Within A Case Model	14502322	30-Sep-14			Pending
Case Leaf Nodes Pointing To Business Objects Or Document Types	14502361	30-Sep-14			Pending
Modeling Case Phase/State And Phase/State Transitions For Case Nodes	14502025	30-Sep-2014			Pending
Case Model - Data Model And Behavior Versioning	14502066	30-Sep-2014			Pending
Case System Events Triggering A Process	14502106	30-Sep-2014			Pending
Placeholder Case Nodes And Child Case Nodes In A Case Model	14502132	30-Sep-2014			Pending
Creating Templates Based On Case Model Instances	14502159	30-Sep-2014			Pending
Hierarchical Permissions Model For Case Management	14502194	30-Sep-2014			Pending
Descendent Case Role Alias	14502222	30-Sep-2014			Pending
Hierarchical Permissions Model Within A Document	14502246	30-Sep-2014			Pending
Expression-Based Hierarchical Mechanism For Html Form Data Validation	14571117	15-Dec-2014			Pending
Context Menu Fragment Management	14671289	27-Mar-2015			Pending
Image Box Filtering For Optical	14788170	30-Jun-2015			Pending

Character Recognition					
Image Box Filtering For Optical Character Recognition	62158775	08-May-2015			Pending
Case Fragment Management	14870459	30-Sep-2015			Pending
Method And System For Ideogram Character Analysis	PCTCN2015 091163	30-Sep-2015			Pending
Method And System For Document Similarity Analysis	14968421	14-Dec-2015			Pending
Model Of Documents And Method For Automatically Classifying A Document	DE(EP)6020 04017695	30-Mar-2004	DE(EP)1583 023	12-Nov-2008	Granted
Model Of Documents And Method For Automatically Classifying A Document	EP0490834.3	30-Mar-2004	EP1583023	12-Nov-2008	Granted
Model Of Documents And Method For Automatically Classifying A Document	GB(EP)0490 834.3	30-Mar-2004	GB(EP)1583 023	12-Nov-2008	Granted
Model Of Documents And Method For Automatically Classifying A Document	10852969	25-May-2004	7370059	06-May-2008	Granted
Model Of Documents And Method For Automatically Classifying A Document	EP0490834.3	30-Mar-2004	EP1583023	12-Nov-2008	Granted
Automatic Form Generation	11711191	26-Feb-2007	7886219	08-Feb-2011	Granted
Generation Of Randomly Structured Forms	11711451	26-Feb-2007	7840890	23-Nov-2010	Granted
Method And System For Using OCR Data For Grouping And Classifying Documents	13432139	28-Mar-2012	8595235	26-Nov-2013	Granted
Method And System For Creating Subgroups Of Documents Using Optical Character Recognition Data	13855906	03-Apr-2013	9069768	30-Jun-2015	Granted
Method And System For Identifying Anchors For Fields Using Optical Character Recognition Data	13855933	03-Apr-2013			Pending
Method And System For Classifying Documents That Have Different Scales	13865350	18-Apr-2013	8832108	09-Sep-2014	Granted
Method And System For Using Keywords To Merge Document Clusters	13868314	23-Apr-2013	8843494	23-Sep-2014	Granted
Method And System For Using Location Transformations To Identify Objects	13869769	24-Apr-2013	8880540	04-Nov-2014	Granted

Optimized Gestures For Zoom Functionality On Touch-Based Device	14040521				Pending
Determining Multiple Invitee Availability Statuses For Proposed Meetings	14108906				Pending
Method And System For Dynamically Generating A Watermarked Document During A Printing Or Display Operation	11300954	15-Dec-2005	8321947	27-Nov-2012	Granted
Method And System For Rendering Watermarked Content	11796835	30-Apr-2007	8312552	13-Nov-2012	Granted
Method And System For Rendering Watermarked Content Using A Watermark Window	11796911	30-Apr-2007	8526666	03-Sep-2013	Granted
Method And System For Implementing Independent Message Queues By Specific Applications	13331739	20-Dec-2011			Pending
Methods And Systems For Providing A Search Service Application	13538207	29-Jun-2012			Pending
Methods And Systems For Building A Search Service Application	13537311	29-Jun-2012			Pending
Extensible Service Execution Framework With Data Mapping Architecture	14135513	19-Dec-2013			Allowed
Systems And Methods For Management Of Collaborative Business Processes	11227254	16-Sep-2005			Pending
Providing Access To Managed Content In Rich Client Application Environments	11392313	28-Mar-2006	8086667	27-Dec-2011	Granted
Providing Access To Managed Content In Rich Client Application Environments	13306864	29-Nov-2011	8725797	13-May-2014	Granted
Providing Access To Managed Content In Rich Client Application Environments	14225357	25-Mar-2014			Published
Dynamic Construction Of Java Class Hierarchy Based On Metadata	11430428	08-May-2006	8655857	18-Feb-2014	Granted
Linking Business Objects And Documents	11473538	22-Jun-2006	8898264	25-Nov-2014	Granted
Linking Business Objects And	14519770	21-Oct-2014			Published

