502541771 10/22/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2587219

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GRANT R. WALLACE	10/08/2013
FREDERICK DOUGLIS	10/08/2013
PHILIP N. SHILANE	10/08/2013
HYONG SHIM	10/08/2013
STEPHEN SMALDONE	10/08/2013

RECEIVING PARTY DATA

Name:	EMC CORPORATION	
Street Address:	176 SOUTH STREET	
City:	HOPKINTON	
State/Country:	MASSACHUSETTS	
Postal Code:	01748	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14038694

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	6368P080F4
NAME OF SUBMITTER:	HUI (HARRY) WANG

PATENT REEL: 031456 FRAME: 0407 0 14038694

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Signature:	/Hui Wang/
Date:	10/22/2013
Total Attachments: 3 source=6368P080F4_Assignment#page1.tif source=6368P080F4_Assignment#page2.tif source=6368P080F4_Assignment#page3.tif	

PATENT REEL: 031456 FRAME: 0408

ASSIGNMENT OF PATENT APPLICATION	Attorney Docket No.: 6368P080F4
For good and valuable consideration, the receipt a	and sufficiency of which is hereby
acknowledged, I/we, the undersigned,Grant R. Wallac	e, Frederick Douglis, Philip N. Shilane,
Hyong Shim and Stephen Smaldone	
hereby sell, assign, and transfer to <u>EMC CORPORATIO</u>	ON
	of Dalawaya
a <u>corporation</u> (Type of Assignee: e.g., corporation, company, partnership, university	of <u>Delaware</u> , r, etc.)
having a principal place of business at 176 SOUTH STRE	EET HOPKINTON MA 01748
Traving a principal place of business at 170 0001110111t	LET, TIOT KINTON, MA 01740
("Assignee"), and its successors, assigns, and legal repre for the United States and all foreign countries, in and to ar are disclosed in the application (provisional or non-provision the non-provisional application may have a declaration ex- concurrently herewith and which application (provisional or	ny and all inventions or improvements that onal) for the United States patent which for ecuted by the undersigned prior hereto or
INDEXING A DEDUPLICATED CACHE SYSTEM BY INT	EGRATING FINGERPRINTS OF
UNDERLYING DEDUPLICATED STORAGE SYSTEM,	
said patent application also identified as follows (when known	own):
[I/we hereby authorize an attorney or agent for sain number and filing date of said patent application were sain to the sain patent application were sain to the s	
United States Patent Application Number <u>14/038,694</u>	filed September 26, 2013,
and in and to said application (provisional or non-provision provisional applications, utility applications, design applications, continued applications, renewal applications, reissue applications, repatent applications that have been or shall be filed in the Lany of said inventions or improvements; and in and to all december all foreign countries on said inventions or improvements; afrom the filing of said United States application;	tions, divisional applications, continuation tion-in-part applications, substitute examinations, extensions, and all other United States and all foreign countries on original patents, reissued patents, or shall be issued in the United States and
agree that said Assignee may apply for and receive improvements in its own name; and that, when requested, said Assignee, its successors, assigns, and legal represer and purpose of this Assignment, the undersigned will executive provisional applications, utility applications, design applications, continued prosecution applications, continued applications, reissue applications, repatent applications on any and all said inventions or improvant assignments, powers of attorney, and other papers; commassigns, and representatives all facts known to the understand that the said inventions of the understand the said inventions of the understand that the said inventions of the understand the said inventions of the s	without charge to, but at the expense of, natives, to carry out in good faith the intent cute all provisional applications, nontions, divisional applications, continuation tion-in-part applications, substitute examinations, extensions, and all other exements; execute all rightful oaths, nunicate to said Assignee, its successors,

PATENT REEL: 031456 FRAME: 0409

Rev. 1/08/2010

improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

Grant R. Wallace
Printed/Typed Name

Date Predent Roy

Frederick Douglis
Printed/Typed Name

Oct 8 , 20 B Signature

Philip N. Shilane
Printed/Typed Name
Date
Signature

Hyong Shim
Printed/Typed Name

Date

Stophen Smaldene

- 2 -

Stephen Smaldone
Printed/Typed Name

Assignment Document Return Address: BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 1279 Oakmead Parkway Sunnyvale, CA 94085-4040 (408) 720-8300

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- 3 -

PATENT REEL: 031456 FRAME: 0411