

TRADEMARK ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	INTELLECTUAL PROPERTY SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
QUANTUM CORPORATION		07/12/2007	CORPORATION:
ADVANCED DIGITAL INFORMATION CORPORATION		07/12/2007	CORPORATION:
CERTANCE HOLDINGS CORPORATION		07/12/2007	CORPORATION:
CERTANCE (US) HOLDINGS, INC.		07/12/2007	CORPORATION:
CERTANCE LLC		07/12/2007	LIMITED LIABILITY COMPANY:
QUANTUM INTERNATIONAL, INC.		07/12/2007	CORPORATION:

RECEIVING PARTY DATA

Name:	CREDIT SUISSE
Street Address:	ELEVEN MADISON AVENUE
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10025
Entity Type:	SWISS BANK:

PROPERTY NUMBERS Total: 71

Property Type	Number	Word Mark
Serial Number:	76329838	COLOR PROTECT
Serial Number:	76449769	TAPECARE
Serial Number:	76471251	ATL VALUELOADER
Serial Number:	76471252	ATL SUPERLOADER
Serial Number:	76539221	EMP60
Serial Number:	76539222	MP60
Serial Number:	76585004	TRUVUE

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Serial Number:	76603451	DLTICE
Serial Number:	78481629	Q
Serial Number:	78510625	DLT
Serial Number:	78659908	GOVAULT
Serial Number:	78918030	STORAGECARE VISION
Registration Number:	3170393	SDLT
Registration Number:	1610492	AMASS
Registration Number:	2030788	SCALAR
Registration Number:	2123355	ADIC
Registration Number:	2211317	FILESERV
Registration Number:	2294666	FASTSTOR
Registration Number:	2468420	STORNEXT
Registration Number:	2481663	
Registration Number:	2669251	PATHLIGHT
Registration Number:	2745109	SNC
Registration Number:	2881314	SCALAR
Registration Number:	2835721	VPS
Registration Number:	0926161	QUANTUM
Registration Number:	1089619	QUANTUM
Registration Number:	1199437	SIDEWINDER
Registration Number:	1410326	IRWIN
Registration Number:	1414004	FLOPPYTAPE
Registration Number:	1414785	FASTAPE
Registration Number:	1442874	ARCHIVE
Registration Number:	1452091	ARCHIVE
Registration Number:	1462655	ARCHIVEXL
Registration Number:	1464451	VIPER
Registration Number:	1478488	DISCACHE
Registration Number:	1489175	QIC STREAM
Registration Number:	1501056	HARDCARD
Registration Number:	1531795	ARCHIVE VP
Registration Number:	1749927	QUANTUM
Registration Number:	1869317	TAPESTOR
Registration Number:	2012843	QUANTUM SIROCCO
Registration Number:	2075239	QUANTUM

Registration Number:	2373379	DLT TAPE
Registration Number:	2386775	QUANTUM
Registration Number:	2392749	QUANTUM
Registration Number:	2411810	QUANTUM
Registration Number:	2434568	QUANTUM
Registration Number:	2472677	QUANTUM
Registration Number:	2487984	ULTRIUM
Registration Number:	2487985	LTO
Registration Number:	2490615	TURNING TRANSACTIONS INTO LOYAL CUSTOMERS
Registration Number:	2496768	LANVAULT
Registration Number:	2518368	DLT SUPER TAPE
Registration Number:	2576453	ULTRIUM LTO
Registration Number:	2737984	VALUSMART TAPE
Registration Number:	2745030	VALUSMART
Registration Number:	2765102	RADICAL SIMPLICITY
Registration Number:	2815237	LTO LINEAR TAPE-OPEN
Registration Number:	2820244	THE 3 R'S OF DATA PROTECTION: RELIABILITY, REDUNDANCY, AND RECOVERY
Registration Number:	2836782	LINEAR TAPE-OPEN
Registration Number:	2864338	DLT
Registration Number:	2864339	DLTTAPE
Registration Number:	2924217	
Registration Number:	2926907	CERTANCE
Registration Number:	2935989	VS TAPE
Registration Number:	2937229	WHEN FAILURE IS NOT AN OPTION
Registration Number:	2938735	VS TAPE VALUSMART
Registration Number:	2957502	VALUELOADER
Registration Number:	2987717	SUPERLOADER
Registration Number:	3018998	STORAGECARE
Registration Number:	3078209	SDLTTAPE

CORRESPONDENCE DATA

Fax Number: (646)848-4455

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 212-848-4455

Email: jlik@shearman.com

Correspondent Name: Gloria Jung
Address Line 1: 599 Lexington Avenue
Address Line 2: Shearman & Sterling LLP
Address Line 4: New York, NEW YORK 10022

ATTORNEY DOCKET NUMBER:	35610/17
NAME OF SUBMITTER:	Gloria Jung
Signature:	/GLORIA JUNG/
Date:	07/25/2007

Total Attachments: 41

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

INTELLECTUAL PROPERTY SECURITY AGREEMENT (as amended, amended and restated, supplemented or otherwise modified from time to time, the "*IP Security Agreement*") dated July 12, 2007, is made by the Persons listed on the signature pages hereof (collectively, the "*Grantors*") in favor of Credit Suisse, acting through one or more of its branches or any Affiliate thereof ("*Credit Suisse*"), as collateral agent (the "*Collateral Agent*") for the Secured Parties (as defined in the Credit Agreement referred to below).

WHEREAS, Quantum Corporation, a Delaware corporation, has entered into a Senior Secured Credit Agreement dated as of July 12, 2007 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "*Credit Agreement*"), with Credit Suisse, as Administrative Agent and Collateral Agent, and the Lenders party thereto. Terms defined in the Credit Agreement and not otherwise defined herein are used herein as defined in the Credit Agreement.

WHEREAS, as a condition precedent to the making of Loans by the Lenders and the issuance of Letters of Credit by the L/C Issuer under the Credit Agreement and the entry into Secured Hedge Agreements by the Hedge Banks from time to time, each Grantor has executed and delivered that certain Security Agreement dated July 12, 2007, made by the Grantors to the Collateral Agent (as amended, amended and restated, supplemented or otherwise modified from time to time, the "*Security Agreement*").

WHEREAS, under the terms of the Security Agreement, the Grantors have granted to the Collateral Agent, for the ratable benefit of the Secured Parties, a security interest in, among other property, certain intellectual property of the Grantors, and have agreed as a condition thereof to execute this IP Security Agreement for recording with the U.S. Patent and Trademark Office, the United States Copyright Office and other governmental authorities.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor agrees as follows:

SECTION 1. Grant of Security. Each Grantor hereby grants to the Collateral Agent for the ratable benefit of the Secured Parties a security interest in all of such Grantor's right, title and interest in and to the following (the "*Collateral*");

- (i) the patents and patent applications set forth in Schedule A hereto (the "*Patents*");
- (ii) the trademark and service mark registrations and applications set forth in Schedule B hereto (provided that no security interest shall be granted in United States intent-to-use trademark applications to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use trademark applications under applicable federal law), together with the goodwill symbolized thereby (the "*Trademarks*");
- (iii) all copyrights, whether registered or unregistered, now owned or hereafter acquired by such Grantor, including, without limitation, the copyright registrations and applications and exclusive copyright licenses set forth in Schedule C hereto (the "*Copyrights*");

(iv) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of such Grantor accruing thereunder or pertaining thereto;

(v) any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect, or otherwise recover, such damages; and

(vi) any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and supporting obligations relating to, any and all of the Collateral of or arising from any of the foregoing.

SECTION 2. Security for Obligations. The grant of a security interest in the Collateral by each Grantor under this IP Security Agreement secures the payment of all Obligations of such Grantor now or hereafter existing under or in respect of the Loan Documents, whether direct or indirect, absolute or contingent, and whether for principal, reimbursement obligations, interest, premiums, penalties, fees, indemnifications, contract causes of action, costs, expenses or otherwise. Without limiting the generality of the foregoing, this IP Security Agreement secures, as to each Grantor, the payment of all amounts that constitute part of the Secured Obligations and that would be owed by such Grantor to any Secured Party under the Loan Documents but for the fact that such Secured Obligations are unenforceable or not allowable due to the existence of a bankruptcy, reorganization or similar proceeding involving a Loan Party.

SECTION 3. Recordation. Each Grantor authorizes and requests that the Register of Copyrights, the Commissioner for Patents and the Commissioner for Trademarks and any other applicable government officer record this IP Security Agreement.

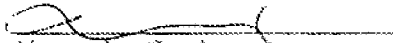
SECTION 4. Execution in Counterparts. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

SECTION 5. Grants, Rights and Remedies. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. Each Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Agent with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein.

SECTION 6. Governing Law. This IP Security Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.


IN WITNESS WHEREOF, each Grantor has caused this IP Security Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

QUANTUM CORPORATION

By 
Name: Jon Gacek
Title: Chief Financial Officer &
Executive Vice President, Finance

Address for notices:
1650 Technology Drive
Suite 700
San Jose, CA 95110

ADVANCED DIGITAL INFORMATION
CORPORATION

By 
Name: Jon Gacek
Title: Chief Executive Officer, President &
Chief Financial Officer

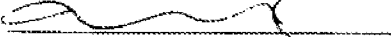
Address for notices:
1650 Technology Drive
Suite 700
San Jose, CA 95110

CERTANCE HOLDINGS CORPORATION

By 
Name: Jon Gacek
Title: Treasurer

Address for notices:
1650 Technology Drive
Suite 700
San Jose, CA 95110

CERTANCE (US) HOLDINGS, INC.