Documents					
Batching Content Management Operations To Facilitate Efficient Database Interactions	12005061	21-Dec-2007	8280917	02-Oct-2012	Granted
Batching Content Management Operations To Facilitate Efficient Database Interactions	13603065	04-Sep-2012	8650224	11-Feb-2014	Granted
Batching Content Management Operations To Facilitate Efficient Database Interactions	14147461	03-Jan-2014			Published
System For Delivering Notification Messages Across Different Notification Media	13536781	28-Jun-2012			Pending
System For Delivering And Confirming Receipt Of Notification Messages Across Different Notification Media	13536787	28-Jun-2012	8923823	30-Dec-2014	Granted
Semantic-Based Business Events	13722866	20-Dec-2012	9027144	05-May-2015	Granted
Method And System For Migrating Content Between Enterprise Content Management Systems	13910342	05-Jun-2013			Pending
Method And System For Morphing Object Types In Enterprise Content Management Systems	13926573	25-Jun-2013			Pending
Method And System For Cloning Enterprise Content Management Systems	13926601	25-Jun-2013			Pending
Optimizing Synchronization Of Enterprise Content Management Systems	14106506	13-Dec-2013			Pending
Optimizing Synchronization Of Content Management Servers	14132176	18-Dec-2013			Pending
Action Flow Fragment Management	14841146	31-Aug-2015			Pending
Method And Mechanism For Context Driven Alteration Of UI Artifacts Instances Behavior Using Expression Based Pluggable UI Aspects					Unfiled
Methods And Systems For Creating Business-Oriented Report Entities	13071266	24-Mar-2011	9135587	15-Sep-2015	Granted
Methods And Systems For	13245338	26-Sep-2011			Pending

Providing Automated Predictive Analysis					
Business Process Optimization Using Predictive Analytics	14040313	27-Sep-2013			Pending
Expression Based Inter-Widget Communication Mechanism	13538434	29-Jun-2012			Pending
Action Flow Client Framework	13474501	17-May-2012	9189761	17-Nov-2015	Granted
Method And System For Business Event Based Reporting	13538708	29-Jun-2012			Pending
Data Services Generation	13631426	28-Sep-2012			Pending
Methods And Systems For Multi-Dimensional Aggregation Using Composition	13538928	29-Jun-2012			Pending
Reorder And Selection Persistence Of Displayed Objects	13628402	27-Sep-2012			Pending
Methods And Systems For Multi-Dimensional Aggregation Using Composition	13538889	29-Jun-2012			Pending
Method And System For Stashing Of Document Alteration Information For Quicker Web Preview	13628511	27-Sep-2012			Pending
Method And System For Accelerated Transformation Of Content Based On Predictive Chunking	13630007	28-Sep-2012	9372840	21-Jun-2016	Granted
Method And System For Dynamic Selection Of Application Dialog Layout Design	13683024	21-Nov-2012			Pending
Mechanism To Support Composite Data Models In Html Form	13724422	21-Dec-2012	9424243	23-Aug-2016	Granted
Mechanism For Partial Page Refresh Using URL Addressable Hierarchical Page Structure	13722833	20-Dec-2012			Pending
Minimizing Eye Strain And Increasing Targeting Speed In Manual Indexing Operations	13720630	19-Dec-2012			Pending
Securing Visual Information On Images For Document Capture	13720654	19-Dec-2012	9032545	12-May-2015	Granted
Securing Visual Information On Images For Document Capture	14685280	13-Apr-2015			Published
Multi-Page Document Recognition In Document	13720671	19-Dec-2012			Pending

Capture					
Multi-Page Document Recognition In Document Capture	15221433	27-Jul-2016			Pending
Method And System For Auto-Correcting Perspective Distortion In Document Images	14024433	11-Sep-2013	9171359	27-Oct-2015	Granted
Method And System For Assessing Similarity Of Documents	14871501	30-Sep-2015			Pending
Churn Prediction Based On Social Factors	15083613	29-Mar-2016			Pending
A Tokenization Solution For Mixed Languages Based On Bit Value Tree					Unfiled
System And Method To Improve Query Performance In Enterprise Search Based On Permission Signature					Unfiled
A Solution To Enhance Phrase Search With Nested Thesaurus Parsing					Unfiled
Advanced Full Text Search With Customized Token Injection					Unfiled
A Restful Batch Template To Batchly Execute Content Management Services					Unfiled
Optimization Of Faceted Search In XML Data					Unfiled
Multi-Dimensional Analysis Of Objects By Manipulating Discovered Semantic Properties	09017823	03-Feb-1998	6028605	22-Feb-2000	Granted
Dividing Data For Multi-Thread Backup	11322176	28-Dec-2005	7574461	11-Aug-2009	Granted
Framework For Defining And Implementing Behaviors Across And Within Content Object Types	11391608	27-Mar-2006	7613726	03-Nov-2009	Granted
Automatic Resource Leak Detection	11393550	29-Mar-2006	8312062	13-Nov-2012	Granted
Serialization And Deserialization	11393199	30-Mar-2006	8131860	06-Mar-2012	Granted
Dynamic Updating Of Display And Ranking For Search Results	11522498	15-Sep-2006	8370334	05-Feb-2013	Granted
User Readability Improvement For Dynamic Updating Of Search Results	11522059	15-Sep-2006	8201107	12-Jun-2012	Granted

User Readability Improvement For Dynamic Updating Of Search Results	13467725	09-May-2012			Allowed
Synchronous Content Transfer	11823608	28-Jun-2007	8543700	24-Sep-2013	Granted
Processing Of A Generalized Directed Object Graph For Storage In A Relational Database	11824375	29-Jun-2007	7664779	16-Feb-2010	Granted
Processing Of A Generalized Directed Object Graph For Storage In A Relational Database	13095143	27-Apr-2011	8166008	24-Apr-2012	Granted
Processing Of A Generalized Directed Object Graph For Storage In A Relational Database	12653312	11-Dec-2009	7958089	07-Jun-2011	Granted
Service Scripting Framework	11890305	03-Aug-2007	8386608	26-Feb-2013	Granted
Service Scripting Framework	13751924	28-Jan-2013	8812683	19-Aug-2014	Granted
System And Method Of Distributed Query Execution	13341529	30-Dec-2011	8949221	03-Feb-2015	Granted
Progressive Indexing For Improving Ad-Hoc Query Performance	13341423	30-Dec-2011	8965899	24-Feb-2015	Granted
Blueprint-Driven Environment Template Creation In A Virtual Infrastructure	13538392	29-Jun-2012	9043786	26-May-2015	Granted
Blueprint-Driven Environment Template Creation In A Virtual Infrastructure	14693148	22-Apr-2015			Published
Environment-Driven Application Deployment In A Virtual Infrastructure	13538986	29-Jun-2012	9003406	07-Apr-2015	Granted
Environment-Driven Application Deployment In A Virtual Infrastructure	14633401	27-Feb-2015			Published
Integrated Search For Shared Storage	13837511	15-Mar-2013	9201889	01-Dec-2015	Granted
Method And System For Identifying Root Causes Of Application Underachievement In A Virtually Provisioned Environment	13782349	01-Mar-2013	9154398	06-Oct-2015	Granted
Method And System For Adjustments For Application Underachievement In A Virtually Provisioned	13782474	01-Mar-2013	9270557	23-Feb-2016	Granted

Environment					
Method And System For Calculating Costs Of Application Operations In A Virtually Provisioned Environment	13785088	05-Mar-2013	9231885	05-Jan-2016	Granted
Method And System For Estimating Required Resources To Support A Specific Number Of Users In A Virtually Provisioned Environment	13785114	05-Mar-2013	9128756	08-Sep-2015	Granted
System And Method For Expression Evaluation In A Distributed Networking Environment	13795212	12-Mar-2013	9116713	25-Aug-2015	Granted
Method And System For Load Balancing Using Server Dormant Mode	13433543	29-Mar-2012			Pending
Method And System For Dynamic Provisioning Using Server Dormant Mode For Virtual Server Dormancy	13433574	29-Mar-2012			Allowed
Methods And Systems For Concurrent Collection And Generation Of Shared Data	13525458	18-Jun-2012			Pending
Method And System For Memory Efficient, Update Optimized, Transactional Full-Text Index View Maintenance	13631363	28-Sep-2012	9245003	26-Jan-2016	Granted
Method And System For Memory Efficient, Update Optimized, Transactional Full-Text Index View Maintenance	CN201380050962.1	20-Sep-2013			Published
Method And System For Memory Efficient, Update Optimized,	EP13774548.5	20-Sep-2013			Published
Method And System For Memory Efficient, Update Optimized, Transactional Full-Text Index View Maintenance	PCTUS201360969	20-Sep-2013			National
Environment Template-Driven Environment Provisioning In A Virtual Infrastructure	13538478	29-Jun-2012	9015712	21-Apr-2015	Granted
Environment Template-Driven Environment Provisioning In A	14663723	20-Mar-2015			Published

Virtual Infrastructure					
Method And System For Tracking Changes To Application Model Definitions For Application Model Migration	13785067	05-Mar-2013			Allowed
Method And System For Optimized Parallel Queuing	13798916	13-Mar-2013	9104742	11-Aug-2015	Granted
Automatic Elevation Of System Security	14034239	23-Sep-2013	9055057	09-Jun-2015	Granted
Automatic Elevation Of System Security	14704759	05-May-2015			Published
Method And System For Connecting A Content Repository To A File Sharing Service	13799075	13-Mar-2013			Pending
Integrated Search For Shared Storage Using Index Throttling To Maintain Quality Of Service	13837594	15-Mar-2013	9239874	19-Jan-2016	Granted
Integrated Search For Shared Storage Using Index Throttling To Maintain Quality Of Service	14964997	10-Dec-2015			Pending
Method And System For Lock Free Statistics Collection	13928576	27-Jun-2013	9128749	08-Sep-2015	Granted
Method And System For Calculating Changes For A Large Data Set	13926654	25-Jun-2013			Pending
Calculating Expenses To Determine Whether To Provision Additional Resources In A Virtually Provisioned Environment	14109044	17-Dec-2013			Pending
Projecting Resource Allocation To Achieve Specific Application Operation Times In A Virtually Provisioned Environment	14106465	13-Dec-2013			Pending
Synchronizing Stateless Process Across Multiple Instances	14172152	04-Feb-2014			Pending
Composable Application Session Parameters	14136342	20-Dec-2013			Pending
Expression Based Declarative Data Service Execution Chaining	14171515	03-Feb-2014			Pending
Service To Invoke Companion Applications	14319806	30-Jun-2014			Pending
Capturing Unstructured	14570225	15-Dec-2014			Pending