By 
Name: Jon Gacek
Title: Chief Financial Officer


Address for notices:
1650 Technology Drive
Suite 700
San Jose, CA 95110

CERTANCE LLC

By 
Name: Jon Gacek
Title: Chief Financial Officer

Address for notices:
1650 Technology Drive
Suite 700
San Jose, CA 95110

QUANTUM INTERNATIONAL, INC.

By 
Name: Jon Gacek
Title: President and Treasurer

Address for notices:
1650 Technology Drive
Suite 700
San Jose, CA 95110

SCHEDULE A

PATENTS

PATENT APPLICATIONS

APPL. NUMBER	APPL. DATE	TITLE	OWNER
09111475	07/08/1998	Native Image Data Storage On A Virtual Tape Storage System	Advanced Digital Information Corporation
10947857	09/22/2004	Apparatus And Method For Virtualizing Data Storage Media, Such As For Use In A Data Storage Library Providing Resource Virtualization	Advanced Digital Information Corporation
10413867	04/14/2003	Non-Volatile Memory Associated with Mass Data Storage Devices, and Associates Data Structures for Logging Events Associated with the Storage Devices	Advanced Digital Information Corporation
10738194	12/17/2002	Logical Library Architecture for Data Storage Applications and Methods of Use	Advanced Digital Information Corporation
10738622	12/17/2003	Intelligent Data Storage Architecture	Advanced Digital Information Corporation
09911740	07/25/01	Method Of Tension Control During Unthread	Quantum Corporation
10072437	02/05/2002	Emulated Backup Tape Drive Using Data Compression	Quantum Corporation
10225760	08/22/2002	Tape Cartridge With Multiple Keying Features	Quantum Corporation
10289120	11/05/2002	Magnetic Read/Write Head	Quantum Corporation
10302786	11/22/2002	Configuring A Storage Medium Using A Logical Cylindrical Recording Format	Quantum Corporation
10303644	11/22/2002	Error Correction In A Storage Medium Configured Using A Logical Cylindrical Recording Format	Quantum Corporation
10383856	03/07/2003	Introducing A Noise Signal Into A Read-Back Signal When Data Is Written To A Removable Data Storage Medium	Quantum Corporation
10412043	04/10/2003	Recovery Of Data On A Primary Data Volume	Quantum Corporation
10454420	06/03/2003	Correcting Data Using Redundancy Blocks	Quantum Corporation
10497864	04/07/2004	Tape Cartridge Write Protect Mechanism	Quantum Corporation
10627571	07/24/2003	Single Reel Tape Cartridge Having Guide Surface	Quantum Corporation
10641627	08/15/2003	Extendable Storage Bin Mounting For Automatic Storage Library	Quantum Corporation
10642038	08/15/2003	Automated Storage Library Cartridge Gripper With Cartridge Detector	Quantum Corporation

TRADEMARK

REEL: 003588 FRAME: 0865

APPL. NUMBER	APPL. DATE	TITLE	OWNER
10656656	09/04/2003	Tape Cartridge Soft Load System	Quantum Corporation
10675376	09/29/2003	Cartridge Transport Assembly	Quantum Corporation
10697101	10/31/03	A Tape Drive Head Cleaner	Certance LLC
10758935	01/14/2004	Auxiliary Memory In A Tape Cartridge	Quantum Corporation
10794697	03/04/2004	Feedback-Controlled Optical Servo Writer	Quantum Corporation
10829311	04/20/2004	Tape Drive Sensor System	Quantum Corporation
10834550	04/28/2004	Data Storage And Protection Apparatus And Methods Of Data Storage And Protection	Quantum Corporation
10856970	05/28/2004	Storage Drive Having Universal Format Across Media Types	Quantum Corporation
10861750	06/04/2004	Dual Source Tracking Servo Systems And Associated Methods	Quantum Corporation
10892948	07/16/2004	Methods And Systems For Providing Predictive Maintenance, Preventative Maintenance, And/Or Failure Isolation In A Tape Storage Subsystem	Quantum Corporation
10917782	08/13/2004	Methods Of Manufacturing Magnetic Heads With Reference And Monitoring Devices	Quantum Corporation
10923443	08/20/2004	Bounding Defective Regions Of A Tape Storage Medium	Quantum Corporation
10940111	09/13/04	Cartridge Carrier	Certance LLC
10944103	09/16/2004	Magnetic Head With Mini-Outriggers And Method Of Manufacture	Quantum Corporation
10944559	09/16/2004	Magnetic Head With Adaptive Data Island And Mini-Outrigger And Methods Of Manufacture	Quantum Corporation
10945717	09/20/2004	System And Method For Testing Media Device Doors	Quantum Corporation
10959644	10/05/2004	Integrated Reel Locking Device For Media Cartridge And Associated Methods Of Manufacture	Quantum Corporation
10964844	10/13/04	Lockable Ejection System And Method	Certance LLC
10986748	11/12/2004	Dynamic Skew Compensation Systems And Associated Methods	Quantum Corporation
10987263	11/12/2004	Passive Data Cartridge Pass-Through	Quantum Corporation
11024511	12/28/2004	Focalizer Alignment	Quantum Corporation
11083651	03/17/05	System And Method For Protecting Head Elements Of A Tape Drive	Quantum Corporation
11085865	03/22/2005	Use of the universal serial bus as an internal architecture within IDE disk array	Quantum Corporation [sic]
11137882	5/25/05	Cartridge Carrier	Quantum Corporation

APPL. NUMBER	APPL. DATE	TITLE	OWNER
11173780	06/30/05	Measuring And Correcting Asymmetry In Magnetic Recording Devices	Quantum Corporation
11198011	08/04/05	Data Error Detection During Media Write	Quantum Corporation
11222714	09/08/2005	Removable disk storage array emulating tape library having backup and archive capability	Quantum Corporation
11224882	09/12/05	Head Actuator Design For A Low Profile Tape Drive	Quantum Corporation
11243712	10/4/05	A Low Impedance Flexible Circuit For Tape Head	Quantum Corporation
11253257	10/17/2005	Intelligent Storage Of Device State In Response To Error Condition	Quantum Corporation
11255851	10/21/2005	Data Storage System For Storing Data In Different Types Of Data Storage Media	Quantum Corporation
11271104	11/10/2005	Data Storage System And Process	Quantum Corporation
11316609	12/21/05	Method And Apparatus For Interpolating Peak Detection Of Servo Stripe Pulses	Certance LLC
11346772	02/02/2006	Point-To Point Protocol	Quantum Corporation
11369427	03/06/2006	Magnetic read/write head	Quantum Corporation
11763009	6/14/2007	Sliding Map Detector For Partial Response Channels	Quantum Corporation
11789922	4/25/2007	Optical Servo Non-Linear Compensation Utilizing Virtual Date Tracks	Quantum Corporation
11786909	4/13/2007	Tape Cartridge For Testing And Repairing A Tape Head In A Tape Drive	Quantum Corporation
TBD	4/5/2007	Tape Tension Sensor	Quantum Corporation
11729617	3/28/2007	Intelligent Tape Drive Assembly That Diagnoses And Repairs Its Own Tape Drives	Quantum Corporation
11692732	3/28/2007	Servo Writing And Decoding Position Error Signal For Linear Tape Drives	Quantum Corporation
11728132	3/23/2007	Methodology And Apparatus Of Soft-Information Detection And Ldpc Decoding On Inter-Symbol Interference	Quantum Corporation
11726310	3/20/2007	Strengthening Parity Check Bit Protection For Array-Like Ldpc Codes	Quantum Corporation
11688092	3/19/2007	Multi-Channel Timing Recovery System	Quantum Corporation
11686891	3/15/2007	Password-Media Based Cartridge Authentication	Quantum Corporation
11716271	3/9/2007	Cryptographic Key Management For Stored Data	Quantum Corporation
11710876	2/26/2007	Data Storage System Including Unique Block Pool Manager And Applications In Tiered Storage	Quantum Corporation

APPL. NUMBER	APPL. DATE	TITLE	OWNER
11709569	2/21/2007	Protective Cartridge Case Having Shock Absorbing Features	Quantum Corporation
11709445	2/21/2007	Protective Cartridge Case Having Zero-Tension Latch	Quantum Corporation
29272948	2/21/2007	Media Cartridge Protective Case	Quantum Corporation
11676873	2/20/2007	Piezoelectric Micro-Actuator For Magnetic Tape Read/Write Head	Quantum Corporation
11698437	1/26/2007	Tape Cartridge Reel Lock Release Sensing Procedure	Quantum Corporation
11619384	1/3/2007	Method For Constructing RH Codes Of Arbitrary Rate	Quantum Corporation
60860558	11/22/2006	Common Hardware Architecture For Scalable Clustered Application Storage Platform	Quantum Corporation
60859277	11/14/2006	Variable Speed Buffer Servo Control For Linear Tape Drives	Quantum Corporation
60856502	11/3/2006	Improve Tape Leader Buckler	Quantum Corporation
11550530	10/18/2006	Azimuth Compensation Using Combination Bump Pes Detection	Quantum Corporation
11516069	9/6/2006	Multi-Function Head Flex Circuit Design For Tape Drives	Quantum Corporation
11510211	8/24/2006	Method For Improving Noise Performance Of A Digital Phase Locked Loop	Quantum Corporation
11506968	8/17/2006	Narrow Width Actuator Design	Quantum Corporation
11500765	8/7/2006	Dual Sided Uni-Directional Media For Bi-Directional Linear Tape Drive	Quantum Corporation
11476313	6/27/2006	Front Panel Wizard	Quantum Corporation
11451937	6/12/2006	Dlt Cartridge With 19mm (.750 Inches) Tape Media	Quantum Corporation
11445546	6/2/2006	Tape Drive Actuator Using A Four-Bar Flexure Moving-Magnet Motor System For The Fine Positioning Sys	Quantum Corporation
11443824	5/31/2006	Method For Allowing Multiple Lun Support For Tape Drives Using A Sata Interface	Quantum Corporation
11436268	5/17/2006	Buckler For Tape Drives	Quantum Corporation
11433152	5/13/2006	Accelerated Raid With Rewind Capability	Quantum Corporation
11413756	4/28/2006	Cable Connection Apparatus	Quantum Corporation
11409426	4/21/2006	Hub Lock/Head Cleaning Dual Purpose Mechanism	Quantum Corporation
11406908	4/18/2006	Single Reel Tape Cartridge Having Guide Surface	Quantum Corporation
11406909	4/18/2006	Single Reel Tape Cartridge Having Guide Surface	Quantum Corporation
11402239	4/11/2006	Sata Odd Block Handling	Quantum Corporation
11397415	4/3/2006	Network-Attachable, File-Accessible Storage Drive	Quantum Corporation
11376588	3/14/2006	MULTI-CHANNEL ADJACENT TRACK READERS	Quantum Corporation

APPL. NUMBER	APPL. DATE	TITLE	OWNER
11369427	3/6/2006	Magnetic Read/Write Head	Quantum Corporation

PATENTS

PAT. NUM.	ISSUE DATE	TITLE	OWNER
7180708	02/20/2007	Stationary Guide Assembly For Tape Drives	Quantum Corporation
7038417	05/02/2006	Current Control Loop Bias Calibration By Integration	Certance LLC
7204444	04/17/2007	Media cartridge having reel suspension system and method of manufacture	Quantum Corporation
7203027	04/10/2007	System And Method For Measuring The Position Of A Tape Drive Head	Certance LLC
7190544	03/13/2007	System And Method For Tape Drive Under Run Control	Certance LLC
7154695	12/26/2006	System And Method For Controlling The Speed Of A Tape Drive	Certance LLC
7230788	06/12/2007	System And Method For Tape Drive Control	Certance LLC
7136255	11/14/2006	Servo Methods And Systems Using Masked Medium Edge Position Sensors	Quantum Corporation
7102845	09/05/2006	Servo Methods And Systems Using Existing Data Structures And Medium Edge Position	Quantum Corporation
7139152	11/21/2006	Servo Methods And Systems Using Existing Data Structures And Optical Masks	Quantum Corporation
7035033	04/25/2006	Method And Apparatus For Reinitializing A Tape Drive After A Power Loss	Certance LLC
7116514	10/03/2006	Methods And Systems For Magnetic Recording	Quantum Corporation
7149050	12/12/2006	Diffraction Position Sensors And Control Systems	Quantum Corporation
7184233	02/27/2007	Dual Source Tracking Servo Systems And Associated Methods	Quantum Corporation
7177108	02/13/2007	Emulation Of Auxiliary Memory	Quantum Corporation
7158338	01/02/2007	Servo Track Having Periodic Frames Of Tone Field And Embedded Synchronization Marks	Quantum Corporation
7097125	08/29/2006	Tape Drive With Automatic Adaptation For Different Size Tape Cassettes	Certance LLC
7224545	05/29/2007	Methods And Systems For Overwrite Protected Storage Media	Quantum Corporation
7099103	08/29/2006	Methods For Controlling The Use Of A Cleaning Cartridge For Tape Drives	Quantum Corporation
7099102	08/29/2006	Multiple Format Magnetic Storage Media Drive	Quantum Corporation
7228490	06/05/2007	Error Correction Decoder Using Cells With Partial Syndrome Generation	Quantum Corporation
7227724	06/05/2007	A Head Actuator Assembly For A Tape Drive	Certance LLC

PAT. NUM.	ISSUE DATE	TITLE	OWNER
7154691	12/26/2006	Multi-Format Thinfilm Head And Associated Methods	Quantum Corporation
7134624	11/14/2006	A Locking Dual Hub Tape Reel For Tape Drives	Certance LLC
7066420	06/27/2006	Tape Drive Apparatus Having An Arrangement For Capturing And Retaining A Leader Pin From A Tape Cartridge	Certance LLC
7228467	06/05/2007	Correcting Data Having More Data Blocks With Errors Than Redundancy Blocks	Quantum Corporation
7111781	09/26/2006	System And Method For Library Inventory	Quantum Corporation
7117068	10/03/2006	System And Method For Library Robotics Positional Accuracy Using Parallax Viewing	Quantum Corporation
7222289	05/22/2007	Channel Processor Using Reduced Complexity LDPC Decoder	Certance LLC
7230782	06/12/2007	Correlation Receiver For Demodulating Servo Track Information	Quantum Corporation
7193810	03/20/2007	Automated Storage Library Gripper With Finger Position Detector	Quantum Corporation
7212375	05/01/2007	Automated Storage Library Gripper Apparatus And Method	Quantum Corporation
7050261	05/23/2006	Magnetic Recording Tape Drive With Tape Guide Assembly Having Dampening Disk (As Amended)	Certance LLC
7126779	10/24/2006	Tape Media Identification Code	Quantum Corporation
7163171	01/16/2007	Magnetic Tape Cartridge Having A Data Storage Medium Connected To An Integral Cleaning Tape Section	Quantum Corporation
7168648	01/30/2007	Improved Performance Tape Cartridge Leader For Single Reel Tape Cartridges	Quantum Corporation
7100858	09/05/2006	Self-Centering Tape Reel For Single Reel Tape Cartridges	Quantum Corporation
7149049	12/12/2006	Optical Apparatus For Tracking A Magnetic Tape	Quantum Corporation
7185031	02/27/2007	Creating A Backup Volume Using A Data Profile Of A Host Volume	Quantum Corporation
7162678	01/09/2007	Extended Error Correction Codes	Quantum Corporation
7187515	03/06/2007	Method And System For Tracking Magnetic Media With Embedded Optical Servo Tracks	Quantum Corporation
7133262	11/07/2006	A Tape Drive Apparatus With A Head Alignment System	Quantum Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
7110210	09/19/2006	Multi-Channel Magnetic Tape System Having Optical Tracking Servo	Quantum Corporation
7170721	01/30/2007	Method Of Producing Flux Guides In Magnetic Recording Heads	Quantum Corporation
7146492	12/05/2006	Method And Apparatus For Attaching More Than Two Disk Devices To An IDE Bus	Quantum Corporation
7161894	01/09/2007	Optical Recording Article	Quantum Corporation
6049848	04/11/2000	System And Method For Performing High-Speed Tape Positioning Operations	Advanced Digital Information Corporation
6324497	11/27/2001	Tape Driver Emulation System Including Tape Library Interface	Advanced Digital Information Corporation
7127388	10/24/2006	Improved Interface For An Open Systems Server Providing Tape Drive Emulation	Advanced Digital Information Corporation
6324497	11/27/2001	Tape Driver Emulation System Including Tape Library Interface	Advanced Digital Information Corporation
7127388	10/24/2006	Improved Interface For An Open Systems Server Providing Tape Drive Emulation	Advanced Digital Information Corporation
7146244	12/05/2006	Method of Generating Control Commands In A Distributed Mass Data Storage Library Network	Advanced Digital Information Corporation
D313011	12/18/1990	Data Cartridge Backup Unit	Advanced Digital Information Corporation
D377787	02/04/1997	Data-Storage Library Door Assembly	Advanced Digital Information Corporation
D409166	05/04/1999	Data Storage-Media Library	Advanced Digital Information Corporation
D409988	05/18/1999	Door For A Data-Storage-Media Library	Advanced Digital Information Corporation
D425878	05/30/2000	Data-Storage Library Front Door	Advanced Digital Information Corporation
D432541	10/24/2000	Data-Storage Library Front Door	Advanced Digital Information Corporation
5235474	08/10/1993	Apparatus And Method For Automatic Storage Of Computer Data	Advanced Digital Information Corporation
5568608	10/22/1996	Method for Protecting Data In Media Recording Peripheral Devices	Advanced Digital Information Corporation
5684654	11/04/1997	Device and Method For Storing And Retrieving Data	Advanced Digital Information Corporation