PATENT
REEL: 055333 FRAME: 0409

Information In Application Pages					
Composable Test Automation Framework	IN2217CHE 2015	30-Apr-2015			Pending
Composable Test Automation Framework	14788106	30-Jun-2015			Pending
Annotated Interfaces And Properties	IN2216CHE 2015	30-Apr-2015			Pending
Annotated Test Interfaces	14755842	30-Jun-2015			Pending
Event Based Validation	14585907	30-Dec-2014			Pending
Method And System For Determining Workload Availability In A Multi-Tenant Environment	14673415	30-Mar-2015			Pending
Data Retention System For A Distributed File System	14675022	31-Mar-2015			Pending
Method And Mechanism For Data Source Fetch Through Virtual Data Source	14840991	31-Aug-2015			Pending
Method And Mechanism For Composite Data Service Generation And Implementation	14871425	30-Sep-2015			Pending
Method And System For Predictive Loading Of Software Resources	14851590	11-Sep-2015			Pending
Translation Of Unstructured Text Into Semantic Models	14871123	30-Sep-2015			Pending
Application Container And Application Service System	14970207	15-Dec-2015			Pending
Method And System For Providing Software Functionalities To Users Of Multi-Tenant Applications Via Inheritance	14871548	30-Sep-2015			Pending
Method And Mechanism For Optimal Saas Based Web Application Security Configuration Through Hierarchical Application Structure					Unfiled
Method And Mechanism For Distributed & Progressive Application Configuration Qualification Evaluation					Unfiled
Method And Mechanism For Optimal Scope Evaluation In					Unfiled

Scoped Based Hierarchical Configuration Using Evaluated Scope Propagation Technique.					
Compos Able Docking Navigation For Optimized Application Interaction					Unfiled
System And Method To Enhance Phrase Search With Nested Thesaurus Parsing					Unfiled
Seamless Upgrade & Patching By Leveraging Docker Containers And Enhanced CS Dormant Mode					Unfiled
Container Session					Unfiled
Avoiding Duplicative Storage Of Managed Content	11364960	28-Feb-2006	8600948	03-Dec-2013	Granted
Incorporated Web Page Content	11731404	30-Mar-2007	7958103	07-Jun-2011	Granted
Incorporated Web Page Content	13015503	27-Jan-2011	8799256	05-Aug-2014	Granted
Object Identity And Addressability	11823527	28-Jun-2007	8433699	30-Apr-2013	Granted
Object Identity And Addressability	13848903	22-Mar-2013	8874539	28-Oct-2014	Granted
Composable Action Flows	14136316	20-Dec-2013			Pending
Unified System For Connecting A Content Repository To A File Sharing Service	14231194	31-Mar-2014			Pending
Perfect Pitch - Auto-Tuning Of ECD Components, Saas Platform					Unfiled
Seamless Upgrade & Patching By Leveraging Docker Containers And Enhanced CS Dormant Mode					Unfiled
Virtual Appliance Deployment	CN201180063285.8				Published
Virtual Appliance Deployment	12983242		8839241	16-Sep-2014	Granted
Virtual Appliance Deployment	14460030		9213561	15-Dec-2015	Granted
Virtual Appliance Deployment	14937729				Pending
Virtual Appliance Deployment	PCTUS201167158				National
Decommissioning Virtual Appliances	12983246		8799915	05-Aug-2014	Granted
Decommissioning Virtual Appliances	14311157		9201699	01-Dec-2015	Granted
Instantiating Virtual Appliances	12983249		8601472	03-Dec-2013	Granted

Instantiating Virtual Appliances	14066252				Published
De-Duplicating Results Of Queries Of Multiple Data Repositories	14108706				Pending
Information Security Architecture For Encrypting Documents For Remote Access While Maintaining Access Control	09321839	28-May-1999	6289450	11-Sep-2001	Granted
Method Of Encrypting Information For Remote Access While Maintaining Access Control	10936829	09-Sep-2004	RE41186	30-Mar-2010	Granted
Method Of Encrypting Information For Remote Access While Maintaining Access Control	11129746	16-May-2005	RE44364	09-Jul-2013	Granted
Method Of Encrypting Information For Remote Access While Maintaining Access Control	09985096	01-Nov-2001	6449721	10-Sep-2002	Granted
Method For Encrypting Information For Remote Access While Maintaining Access Control	09906811	18-Jul-2001	6339825	15-Jan-2002	Granted
Information Security Architecture For Encryping Documents For Remote Acess While Maintaining Access Control	09736229	15-Dec-2000	6978376	20-Dec-2005	Granted
Information Security Architecture For Remote Access Control Using Non-Bidirectional Protocols	10919300	17-Aug-2004	7458102	25-Nov-2008	Granted
Seamless Integration Of Application Programs With Security Key Infrastructure	09232977	18-Jan-1999	6490679	03-Dec-2002	Granted
Seamless Integration Of Application Programs With Security Key Infrastructure	PCTUS0001 167	18-Jan-2000			National
Methods And Apparatus For Classifying Objects	11642794	20-Dec-2006	8375020	12-Feb-2013	Granted
Methods And Apparatus For Dynamically Classifying Objects	11642803	20-Dec-2006	8380696	19-Feb-2013	Granted
Accessing Rights-Managed Content From Constrained	11480300	30-Jun-2006			Pending