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5781367	07/14/1998	Library For Storing Data-Storage Media	Advanced Digital Information Corporation
6049848	04/11/2000	System And Method For Performing High-speed Tape Positioning Operations	Advanced Digital Information Corporation
5940849	08/17/1999	Information Memory Apparatus And Library Using A Single Magnetic Tape Shared With A Plurality Of Tasks	Advanced Digital Information Corporation
6067587	05/23/2000	A Method For Serializing And Synchronizing Data Packets By Utilizing A Physical Lock System And Control Data Structure For Mutual Exclusion Lock	Advanced Digital Information Corporation
6120230	09/19/2000	Roller-Insertor For Use With Cartridge Style Information Storage Media	Advanced Digital Information Corporation
6138909	10/31/2000	Media Handling System And Method	Advanced Digital Information Corporation
6163431 (expired)	12/19/2000	Door Hinge	Advanced Digital Information Corporation
6198984	03/06/2001	Library For Storing Data-Storage Media And Having An Improved Media Transporter	Advanced Digital Information Corporation
6204992 (expired)	03/20/2001	Data Cartridge Loading And Unloading Apparatus And Method Of Use	Advanced Digital Information Corporation
6266574	07/24/2001	Library For Storing Data-Storage Media And Having A Removable Interface Module	Advanced Digital Information Corporation
6269464	07/31/2001	Error Checking Technique For Use In Mass Storage	Advanced Digital Information Corporation
6324497	11/21/2001	Tape Drive Emulation System Including Tape Library Interface	Advanced Digital Information Corporation
6434674	08/13/2002	Multiport Memory Architecture With Direct Data Flow	Advanced Digital Information Corporation
6496791	12/17/2002	Interfaces For An Open Systems Server Providing Tape Drive Emulation	Advanced Digital Information Corporation
6571302	05/27/2003	Dynamic Adjustment Of Multiple Sequential Burst Data Transfers	Advanced Digital Information Corporation
6757767	06/29/2004	Method For Acceleration Of Storage Devices By Returning Slightly Early Write Status	Advanced Digital Information Corporation
6845387	01/18/2005	Creating Virtual Private Connections Between End Information Points Across A SAN	Advanced Digital Information Corporation
6938188	08/30/2005	Method For Verifying Functional Integrity Of Computer Hardware Particularly Data Storage Devices	Advanced Digital Information Corporation

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6950856	09/27/2005	Library For Storing Data-Storage Media And Having A Removable Interface Module	Advanced Digital Information Corporation
6542787	04/01/2003	Library For Storing Data-Storage Media And Having A Removable Interface Module	Advanced Digital Information Corporation
6198984	03/06/2001	Library For Storing Data-Storage Media And Having An Improved Media Transporter	Advanced Digital Information Corporation
5108246	04/28/1992	Process and Device for Operating an Automatic Data Carrier Archive	Advanced Digital Information Corporation
5158345	10/27/1992	Storage Units for Computer Tape Cassettes	Advanced Digital Information Corporation
D337760	07/27/1993	Combined Media Cartridge Loader And Associated Magazine	Quantum Corporation
D35879	07/07/1998	Tape Drive Bezel	Quantum Corporation
D413592	09/07/1999	Tape Cartridge	Quantum Corporation
D438870	03/13/2001	Tape Cartridge	Quantum Corporation
D439249	03/20/2001	Storage Device	Quantum Corporation
D448033	09/18/2001	Memory Storage Assembly Panel	Quantum Corporation
D465786	11/19/2002	Magnetic Tape Cartridge	Quantum Corporation
D486498	02/10/2004	Tape Cartridge	Quantum Corporation
D491564	06/15/2004	Tape Cartridge	Quantum Corporation
D496368	09/21/2004	Two-Tone Magnetic Tape Cartridge	Quantum Corporation
D523338	06/20/2006	Shipping Tray For Multiple Cartridges	Quantum Corporation
RE33949	06/02/1992	Vertical Magnetic Recording Arrangement	Quantum Corporation
RE33224	5/29/90	Cartridge Tape Drive With Friction Roller To Open Cartridge Door	Certance LLC
RE33661	8/13/91	Head Positioning Assembly	Certance LLC
4772974	09/20/1988	Compact Head And Disk Assembly	Quantum Corporation
4788465	11/29/1988	Armature For Dc Motor	Quantum Corporation
4809110	02/28/1989	Narrow Contour Head Assembly	Quantum Corporation
4816932	3/28/89	Circuit For Providing A Symmetric Current To The Head Of A Magnetic Recording Device	Archive Corporation
4819107	4/4/89	Magnetic Transducer Head Structure	Archive Corporation
4833418	5/23/89	Compensation Circuit For Nullifying Differential Offset Voltage And Regulating Common Mode Voltage Of Differential Signals	Archive Corporation

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4837643	6/6/89	Circuit For Controlling Frequency And Phase Of Voltage Controlled Oscillator In A Data Smoother For A Streaming Cartridge Tape Drive	Archive Corporation
4849841	4/18/89	Transducer Head Core Structure With Recessed Magnetic Closures	Archive Corporation
4852825	8/1/89	Extraction And Insertion Mechanism For A Leader Block Of A Tape Cartridge	Archive Corporation
4858039	8/15/89	Streaming Tape Drive With Direct Block Addressability	Archive Corporation
4864198	09/05/1989	Method Of And Apparatus For Driving Three-Phase D.C. Brushless Motor	Quantum Corporation
4872079	10/3/89	Thin Film Magnetic Head With A Leveler Layer	Certance LLC
4874975	10/17/1989	Brushless Dc Motor	Quantum Corporation
4899434	2/13/90	Method Of Making A Thin Film Magnetic Head With A Leveler Layer And Superstate	Certance LLC
4908826	03/13/1990	Stored Data Error Correction System	Quantum Corporation
4918548	04/17/1990	Cartridge Loader	Quantum Corporation
4933636	6/12/90	Self-Aligning Tachometer And Method Of Manufacturing Same	Archive Corporation
4949914	8/21/90	Tape Transport With Rigid Arm Threader Mechanism For Leader Block Tape Cartridge	Archive Corporation
4954921	9/4/90	Magnetic Transducer Head Structure	Irwin Magnetic Systems, Inc.
4963810	10/16/90	Variable Load Motor Drive Control	Archive Corporation
4967300	10/30/90	Magnetic Head Assembly Having A Transverse Guiding Surface Formed Of A Mixture Of Aluminum Oxide And Titanium Carbide	Certance LLC
4972336	11/20/90	Read While Write Magnetic Head Assembly	Certance LLC
4978955	12/18/90	Data Randomizing/De-Randomizing Circuit For Randomizing And De-Randomizing Data	Archive Corporation
5001580	3/19/91	Method To Compensate For Tape Slope And Head Azimuth Errors	Archive Corporation
5001584	3/19/91	Head-Positioner Arm For Data Recorders	Archive Corporation
5003408	3/26/91	Method And Apparatus For Removing Data Stream Variations	Archive Corporation
5006819	4/9/91	Track And Hold Phase Locked Loop Circuit	Archive Corporation
5025334	6/18/91	Auto-Loading Transport For Tape Cartridge With Tape Access Door And Belt Capstan Roller	Archive Corporation
5031061	07/09/1991	Disk Drive Hub Assembly	Quantum Corporation

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5050020	9/17/91	Cartridge Loader For Loading Each Of A Plurality Of Cartridges Into A Cartridge Insertion Slot	Archive Corporation
5050025	9/17/91	Lead Screw And Follower-Type Head Positioner For Data Recorders	Archive Corporation
5055951	10/8/91	Method And Apparatus For Servo-Positioning Movable Transducer Heads	Archive Corporation
5055959	10/15/1991	Tape Head With Low Spacing Loss Produced By Narrow And Wide Wear Regions	Quantum Corporation
5062023	10/29/1991	Disk File Servo Loop With Improved Track Settling	Quantum Corporation
5079831	1/14/92	Method Of Making A Dual Stripe Magnetic Head	Certance LLC
5081547	1/14/92	Apparatus And Method For Automatic Adjustment Of Read Amplitude Threshold In A Digital Tape Drive	Archive Corporation
5084791	01/28/1992	Head Position Control System For Fixed Drive Including Position Encoder, Temperature Sensor And Embedded Fine Servo Information	Quantum Corporation
5088172	02/18/1992	Non-Slip Tachometer Roller	Quantum Corporation
5095471	03/10/1992	Velocity Estimator In A Disk Drive Positioning System	Quantum Corporation
5099367	03/24/1992	Method Of Automatic Gain Control Basis Selection And Method Of Half-Track Servo	Quantum Corporation
5101311	5/31/92	Tape And Mechanism Protection Methods For DAT Drives	Archive Corporation
5105322	04/14/1992	Transverse Positioner For Read/Write Head	Quantum Corporation
5109307	04/28/1992	Continuous-Plus-Embedded Servo Data Position Control System For Magnetic Disk Device	Quantum Corporation
5109308	4/28/92	Stationary Head Tape Drive With A Movable Door Opening Mechanism	Archive Corporation
5112142	05/12/1992	Hydrodynamic Bearing	Quantum Corporation
5112662	05/12/1992	Method For Providing A Lubricant Coating On The Surface Of A Magneto-Optical Disk And Resulting Optical Disk	Quantum Corporation
5115359	05/19/1992	Fault Tolerant Frame, Guardband And Index Detection Methods	Quantum Corporation
5119254	06/02/1992	Data Transducer Position Control System For Rotating Disk Data Storage Equipment	Quantum Corporation
5120603	06/09/1992	Magneto-Optic Recording Medium With Oriented Langmuir-Blodgett Protective Layer	Quantum Corporation

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5122916	6/16/92	Electromagnetic Head Having Interference Compensation Circuitry	Archive Corporation
5124269	06/23/1992	Method Of Producing A Semiconductor Device Using A Wire Mask Having A Specified Diameter	Quantum Corporation
5136592	08/04/1992	Error Detection And Correction System For Long Burst Errors	Quantum Corporation
5148338	09/15/1992	Disk Drive	Quantum Corporation
5157564	10/20/92	Storage Module Charger For A Computer Data Storage Drive	Archive Corporation
5157570	10/20/1992	Magnetic Pole Configuration For High Density Thin Film Recording Head	Quantum Corporation
5160865	11/03/1992	Disk Assembly With Thermally Isolated In-Hub Spindle Motor	Quantum Corporation
5162955	11/10/1992	Apparatus For Writing Servo Information Onto A Magnetic Disk	Quantum Corporation
5163136	11/10/92	System For Assembling Playback Data Frames Using Indexed Frame Buffer Group According To Logical Frame Numbers In Valid Subcode Or Frame Header	Archive Corporation
5172280	12/15/92	Apparatus And Method For Automatic Write Current Calibration In A Streaming Tape Drive	Archive Corporation
5173828	12/22/1992	Compact Multiple Roller Tape Guide Assembly	Quantum Corporation
5182687	1/26/93	Method And Apparatus For Aligning Cartridges With A Cartridge Insertion Slot	Archive Corporation
5187619	02/16/1993	High Speed Switched Automatic Gain Control	Quantum Corporation
5191492	3/2/93	Mechanisms For A Closed Loop Head Positioner For Streaming Tape Drives	Certance LLC
5198947	3/30/93	Apparatus For Adjusting A Tape Head For A Magnetic Tape	Archive Corporation
5199033	03/30/1993	Solid State Memory Array Using Address Block Bit Substitution To Compensate For Non-Functional Storage Cells	Quantum Corporation
5199168	04/06/1993	Non-Slip Tachometer Roller	Quantum Corporation
5210829	05/11/1993	Adjustable Threshold For Buffer Management	Quantum Corporation
5214553	05/25/1993	Magnetic Contact Recording Head For Operation With Tapes Of Varying Thicknesses	Quantum Corporation
5216556	06/01/1993	Method For Optimized Tape Tension Adjustment For A Tape Drive	Quantum Corporation

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5218501	6/8/93	Device For Aligning Magnetic Tape To A Read-Write Head	Certance LLC
5227935	07/13/1993	Tape Drive Having A Selectively Retractable Drive Hub	Quantum Corporation
5231552	07/27/1993	Magazine And Receiver For Media Cartridge Loader	Quantum Corporation
5237469	8/17/93	Stationary Head Tape Drive With A Movable Door Opening Mechanism	Certance LLC
5247398	09/21/1993	Automatic Correction Of Position Demodulator Offsets	Quantum Corporation
5253126	10/12/93	Method For Self-Cleaning DAT Drive Tape Heads	Certance LLC and Arciat, Inc.
5255130	10/19/93	Adjustable Write Equalization For Tape Drives	Certance LLC
5257091	10/26/93	Optical Alignment System For Aligning A Multiple Gap Tape Head Assembly	Certance LLC
5263030	11/16/1993	Method And Apparatus For Encoding Data For Storage On Magnetic Tape	Quantum Corporation
5264974	11/23/93	Cassette Loading System	Certance LLC and Matsushita Electric Industrial Co., Ltd.
5267096	11/30/93	Adjustable Write Equalization For Tape Drives	Certance LLC
5285333	2/8/94	Mass Storage And Retrieval System For Magnetic Tape Cartridges	Certance LLC
5289328	02/22/1994	Method And Apparatus For Variable Density Read-After-Writing On Magnetic Tape	Quantum Corporation
5307217	04/26/1994	Magnetic Head For Very High Track Density Magnetic Recording	Quantum Corporation
5308558	05/03/1994	Process For Foaming Thermoplastic Polycarbonates	Quantum Corporation
5311390	5/10/94	Apparatus For Adjusting A Tape Head For A Magnetic Tape	Certance LLC
5327059	7/5/94	Tape Drive Capstan Motor Servo System With Static Friction Compensation	Certance LLC
5327305	7/5/94	Tape Format Detection System	Certance LLC
5343426	08/30/1994	Data Formatter/Converter For Use With Solid-State Disk Memory Using Storage Devices With Defects	Quantum Corporation
5353179	10/04/1994	Auto-Loading Of Tape Cartridges	Quantum Corporation
5359610	10/25/1994	Error Detection Encoding System	Quantum Corporation
5371636	12/6/94	Mechanisms For A Closed Loop Head Positioner For Streaming Tape Drives	Certance LLC

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5371638	12/06/1994	Servo Method And Apparatus For Very High Track Density Magnetic Recording By Adjusting Head Position Based On Servo Information Read From Adjacent Track	Quantum Corporation
5375224	12/20/94	Raw Data Reader	Certance LLC
5381292	1/10/95	Method For Self-Cleaning DAT Drive Tape Heads	Certance LLC
5386545	1/31/95	Target Management Method For Data Backup To A Shared Transfer Station. Multiple Media Element Device	Certance LLC
5392288	02/21/1995	Addressing Technique For A Fault Tolerant Block-Structured Storage Device	Quantum Corporation
5392302	02/21/1995	Address Error Detection Technique For Increasing The Reliability Of A Storage Subsystem	Quantum Corporation
5396376	3/7/95	Multi-Track Embedded Servo Recording Format And Method	Certance LLC
5402273	3/28/95	Circuit For Determining Window Margin For Data Transitions In A Streaming Data Device	Certance LLC
5402285	3/28/95	Five And One-Quarter Inch Form Factor Combination DAT Tape Drive And Cassette Magazine Loader	Certance LLC
5414585	05/09/1995	Rotating Tape Edge Guide	Quantum Corporation
5426551	06/20/1995	Magnetic Tape Head	Quantum Corporation
5448438	09/05/1995	Head Actuator Having Spring Loaded Split Nut	Quantum Corporation
5454098	9/26/95	Method Of Emulating Access To A Sequential Access Data Storage Device While Actually Using A Random Access Storage Device	Certance LLC
5455729	10/3/95	Multi-Channel Rotating Transformer	Certance LLC
5459742	10/17/1995	Solid State Disk Memory Using Storage Devices With Defects	Quantum Corporation
5474253	12/12/1995	Wedge Reels In Streaming Tape Drives And Tape Cartridges	Quantum Corporation
5475553	12/12/1995	Tape Head With Self-Regulating Wear Regions	Quantum Corporation
5485606	1/16/96	System And Method For Storing And Retrieving Files For Archival Purposes	Certance LLC
5491595	2/13/96	Magnetic Head Guidance And Calibration System And Method Description	Certance LLC
5515326	4/30/96	System For Optimizing Data Transfer	Quantum Corporation

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5515213	05/07/1996	Tape Drive Machine For Selectively Reading A Plurality Of Recording Tape Cartridges	Quantum Corporation
5523539	6/4/96	Processor For Manufacturing Recording Heads For Magnetic Storage Devices	Certance LLC
5523904	06/04/1996	Linear Tape Write Servo Using Embedded Azimuth Servo Blocks	Quantum Corporation
5532886	7/2/96	Data Stream Smoothing Method And Circuit For A Tape Drive	Certance LLC
5535399	07/09/1996	Solid State Disk Drive Unit Having On-Board Backup Non-Volatile Memory	Quantum Corporation
5581458	12/3/96	Buffered Intelligent Digital Tape Controller With Onboard ECC And Featuring Global Control Variables	Certance LLC
5585978	12/17/96	Arcuate Scan Tape Drive	Certance LLC
5589746	12/31/96	Brushless Motor Speed Control Arrangement Having Derived Common Mode Supply Signal Component	Certance LLC
5592342	01/07/1997	Method For Packing Variable Size User Data Records Into Fixed Size Blocks On A Storage Medium	Quantum Corporation
5602703	2/11/97	Recording Head For Recording Track-Centering Servo Signals On A Multi-Track Recording Medium	Certance LLC
5608584	03/04/1997	Recognition Of Tape Recording Media Type Using Plural In-Line Holes	Quantum Corporation
5617269	4/1/97	System For Recording Track-Centering Servo Signals On Multi-Track Magnetic Medium	Certance LLC
5642461	6/24/97	Economical Wide Range Speed Control System	Certance LLC
5652682	07/29/1997	Apparatus For Loading And Unloading Cartridges	Quantum Corporation
5660345	8/26/97	Tape Drive With Movable Cartridge Door Opening Mechanism	Certance LLC
5671389	09/23/1997	Adaptive Compression Caching For Tape Recording Method And Arrangement For Initiating Search For Start Of Data In Arcuately Recorded Data Tracks	Quantum Corporation
5675447	10/7/97	Apparatus For Combining Linear And Rotational Motion Of An Azimuth Read/Write Head	Certance LLC
5680278	10/21/1997	Belt Drive Mechanism For A Tape Drive	Quantum Corporation
5690293	11/25/97	Method Of Making An Arcuate Scan Tape Drive Arrangement And Method For Optimizing The Recorded Signal To Noise Ratio In Contact Recording Systems	Certance LLC
5729890	3/24/98		Certance LLC
5748396	5/5/98		Certance LLC