Connectivity Devices					
Methods And Apparatus For Adapting The Protection Level For Protected Content	11541360	29-Sep-2006	9118617	25-Aug-2015	Granted
Systems And Methods For Managing Content Having A Retention Period On A Content Addressable Storage System	11024195	38350	7627726	40148	Granted
Retention And Disposition Of Stored Content Associated With Multiple Stored Objects	11371147	07-Mar-2006	7970743	28-Jun-2011	Granted
Configurable Prioritization And Aging Of Queued Tasks	11388351	23-Mar-2006	8539493	17-Sep-2013	Granted
Profile-Based Assignment Of Queued Tasks	11388856	23-Mar-2006	8347295	01-Jan-2013	Granted
Processing Raw Information For Performing Real-Time Monitoring Of Task Queues	11388576	23-Mar-2006	8826280	02-Sep-2014	Granted
Wizard For Web Service Search Adapter	11605844	28-Nov-2006	8375362	12-Feb-2013	Granted
Object Tree Walking	11824477	29-Jun-2007	7792979	07-Sep-2010	Granted
Object Tree Walking	12804663	26-Jul-2010			Published
Assured Federated Records Management	14079907	14-Nov-2013			Allowed
Assured Federated Records Management	12005125	19-Dec-2007	8615497	24-Dec-2013	Granted
Reusing System Configuration Information And Metadata For Related Operations	12005143	21-Dec-2007	8131884	06-Mar-2012	Granted
Reusing System Configuration Information And Metadata For Related Operations	13356473	23-Jan-2012	8341299	25-Dec-2012	Granted
Reusing System Configuration Information And Metadata For Related Operations	13684003	21-Nov-2012	8612635	17-Dec-2013	Granted
Reusing System Configuration Information And Metadata For Related Operations	14079912	14-Nov-2013	8990440	24-Mar-2015	Granted
Optimized Fetching For Aspect Attributes	12005167	21-Dec-2007	8171054	01-May-2012	Granted
Optimized Fetching For Aspect Attributes	13430580	26-Mar-2012	8694546	08-Apr-2014	Granted
Customization Of Types Using Added Default Aspects	12005157	21-Dec-2007	8244778	14-Aug-2012	Granted
System And Method Of Dynamic Data Object Upgrades	13251175	30-Sep-2011	8612405	17-Dec-2013	Granted

PATENT
REEL: 055333 FRAME: 0413

System And Method Of Dynamic Data Object Upgrades	14061386	23-Oct-2013			Allowed
System And Method Of Dynamic Data Object Upgrades	15047043	18-Feb-2016			Pending
System And Method Of Rolling Upgrades Of Data Traits	13250992	30-Sep-2011	9164751	20-Oct-2015	Granted
Cross-Reference And Priority Claim To Related Applications	CN201280058212.4	28-Sep-2012			Published
Cross-Reference And Priority Claim To Related Applications	EP12836509.5	28-Sep-2012			Published
System And Method Of Rolling Upgrades Of Data Traits	14824876	12-Aug-2015			Pending
Cross-Reference And Priority Claim To Related Applications	PCTUS201258037	28-Sep-2012			National
System And Method Of Hierarchical Data Containers	13436926	31-Mar-2012	8949281	03-Feb-2015	Granted
System And Method Of Hierarchical Data Containers	CN201380028529.8	14-Mar-2013			Published
System And Method Of Hierarchical Data Containers	EP13769703.3	14-Mar-2013			Published
System And Method Of Hierarchical Data Containers	14568726	12-Dec-2014			Published
System And Method Of Hierarchical Data Containers	PCTUS201331509	14-Mar-2013			National
Method And System For Virtual Server Dormancy	13430943	27-Mar-2012			Pending
Polymorphic Application Of Policy	13435987	30-Mar-2012	9268916	23-Feb-2016	Granted
Polymorphic Application Of Policy	14997779	18-Jan-2016			Pending
Methods For Updating Reference Count And Shared Objects In A Concurrent System	13524411	15-Jun-2012			Pending
Methods For Updating Reference Count And Shared Objects In A Concurrent System	13524487	15-Jun-2012			Pending
Data Model Based Context Tree	13626199	25-Sep-2012			Pending
Method And System For Predictive Load Balancing	13627121	26-Sep-2012	8914517	16-Dec-2014	Granted
Method And System For Cache Data Analysis For Enterprise Content Management Systems	14036174	25-Sep-2013			Pending
Synchronous Default Aspects To Force Customizations On Existing And New Object Instances	14040143	27-Sep-2013			Pending

Method And System For Using External Content Type Object Types	14755000	30-Jun-2015			Pending
Method And System For Using Dynamic Content Types	14755858	30-Jun-2015			Pending
Method And System For Using Micro Objects	14755537	30-Jun-2015			Pending
Method And System For Extracting Content From Noisy Data	14673472	30-Mar-2015			Pending
Method And System For Configuring Processes Of Software Applications Using Activity Fragments	14871523	30-Sep-2015			Pending
Method And System For Enforcing Governance Across Multiple Content Repositories Using A Content Broker	14870986	30-Sep-2015			Pending
Method And Apparatus For Generating Metadata For A Document	PCTUS0140363	23-Mar-2001			National
Providing Direct Access To Managed Content	11229318	15-Sep-2005	8082334	20-Dec-2011	Granted
Providing Direct Access To Distributed Managed Content	11229036	15-Sep-2005	8396938	12-Mar-2013	Granted
Providing Local Access To Managed Content	11229317	15-Sep-2005	8447827	21-May-2013	Granted
Providing Local Access To Managed Content	13869864	24-Apr-2013			Allowed
Providing Local Access To Managed Content	15003595	21-Jan-2016			Pending
Virtual Repository Management	13189230	22-Jul-2011	8782096	15-Jul-2014	Granted
Virtual Repository Management	14282126	20-May-2014	9223817	29-Dec-2015	Granted
Virtual Repository Management	14945763	19-Nov-2015			Pending
Virtual Repository Management	PCTUS2006041254	24-Oct-2006			National
Virtual Repository Management	11355556	16-Feb-2006	8015222	06-Sep-2011	Granted
Virtual Repository Management To Provide Retention Management Services	11355555	16-Feb-2006	8819048	26-Aug-2014	Granted
Virtual Repository Management To Provide Functionality	EP07763646.2	24-Jan-2007			Published
Virtual Repository Management To Provide Functionality	PCTUS200701944	24-Jan-2007			National
Providing A Visual Indication	11370296	07-Mar-2006			Pending

PATENT
REEL: 055333 FRAME: 0415

That Stored Content Is Associated With A Collaboration Environment					
Containerized Security For Managed Content	11370293	07-Mar-2006			Pending
Consistent Retention And Disposition Of Managed Content And Associated Metadata	11370292	07-Mar-2006	7818300	19-Oct-2010	Granted
Consistent Retention And Disposition Of Managed Content And Associated Metadata	12872892	31-Aug-2010	8712980	29-Apr-2014	Granted
Resolving Retention Policy Conflicts	11370473	07-Mar-2006	7594082	22-Sep-2009	Granted
Resolving Retention Policy Conflicts	12462790	07-Aug-2009	7962708	14-Jun-2011	Granted
Retention And Disposition Of Components Of A Complex Stored Object	11370423	07-Mar-2006	7814063	12-Oct-2010	Granted
Deploying And Distributing Content Management Code	13523648	14-Jun-2012	9038046	19-May-2015	Granted
Deploying And Distributing Content Management Code	11430491	08-May-2006	8225311	17-Jul-2012	Granted
Automatic Detection And Redistribution Of Content Management Code	11430481	08-May-2006	8225310	17-Jul-2012	Granted
In Place Object Reconstruction	13687876	28-Nov-2012	9223639	29-Dec-2015	Granted
In Place Object Reconstruction	11430353	08-May-2006	8347321	01-Jan-2013	Granted
Managed Content Delivery Via Web Services	11430433	08-May-2006			Pending
Mandatory Access Control List For Managed Content	11393219	30-Mar-2006	7984066	19-Jul-2011	Granted
Mandatory Access Control List For Managed Content	13157954	10-Jun-2011	8370388	05-Feb-2013	Granted
Priveleged Access To Managed Content	11393081	30-Mar-2006	8555403	08-Oct-2013	Granted
Priveleged Access To Managed Content	14015844	30-Aug-2013	8973157	03-Mar-2015	Granted
Dynamic Access Control List For Managed Content	11393624	30-Mar-2006	8719903	06-May-2014	Granted
Application-Supervised Access To Managed Content	11393039	30-Mar-2006			Pending
Retention Of Complex Objects	11540503	29-Sep-2006	7801862	21-Sep-2010	Granted
Superseding Objects In A Retention System	11541485	29-Sep-2006	9063940	23-Jun-2015	Granted
Superseding Objects In A	14716650	19-May-2015			Published

Retention System					
User Management For Repository Manager	11638654	12-Dec-2006	8533789	10-Sep-2013	Granted
Configurable User Management	11638340	12-Dec-2006	7702787	20-Apr-2010	Granted
System For Lightweight Objects	11906185	28-Sep-2007	7987210	26-Jul-2011	Granted
System For Lightweight Objects	13161580	16-Jun-2011	8560572	15-Oct-2013	Granted
System For Lightweight Objects	13969101	16-Aug-2013			Published
Conversion Of Lightweight Object To A Heavyweight Object	11906174	28-Sep-2007	8656410	18-Feb-2014	Granted
Conversion Of Lightweight Object To A Heavyweight Object	14148052	06-Jan-2014	9009731	14-Apr-2015	Granted
Converting Heavyweight Objects To Lightweight Objects	11906184	28-Sep-2007	7987470	26-Jul-2011	Granted
Single Retention Policy	12494645	30-Jun-2009	8856081	07-Oct-2014	Granted
Method And System For Managing Versioned Structured Documents In A Database	13338553	28-Dec-2011	9002810	07-Apr-2015	Granted
Method And System For Managing Versioned Structured Documents In A Database	13338587	28-Dec-2011	8918379	23-Dec-2014	Granted
Method And System For Managing Versioned Structured Documents In A Database	13338499	28-Dec-2011	8732127	20-May-2014	Granted
Active Records Management	13436466	30-Mar-2012	8949194	03-Feb-2015	Granted
Method And System For Managing Versioned Structured Documents In A Database	13338533	28-Dec-2011	8898122	25-Nov-2014	Granted
Activity Stream Based Collaboration	13529286	21-Jun-2012			Pending
Method And System For Describing How Retention Should Be Applied To Composite Objects	13630096	28-Sep-2012	9201877	01-Dec-2015	Granted
Stateless Services In Content Management Clients	13630834	28-Sep-2012	9083579	14-Jul-2015	Granted
Stateless Services In Content Management Clients	14734318	09-Jun-2015			Published
Activity Stream Based Interaction	13529290	21-Jun-2012			Pending
Method And System For Connection Pooling For Content Management Clients	13630538	28-Sep-2012			Pending
Method And System For	13630438	28-Sep-2012	9258793	09-Feb-2016	Granted