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5754372	05/19/1998	Actuator Bearing Cartridge For Top Down Assembly	Quantum Corporation
5760995	06/02/1998	Multi-Drive, Multi-Magazine Mass Storage And Retrieval Unit For Tape Cartridges	Quantum Corporation
5769346	06/23/1998	Tape Buckling Mechanism For Single Reel Cartridge Tape Recording	Quantum Corporation
5774366	6/30/98	Multi-Channel, High Speed, Tape Head Contour	Certance LLC
5790337	8/4/98	Tape Cartridge Qualified By Location, And Identified By Geometry, Of Type Aperture	Quantum Corporation
5793552	8/11/98	Method And Apparatus For High Speed Searching In Arcuate Scan Tape Drives	Certance LLC
5793574	08/11/1998	Tape Head Actuator Assembly Having A Shock Suppression Sleeve	Quantum Corporation
5796537	8/18/98	Method And Arrangement For Servoing And Formatting Magnetic Recording Tape	Certance LLC
5803388	09/08/1998	Tape Reel With Flange Sections For Uniform Tape Stacking	Quantum Corporation
5815337	9/29/98	Tape Drive Having An Arcuate Scanner And A Method For Calibrating The Arcuate Scanner	Certance LLC
5833161	11/10/98	Low Profile Mechanism For Biased Driving Of Driven Roller In Tape Cartridge	Certance LLC
5841600	11/24/1998	Randomly Ordered Data Block Envelope Tape Format	Quantum Corporation
5847892	12/8/98	Servoing And Formatting Magnetic Recording Tape In An Arcuate Scanner System	Certance LLC
5854877	12/29/98	Economical Wide Range Speed Control System	Certance LLC
5857634	01/12/1999	Take-Up Reel Lock	Quantum Corporation
5862014	01/19/1999	Multi-Channel Magnetic Tape Head Module Including Flex Circuit	Quantum Corporation
5867339	02/02/1999	Two Channel Azimuth And Two Channel Non-Azimuth Read-After-Write Longitudinal Magnetic Head	Quantum Corporation
5868333	2/9/99	Tape Media Cartridge System And Components Thereof And Methods Of Making And Using The Same	Certance LLC
5883864	03/16/1999	Media Library Having Locally Vectored Driver Addressing	Quantum Corporation
5890669	4/6/99	Tape Drive With Movable Centering Guide And Door Opening Arrangement	Certance LLC

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5892631	4/6/99	Method And An Arrangement For Detecting State Transitions In A Read Signal During A Bit Cell Timing Window	Certance LLC
5894425	04/13/1999	Wireless Secondary Interface For Data Storage Device	Quantum Corporation
5901008	5/4/99	Voice Coil Driven Positioner For Coarse And Fine Positioning Of Magnetic Head In Multi-Track Tape Drive	Certance LLC
5925119	7/20/99	Computer Architecture For Automated Storage Library	Quantum Corporation
5936795	8/10/99	Magazine Cassette Locking Device	Certance LLC
5940238	8/17/99	Mechanism To Reduce Adjacent Track Interference In A Magnetic Tape Data Storage System	Certance LLC
5940253	08/27/1999	Laminated Plated Pole Pieces For Thin Film Magnetic Transducers	Quantum Corporation
5949604	09/07/1999	Method Of Writing And Reading Servo On Tracks Having A Longitudinal Gap	Quantum Corporation
5969894	10/19/99	Method For Detecting Data Encoded As State Transitions In A Read Signal	Certance LLC
5971310	10/26/1999	Positive Engagement Buckle For A Tape Drive And Cartridge	Quantum Corporation
5973872	10/26/1999	Method And Apparatus For A Low Cost Multi-Channel Tape Recording Head	Quantum Corporation
5973874	10/26/99	Four Channel Azimuth And Two Channel Non-Azimuth Read-After-Write Longitudinal Magnetic Head	Quantum Corporation
5973891	10/26/1999	Data Transducer And Method For Writing Data Utilizing The Bottom Pole As The Trailing Edge Of A Thin-Film Magnetic A Tape Write Head	Quantum Corporation
5978172	11/2/99	Voice Coil Driven Positioner For Coarse And Fine Positioning Of Magnetic Head In Multi-Track Tape Drive	Certance LLC
5986846	11/16/99	Methods And Apparatus For Track Centering An Arcuate Scanner Head Assembly	Certance LLC
5986856	11/16/99	Magnetoresistive Sensor With Improved Stability	Certance LLC
6003802	12/21/99	Tape Leader Pin Assembly And Method For Making The Same	Certance LLC, Hewlett-Packard Company, and IBM Corporation
6018434	01/25/2000	Tape Cartridge Having Written-In-Defect Servo Patterns For Rapid Head Position Calibration	Quantum Corporation

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6031681	2/29/00	Method And Arrangement For Servoing And Formatting Magnetic Recording Tape	Certance LLC
6034839	3/7/00	Mechanism And Method For Loading A Tape From A Cartridge To A Take-Up Reel	Certance LLC
6034850	03/07/2000	Two-Part Tape Cartridge Reel Locking Mechanism	Quantum Corporation
6038099	3/14/00	Multiple Cartridge Tape Auto Loader Utilizing A Drive Plate For Positioning Of Drive Mechanism	Certance LLC
6040964	3/21/00	Method And Apparatus For Multiple Channel Head Assembly	Quantum Corporation
6043953	3/28/00	Gear Train Capstan Drive Assembly For A Tape Drive	Certance LLC
6059212	5/9/00	Tape Moving Mechanism Using A Direct Drive Motor	Certance LLC
6061199	5/9/00	Method And Arrangement For Servoing And Formatting Magnetic Recording Tape	Certance LLC
6062500	05/16/2000	High Speed Reel	Quantum Corporation
6067481	05/23/2000	Virtual Magnetic Tape Drive Library System	Quantum Corporation
6072653	6/6/00	Methods And Apparatus For Calibration Of A Rotating Scanner To A Track Recorded On A Tape	Certance LLC
6075678	06/13/2000	Pivoting Lever Cam Guide Tape Head Positioner	Quantum Corporation
6079651	6/27/00	Tape Coupling Arrangement For Single Reel Cartridge	Certance LLC
6082652	7/4/00	Independent Double Hub Take-Up Reel Arrangement For Use With A Single Reel Cartridge Tape Drive	Certance LLC
6088183	7/11/00	Arcuate Scan Read/Write Assembly	Certance LLC
6092754	07/25/2000	Buckler For A Tape Drive	Quantum Corporation
6095445	08/01/2000	Cartridge Buckler For A Tape Drive	Quantum Corporation
6095446	8/1/00	Tape Drive With Movable Centering Guide And Door Opening Arrangement	Certance LLC
6097566	8/1/00	A Multi-Drive, Multi-Magazine Mass Storage And Retrieval Unit For Tape Cartridges	Quantum Corporation
6101061	8/8/00	Methods And Apparatus For Calibration Of A Rotating Scanner To A Plurality Of Data Track Groups Recorded On A Tape	Certance LLC
6103365	08/15/2000	Magnetic Tape	Quantum Corporation
6108159	08/22/2000	Data Track Edge Follower Servo Method And Apparatus	Quantum Corporation
6113020	9/5/00	Reel Lock And Coupling Engagement Mechanisms For A Cartridge	Certance LLC
6115218	9/5/00	Tape Support System For Arcuate Scan Rotating Head	Certance LLC

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6128717	10/03/2000	Method And Apparatus For Storage Application Programming Interface For Digital Mass Storage And Retrieval Based Upon Data Object Type Or Size And Characteristics Of The Data Storage Device	Quantum Corporation
6130792	10/10/00	Flat Servo Bursts For Arcuate Track Scanner	Certance LLC
6130804	10/10/00	Four Channel Azimuth And Two Channel Non-Azimuth Read-After-Write Longitudinal Magnetic Head	Quantum Corporation
6141174	10/31/2000	Method Of Reading Of Recording Information From A Magnetic Tape That Compensates For Track Pitch Changes	Quantum Corporation
6141184	10/31/2000	Tape Drive Data Storage Device Having Perpendicularly Adjusted Tape Guides	Quantum Corporation
6148430	11/14/2000	Encoding Apparatus For Raid-6 System And Tape Drives	Quantum Corporation
6157516	12/05/2000	Method And Apparatus For Preventing Electrostatic Damage To The EAD/Write Head Of A Tape Drive	Quantum Corporation
6175470	01/16/2001	Storage Medium Cartridge Having An Integral Key	Quantum Corporation
6184806	02/06/2001	Rate 321/33 (D=0, K=6) Run Length Limited Modulation Code Having Optimized Error Propagation	Quantum Corporation
6186430	02/13/2001	Tape Drive Connection Sensing Assembly	Quantum Corporation
6188532	02/13/2001	Backward Compatible Head And Head Positioning Assembly For A Linear Digital Tape Drive	Quantum Corporation
6236340	05/22/2001	Modulation Encoders And Decoders	Quantum Corporation
6241171	06/05/2001	Leaderless Tape Drive	Quantum Corporation
6246535	06/12/2001	Optical Apparatus For Tracking A Magnetic Tape	Quantum Corporation
6257514	07/10/2001	Guiding Assembly For Protecting A Magnetic Tape Head	Quantum Corporation
6267313	07/31/2001	Wide Tape Cartridge	Quantum Corporation
6267325	07/31/2001	Tape Support	Quantum Corporation
6270030	08/07/2001	System For Controlling Compatibility Of Tape Cartridges Having The Same Form Factor	Quantum Corporation
6271991	08/07/2001	Tape Cartridge	Quantum Corporation
6281675	8/28/01	Self Calibrating Embedded Stripe Based Timing Tracking Servo System For Helical Recorders	Certance LLC
6288870	09/11/2001	Self-Aligned Metal Film Core Multi-Channel Recording Head For Tape Drives	Quantum Corporation