PATENT
REEL: 055333 FRAME: 0417

Lightweight Sessions In Content Management Clients					
Method And System For Access Request Alerts For Protected Information	13926194	25-Jun-2013			Allowed
Chronological Based Retention For Objects Archived Through A Web-Based Storage Interface For Ilm	14040527	27-Sep-2013			Pending
Content Access Based On Mobile Device Geographical Location	14312909	24-Jun-2014			Pending
Assimilation In Multi Model Webpage Composition	14671212	27-Mar-2015			Pending
Process Fragment Management	14671396	27-Mar-2015			Pending
Rules Based Data Extraction	14788196	30-Jun-2015			Pending
Rules Based Data Extraction	62158797	08-May-2015			Pending
Method And System For Communication Using Published Events	14851499	11-Sep-2015			Pending
Server-Orchestrated Peer-To-Peer Content Sharing In CMS And Sync-N-Share Applications	14858913	18-Sep-2015			Pending
Method And System For Creating And Using Persona In A Content Management System	14871557	30-Sep-2015			Pending
Method And System For Managing And Tracking Content Dissemination In An Enterprise	14871126	30-Sep-2015			Pending
Method And System Implementing Dynamic And/Or Adaptive User Interfaces	14871288	30-Sep-2015			Pending
Dynamic External Views With Encryption To Support Global Data Compliance For Global Archives	14871414	30-Sep-2015			Pending
Method And System For Software Application Optimization Using Natural Language-Based Queries	14970259	15-Dec-2015			Pending
Dynamic Expression Based Default Values Of Child Hierarchical Nodes Based On Ancestor Level Meta-Data.					Unfiled
Expression Based Conditional Creation Of Child Hierarchical					Unfiled

Nodes Based On Ancestor Level Meta-Data.					
System And Method For End To End Performance Response Time Measurement Based On Graphic Recognition					Unfiled
System And Method To Solve Full Text Search Performance Issue Caused By Low-Privileged Users Based On Security Hash					Unfiled
System And Method To Tokenize Mixed Languages Based On Z-Tree					Unfiled
Method And Mechanism Of Context Driven Multi Nodal Content Discovery And Delivery In An Access Controlled Content Management System					Unfiled
Systems And Methods For Facilitating Management Of Data	11933111				Allowed
Systems And Methods For Performing Integrated Searches With Actions	12030153		8521741	27-Aug-2013	Granted
Systems And Methods For Managing Movement	12023941				Pending
Extending Content Management Policies To Local Copies Of Content	11810528	06-Jun-2007			Pending
Transfering Virtual Datacenters Between Hosting Locations While Maintaining Communication With A Gateway Server Following The Transfer	13174213	30-Jun-2011	9282142	08-Mar-2016	Granted
Managing Virtual Datacenters With Tool That Maintains Communications With A Virtual Data Center That Is Moved	13248372	29-Sep-2011	9058336	16-Jun-2015	Granted
Provisioning Interfacing Virtual Machines To Separate Virtual Datacenters	13248404	29-Sep-2011	8769058	01-Jul-2014	Granted
Virtual Datacenter Redundancy	14042200	30-Sep-2013			Pending
Defining Virtual Application Templates	14042219	30-Sep-2013			Pending
Provisioning Virtual	14042260	30-Sep-2013			Pending

Applications From Virtual Application Templates					
Method And System For Indexing A Structured Document	13161700	16-Jun-2011	8903829	02-Dec-2014	Granted
Method And System For Processing A Query	13161717	16-Jun-2011	8645388	04-Feb-2014	Granted
Methods And Systems For Building An Application Execution Map	13245390	26-Sep-2011	9203894	01-Dec-2015	Granted
Methods And Systems For Providing Recommendation Information	13074188	29-Mar-2011			Allowed
Methods And Systems For Providing Recommendation Information In A Workflow Process	13074193	29-Mar-2011			Pending
Method And Systems For Providing A Warning By A Case Management System	13245298	26-Sep-2011			Pending
Efficient Xacml Access Control Processing	13174719	30-Jun-2011	8875222	28-Oct-2014	Granted
Trait Definitions	13174746	30-Jun-2011	9092466	28-Jul-2015	Granted
System And Method Of Hierarchical Archive Management	13341194	30-Dec-2011			Pending
Risk-Adaptive Access Control	13852865	28-Mar-2013	9240996	19-Jan-2016	Granted
Risk-Adaptive Access Control	14957406	02-Dec-2015			Published
Method And System For Configuring Resources To Enable Resource Monitoring	13833499	15-Mar-2013	9118538	25-Aug-2015	Granted
Execution Path Determination In A Distributed Environment	13630966	28-Sep-2012			Pending
Method And System For Multi-Dimensional Logging For Enterprise Applications	13627148	26-Sep-2012	8949195	03-Feb-2015	Granted
Method And System For On-Demand Aggregated Logging For Distributed Systems	13921335	19-Jun-2013			Pending
Method And System For Translating Mind Maps To Test Management Utility Test Cases	13627086	26-Sep-2012	8949670	03-Feb-2015	Granted
Generating Customized Documentation For Applications	13725581	21-Dec-2012			Pending
Generation And Use Of A	13725609	21-Dec-2012	9275233	01-Mar-2016	Granted

Modified Protected File					
Generation And Use Of A Modified Protected File	14937680	10-Nov-2015			Published
Page-Independent Multi-Field Validation In Document Capture	13720679	19-Dec-2012	9317484	19-Apr-2016	Granted
Page-Independent Multi-Field Validation In Document Capture	15055154	26-Feb-2016			Published
Method And System For Deciding On Ordering Of Scripting Language Source Code For Dependency Resolution	13710030	10-Dec-2012			Pending
Using Server Side Font Preparation To Achieve Wysiwyg And Cross Platform Fidelity On Web Based Word Processor	14256101	18-Apr-2014			Published
Using Server Side Font Preparation To Achieve Wysiwyg And Cross Platform Fidelity On Web Based Word Processor	EP15159736.6	18-Mar-2015			Published
Method And System For Content Access Authorization	14641934	09-Mar-2015			Pending
Method And System For Content Management Of Structured And Unstructured Data	14754955	30-Jun-2015			Pending
Network Configuration Backup And Restore Operations Using Continuous Data Protection	11381343	02-May-2006	7971091	28-Jun-2011	Granted
A Method And Apparatus For Implementing A Remote Mirroring Data Facility Without Employing A Dedicated Leased Line To Form The Link Between Two Remotely Disposed Storage Devices	08935844	23-Sep-1997	7647460	12-Jan-2010	Granted
Using Pseudosnapshots For Continuous Data Protection Systems To Surface a Copy Of Data	11381347	02-May-2006	7603395	13-Oct- 2009	Granted
Using a Virtual Device to Access Data as it Previously Existed in a Mass Data Storage System	09268739	16-Mar-1999	6073222	6-Jun-2000	Granted
Method and System For	08322697	13-Oct-1994	5649152	15-Jul-1997	Granted

Providing a Static Snapshot of Data Stored on a Mass Storage System					
Backup System That Takes A Snapshot Of The Locations In A Mass Storage Device That Has Been Identified For Updating Prior To Updating	08747151	08-Nov-1996	5835953	10-Jan-1998	Granted
Comparing Mass Storage Devices Through Digests That Are Representative Of Stored Data In Order To Minimize Data Transfer	09165180	01-Oct-1998	6085298	04-Jul-2000	Granted
Methods And Apparatus For Multiple Point In Time Data Access	11609561	12-Dec-2006	7849361	07-Dec-2010	Granted
Cross Tagging Of Data For Consistent Recovery	11356920	17-Feb-2006	7577867	18-Aug-2009	Granted
Methods And Apparatus For Optimal Journaling For Continuous Data Replication	11536215	28-Sep-2006	7516287	07-Apr-2009	Granted
I/O Scheduling for Flash Drives	11862417	27-Sep-2007	8375187	12-Feb-2013	Granted
Efficient data storage system	11974961	16-Oct-2007	7434015	07-Oct-2008	Granted
Efficient data storage system	11403153	11-Apr-2006	7305532	04-Dec-2007	Granted
Efficient data storage system	10325479	20-Dec-2002	7065619	20-Jun-2006	Granted
Efficient data storage system	11136263	24-May-2005	7373464	13-May-2008	Granted
Efficient data storage system	10325690	12/20/2002	6928526	09-Aug-2005	Granted
Efficient data storage system	12079766	28-Mar-2008	7769967	03-Aug-2010	Granted
Efficient data storage system	12819356	21-Jun-2010	8275955	25-Sep-2012	Granted
Efficient data storage system	13592746	23-Aug-2012	8612696	17-Dec-2013	Granted
Efficient data storage system	14068415	31-Oct-2013	9081728	14-Jul-2015	Granted
Efficient data storage system	14734920	09-Jun-2015			Pending
Data Integrity Management for Data Storage Systems	09342955	29-Jun-1999	6915475	05-Jul-2005	Granted
Systems and methods which utilize parity sets	09927042	09-Aug-2001	6904556	07-Jun-2005	Granted

Snapshot Of Data Stored On A Mass Storage System			AT237842	15-May-2003	Granted
System And Method For Maintaining A Logically Consistent Backup Using Minimal Data Transfer			AT266228 (T)	15-May-2004	Granted
Snapshot of data stored on a			AU687274	19-Feb-1998	Granted

mass storage system			(B2)		
System and method for maintaining a logically consistent backup using minimal data transfer			AU726915 (B2)	23-Nov-2000	Granted
Snapshot of data stored on a mass storage system			AU3958595 (A)	6-May-1996	Granted
System and method for maintaining a logically consistent backup using minimal data transfer			AU5174098 (A)	29-May-1998	Granted
Snapshot Of Data Stored On A Mass Storage System	PCT/US1995 /013324	10-Oct-1995	CA2201859 (A1); CA2201859 (C)	19-Dec-2000	Granted
System And Method For Maintaining A Logically Consistent Backup Using Minimal Data Transfer	PCT/US1997 /020406	7-Nov-1997	CA2268929 (A1)	14-May-1998	Granted
Snapshot Of Data Stored On A Mass Storage System			DE69530405 (T2)	30-Oct-2003	Granted
System And Method For Maintaining A Logically Consistent Backup Using Minimal Data Transfer			DE69729011 (T2)	14-Jul-2005	Granted
Snapshot Of Data Stored On A Mass Storage System			EP0786111 (B1)	16-Apr-2003	Granted
System And Method For Maintaining A Logically Consistent Backup Using Minimal Data Transfer			EP1012716 (A4)	16-Aug-2001	Granted
Snapshot Of Data Stored On A Mass Storage System			WO9612232 (A1)	25-Apr-1996	Granted
System And Method For Maintaining A Logically Consistent Backup Using Minimal Data Transfer			WO9820419 (A1)	14-May-1998	Granted
Data Integrity Management For Data Storage Systems			DE60032239	31-May-2007	Granted
Data Integrity Management For Data Storage Systems			EP1198891 (B1)	6-Dec-2006	Granted
Data integrity management for data storage systems			EP1758253 (A1)	28-Feb-2007	Granted
Data Integrity Management For Data Storage Systems			WO0101581 (A9)	4-Jan-2001	Granted
Cache memory system for			DE10236179	20-Feb-2003	Granted

PATENT
REEL: 055333 FRAME: 0423

network data storage system, comprises memory segment having respective parity segment and data segments			(A1)		
Fault-tolerant memory system having parity groups	GB0217160.1	24-Jul-2002	GB2380836 (B)	15-Jun-2005	Granted
Memory System And Method For Using Same			JP4643539 (B2)	2-Mar-2011	Granted
Memory System And Using Method Therefor			JP2003131953 (A)	9-May-2003	Granted