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6292325	9/18/01	Offset Gear Segment Arm Employed To Accommodate The Meshing Alignment In A Tape Cartridge-Loading Mechanism	Certance LLC
6297949	10/2/01	Recessed Bezel Apparatus	Certance LLC
6304439	10/16/2001	Disk Drive Sled Insertion And Removal System	Quantum Corporation
6305628	10/23/01	Controlled Tape Stopping With Feed Forward During Power Loss	Certance LLC
6307718	10/23/01	Tape Drive Head Positioning Device For Adjusting Head Tilt And Azimuth	Quantum Corporation
6311915	11/06/2001	Buckler For A Tape Drive	Quantum Corporation
6317283	11/13/01	Methods And Apparatus For Calibration Of A Rotating Scanner To A Track Recorded On A Tape	Certance LLC
6319595	11/20/2001	Magnetic Tape	Quantum Corporation
6320727	11/20/2001	Roller Guide System For Delivery Of Tape Media Along A Tape Path	Quantum Corporation
6331920	12/18/01	Backward Compatible Head And Head Positioning Assembly For A Linear Tape Drive	Quantum Corporation
6344944	2/5/02	Mini-Cartridge Adapter For Adapting A Mini-Cartridge To An Industry Standard Tape Cartridge Format	Quantum Corporation
6349020	2/19/02	Head Tilting Mechanism For Tape Drives	Quantum Corporation
6349891	02/26/2002	Tape Drive Ejection Assembly	Quantum Corporation
6359748	3/19/02	Electronically Damped Flexure Based Actuator System	Certance LLC
6360979	03/26/2002	Takeup Leader For Single Reel Tape Drives With Increased Flexibility For Improved Performance	Quantum Corporation
6369982	04/09/2002	Floating Tape Head Having Side Wings For Longitudinal And Azimuth Play Back With Minimized Tape Wrap Angle	Quantum Corporation
6375063	04/23/2002	Multi-Step Stud Design And Method For Producing Closely Packed Interconnects In Magnetic Recording Heads	Quantum Corporation
6375108	04/23/2002	Multi-Layered Drive Leader For A Tape Drive	Quantum Corporation
6380873	04/30/2002	Method For Reducing Radio Frequency Emissions On High-Speed Serial Buses	Quantum Corporation, Intel Corporation, and Maxtor Corporation
6386470	05/14/2002	Takeup Reel For Single Reel Tape Drives	Quantum Corporation
6392836	5/21/02	Tape Cartridge-Loading Mechanism	Certance LLC

PAT. NUM.	ISSUE DATE	TITLE	OWNER
6392837	5/21/02	Technique For Opening Door Of A Tape Cartridge To Access The Tape Leader Pin	Certance LLC
6398143	06/04/2002	Drive Leader And Take-Up Reel For A Tape Drive	Quantum Corporation
6404598	6/11/02	Flexible Circuit Routing Configuration For A Fine/Coarse Positioner For A Tape Drive	Certance LLC
6424481	7/23/02	Five And One-Quarter Inch Form Factor Combination DAT Tape Drive And Cassette Magazine Loader	Certance LLC
6424496	07/23/2002	Flat Tape Head With Cantilevered Tape Supports	Quantum Corporation
6424499	07/23/2002	Improved Flexible Trace Interconnect Array For Multi-Channel Tape Head	Quantum Corporation
6427934	08/06/2002	Tape Reel Minimizing Print Through	Quantum Corporation
6439489	08/27/2002	Tape Cartridge Leader For Single Reel Tape Cartridges Having Increased Flexibility For Improved Performance	Quantum Corporation
6445533	09/03/2002	Transfer Linkage For A Cartridge Adapter Of A Tape Drive	Quantum Corporation
6450431	09/17/2002	Method For Preventing A Reverse Connection Failure In A Single Reel Tape Drive	Quantum Corporation
6450432	09/17/2002	Tape Cartridge	Quantum Corporation
6464509	10/15/2002	System And Method Requiring Zero Insertion Force And Positive Retention Of Removable Storage Media In A Data Storage Subsystem	Quantum Corporation
6469867	10/22/02	Floating Tape Head Having Side Wings For Longitudinal And Azimuth Playback With Minimized Tape Wrap Angle	Quantum Corporation
6470291	10/22/02	Velocity Feedback Measurement Method	Certance LLC
6473262	10/29/02	Techniques For Compensating For High Initial Unloading Force Requirement In Tape Cartridge-Loading Mechanism	Certance LLC
6488462	12/03/2002	Transport Mechanism For A Storage System	Quantum Corporation
6490133	12/03/2002	Tape Cartridge With A Cell For A Leader Hook Member And A Cell For A Leader	Quantum Corporation
6493959	12/17/2002	Tape Path Adjustment Tool	Quantum Corporation
6499684	12/31/02	Tape Leader Pin Assembly And Method For Making The Same	Certance LLC, Hewlett-Packard Company, and IBM Corporation
6508428	01/21/2003	Multi-Purpose Wide Media Cartridges And Cartridge Chassis Subassemblies	Quantum Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
6512644	01/28/2003	Method And Apparatus For Read-After-Write Verification With Error Tolerance	Quantum Corporation
6512962	01/28/2003	Cabling Picker In A Library Of Stationary Memory Devices	Quantum Corporation
6515819	02/04/2003	Adaptive Update Of Seek Time Prediction Data	Quantum Corporation
6524689	02/25/2003	Castellation Technique For Improved Lift-Off Of Photoresist In Thin-Film Device Processing And A Thin-Film Device Made Thereby	Quantum Corporation
6537013	03/25/2003	Picking Mechanism With Ventilation System For Automated Library Of Memory Storage Units	Quantum Corporation
6538841	03/25/2003	Cartridge Stop/Compression Pad For A Tape Cartridge Picker	Quantum Corporation
6540528	04/01/2003	Releasable, Repeatable Electrical Connection Employing Compression	Quantum Corporation
6545865	04/08/2003	Shock Mount For A Device Packaged In A Portable Cartridge	Quantum Corporation
6550710	04/22/2003	Tape Cartridge Leader For Single Reel Tape Cartridges Having Increased Flexibility For Improved Performance	Quantum Corporation
6558774	05/06/2003	Multiple-Layer Backcoating For Magnetic Tape	Quantum Corporation
6565029	05/20/2003	Method Of Detecting And Correcting For Slippage Of A Tape Media In A Tape Storage Device	Quantum Corporation
6568618	05/27/2003	Half-Inch Tape Drive In Half High Form Factor	Quantum Corporation
6570731	05/27/2003	System For Detecting An Edge Of A Moving Data Storage Medium	Quantum Corporation
6572046	06/03/2003	Method For Unlocking A Single Reel Tape Cartridge Locking Mechanism In A Tape Cartridge Load Operation	Quantum Corporation
6577469	6/10/03	Variable Width Flat Tape Head For Hi-Directional Contact Recording And Method For Making The Same	Quantum Corporation
6580582	06/17/2003	Cartridge Magazine For A Tape Library	Quantum Corporation
6581865	06/24/2003	Retracting Door Assembly	Quantum Corporation
6587305	07/01/2003	Tape Head With Transducer Supports Having Raised, Wear-Resistant Surfaces At Edges Of Softer Core	Quantum Corporation
6588694	07/08/2003	"Take-Up Reel Leader For DLT Tape Drive"	Quantum Corporation
6600624	07/29/2003	Guiding Method Utilizing Roller Surface Features	Quantum Corporation
6600703	07/29/2003	Magazine For A Plurality Of Removable Hard Disk Drives	Quantum Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
6604701	08/12/2003	Single Reel Tape Cartridge Sliding Door With Auxiliary Leader Retractor	Quantum Corporation
6606218	08/12/2003	Single Tape Cartridge Interface Having A Cartridge Reinsertion Preventing Mechanism In An Automated Autoloader/Library System	Quantum Corporation
6606220	08/12/2003	Systems And Methods For Providing Beginning-Of-Tape And End-Of-Tape Indicators	Quantum Corporation
6611398	08/26/2003	Tape Head With Support Bars	Quantum Corporation
6614611	09/02/2003	Method For Buckler Rotation Test	Quantum Corporation
6618249	09/09/2003	Thermal Cooling System For Densely Packed Storage Devices	Quantum Corporation
6618255	09/09/2003	Quick Release Fastening System For Storage Devices	Quantum Corporation
6622164	09/16/2003	Mass Storage Device With Network Interface	Quantum Corporation
6636942	10/21/2003	Storage Structure For Storing Formatted Data On A Random Access Medium	Quantum Corporation
6648574	11/18/03	Transport Mechanism For A Storage System	Quantum Corporation
6650601	11/18/2003	Hard Disk Drive Picking Device And Method	Quantum Corporation
6655623	12/02/2003	Leader Tape And Tape Cartridge	Quantum Corporation
6665137	12/16/2003	Method For Locating Data Tracks On A Tape Media	Quantum Corporation
6676070	01/13/2004	Backward Compatible Tape Support	Quantum Corporation
6685122	02/03/2004	Tape Drive Leader Connection Sensing Assembly	Quantum Corporation
6690539	02/10/2004	Portable Data Storage Drive Cartridge With External Interface At Each End	Quantum Corporation
6693758	02/17/2004	Tape Cartridge Transport Magazine For An Automated Tape Cartridge Autoloader/Library System	Quantum Corporation
6693759	02/17/2004	Compact Form Factor For An Automated Tape Cartridge Autoloader/Library System	Quantum Corporation
6693859	02/17/2004	Gripper Assembly Apparatus For Interfacing With A Storage Device	Quantum Corporation
6697214	02/24/2004	Removable Disk Drive With Separable Electrical And Mechanical Components	Quantum Corporation
6699013	03/02/2004	Forced Air Cooling Fan Having Pivotal Fan Blades For Unidirectional Air Flow	Quantum Corporation
6702215	3-9/04	Repositionable Memory Element In A Single Reel Tape Cartridge	Quantum Corporation
6704171	03/09/2004	Apparatus And Systems For Lifting A Tape Drive Transducer Head	Quantum Corporation

TRADEMARK

REEL: 003588 FRAME: 0888

PAT. NUM.	ISSUE DATE	TITLE	OWNER
6710962	03/23/2004	Automated Tape Library	Quantum Corporation
6710969	03/23/2004	Rotary Magazine Tape Storage System	Quantum Corporation
6714381	03/30/2004	Tape Media Guiding Assembly For Protecting A Tape Head	Quantum Corporation
6716515	4/6/04	Castellation Technique For Improved Lift-Off Of Photoresist In Thin-Film Device Processing And A Thin-Film Device Made Thereby	Quantum Corporation
6722599	4/20/04	Single Reel Tape Cartridge Sliding Door With Auxiliary Leader Retractor	Quantum Corporation
6722895	04/20/2004	Releasable, Repeatable Electrical Connection Employing Compression	Quantum Corporation
6725394	04/20/2004	Media Library With Fail Over Capability	Quantum Corporation
6729825	05/04/2004	Storage Medium Cartridge Use With A Storage Medium Cartridge Gripping Assembly	Quantum Corporation
6731455	05/04/2004	Automated Library System Including A Gripper Assembly Apparatus For Interfacing With A Storage Device	Quantum Corporation
6741415	05/25/2004	Method Of Writing Servo Signal On Magnetic Tape	Quantum Corporation
6744595	06/01/2004	Portable Data Storage Cartridge Encoded Multi-Position Mechanical Indicator	Quantum Corporation
6754768	06/22/2004	Library Of Hard Disk Drives With Transparent Emulating Interface	Quantum Corporation
6766412	07/20/2004	Data Storage Media Library With Scalable Throughput Rate For Data Routing And Protocol Conversion	Quantum Corporation
6768608	7/27/04	Multi-Channel Magnetic Tape System Having Optical Tracking Servo	Quantum Corporation
6771448	08/03/2004	Tension/Compression Compliant Link For Cartridge Loading Apparatus	Quantum Corporation
6771450	08/03/2004	Method Of Writing Servo Signal On Magnetic Tape	Quantum Corporation
6772390	08/03/2004	Erasure Correction For ECC Entities	Quantum Corporation
6773281	08/10/2004	Strain Relief For Flexible Circuit	Quantum Corporation
6775092	08/10/2004	Lateral Tape Motion Sensor	Quantum Corporation
6778387	8/17/04	Thermal Cooling System For Densely Packed Storage Devices	Quantum Corporation
6785078	08/31/2004	Concurrent Read And Write Access To Simulated Sequential Data Of A Removable Random Access Data Storage Medium	Quantum Corporation

PAT. NUML.	ISSUE DATE	TITLE	OWNER
6791789	09/14/2004	Thermal Insulator For Protecting A Storage Tape In A Tape Drive	Quantum Corporation
6795309	09/21/2004	Tool-Less Field Replaceable Peripheral Mounting System	Quantum Corporation
6801383	10/05/2004	Method For Calibrating A Tape Media Using Staggered Calibration Tracks	Quantum Corporation
6816531	11/09/2004	Tape Cartridge Picker For An Automated Tape Cartridge Autoloader/Library System	Quantum Corporation
6819524	11/16/2004	Storage Device Apparatus Having Multiple Interfaces	Quantum Corporation
6826004	11/30/2004	Gripper Assembly For Interfacing With Portable Storage Devices In A Storage Library	Quantum Corporation
6829116	12/07/2004	Automated Tape Cartridge Autoloader/Library System	Quantum Corporation
6831797	12/14/2004	Programmable Write Equalization Circuit	Quantum Corporation
6837718	01/04/2005	Releasable, Repeatable Electrical Connection Employing Compression	Quantum Corporation
6839196	01/04/2005	Magnetic Track Following Servo Algorithm Using Signal Quality	Quantum Corporation
6850380	02/01/2005	Stackable Connector System For Automated Removal/Addition In A Storage Media Library	Quantum Corporation
6853548	02/08/2005	In Rack Mount Equipment Enclosure With Increased Structural Support	Quantum Corporation
6853652	02/08/2005	Spatial Filtering Of Laser Ghosts	Quantum Corporation
6854982	02/15/2005	Releasable, Repeatable Electrical Connection Employing Compression	Quantum Corporation
6856484	02/15/2005	Magnetic Servo Of A Recording Headhard	Quantum Corporation
6865640	03/08/2005	Hard Disk Drive Library	Quantum Corporation
6867942	03/15/2005	Storage Device Mounted In Portable Data Storage Media Type Cartridges	Quantum Corporation
6879470	04/12/2005	Thin Film Recording Head With A Localized Coating To Protect Against Corrosion And Electrostatic Discharge	Quantum Corporation
6892275	05/10/2005	Storage System Utilizing An Active Subset Of Drives During Data Storage And Retrieval Operations	Quantum Corporation
6900960	05/31/2005	Multi-Receiver Cartridge Transport System	Quantum Corporation
6902128	06/07/2005	Buckler Assembly Having A Drive Leader Sensor In A Tape Drive	Quantum Corporation
6914748	07/05/2005	Head Shield For A Tape Drive	Quantum Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
6918554	07/19/2005	Tape Cartridge Format Identification In A Single Reel Tape Handling Device	Quantum Corporation
6923395	8/2/05	Tape Drive Leader Connection Sensing Assembly	Quantum Corporation
6929208	08/16/2005	Cartridge Housing For Inhibiting Damage To Recording Media	Quantum Corporation
6937435	08/30/2005	Tape Head With Thin Support Surface And Method Of Manufacture	Quantum Corporation
6940676	09/06/2005	Triple Push-Pull Optical Tracking System	Quantum Corporation
6940681	09/06/2005	Optical To Magnetic Alignment In Magnetic Tape System	Quantum Corporation
6943979	9/13/05	Method And Apparatus For Written-In Tracking Error Compensation For Linear Tape Drives	Certance, LLC
6957291	10/18/2005	Removable Disk Storage Array Emulating Tape Library Having Backup And Archive Capability	Quantum Corporation
6961200	11/01/2005	Optical Servo Track Identification On Tape Storage Media	Quantum Corporation
6961246	11/01/2005	Workshelf For A Computer Rack	Quantum Corporation
6962304	11/08/2005	Single Reel Tape Cartridge With Tape Reel Centering Features	Quantum Corporation
6965811	11/15/2005	Media Drive Module And Storage Library System	Quantum Corporation
6980390	12/27/2005	Magnetic Media With Embedded Optical Servo Tracks	Quantum Corporation
6985328	01/10/2006	One And Three Quarters Inch Form Factor Tape Cartridge Autoloader	Quantum Corporation
6994287	02/07/2006	Tape Cartridge	Quantum Corporation
7016138	03/21/2006	Tension Feedback System For A Tape Drive	Quantum Corporation
7016151	03/21/2006	Tape Cartridge Improved Boss Door	Quantum Corporation
7023650	04/04/2006	Optical Sensor To Recording Head Alignment	Quantum Corporation
7023876	04/04/2006	Point-To-Point Protocol	Quantum Corporation
7027250	04/11/2006	Magnetic Tape Head With Thinfilm Thermosensors For Head-Media Interface Temperature Monitoring	Quantum Corporation
7029726	04/18/2006	Method For Forming A Servo Pattern On A Magnetic Tape	Quantum Corporation
7061711	06/13/2006	Detection Of A Lower Limit Of Tape Head Travel In A Single Reel Tape Drive	Quantum Corporation
7064913	06/20/2006	Enhanced Read Margining Using Dither Enhanced Write Marginalization For Mass Data Storage Applications	Quantum Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
7073742	7/11/2006	Tape Guiding Reel	Quantum Corporation
7076333	7/11/2006	Releasable, Repeatable Electrical Connection Employing Compression	Quantum Corporation
7076606	7/11/2006	Accelerated Raid With Rewind Capability	Quantum Corporation
7076723	7/11/2006	Error Correction Codes	Quantum Corporation
7077354	7/18/2006	Edge Guiding Tape Reel	Quantum Corporation
7085095	8/1/2006	Electromagnetic Void-Sensing Probes And Position Control Systems	Quantum Corporation
7,230,788	6/12/2007	System And Method For Tape Drive Control	Quantum Corporation
7,230,782	6/12/2007	Correlation Receiver For Demodulation Servo Track Information	Quantum Corporation
7,228,490	6/5/2007	Error Correction Decoder Using Cells With Partial Syndrome Generation	Quantum Corporation
7,228,467	6/5/2007	Correcting Data Having More Data Blocks With Errors Than Redundancy Blocks	Quantum Corporation
4,227,224	6/5/2007	A Head Actuator Assembly for a Tape Drive	Quantum Corporation
7,224,545	5/29/2007	Methods And Systems For Overwrite Protected Storage Media	Quantum Corporation
7,215,259	5/8/2007	Data Compression Apparatus And Method	Quantum Corporation
7,212,375	5/1/2007	Automated Storage Library Gripper Apparatus And Method	Quantum Corporation
7,204,444	4/17/2007	Media Cartridge Having Reel Suspension System And Method Of Manufacture	Quantum Corporation
7,203,027	4/10/2007	System And Method For Tape Drive Under Run Control	Quantum Corporation
7,193,810	3/20/2007	Automated Storage Library Gripper With Finger Position Detector	Quantum Corporation
7,190,544	3/13/2007	System And Method For Tape Drive Under Run Control	Quantum Corporation
7,187,515	3/6/2007	Method And System For Tracing Magnetic Media With Embedded Optical Servo Tracks	Quantum Corporation
7,185,031	2/27/2007	Creating Backup Volume Using A Data Profile Of A Host Volume	Quantum Corporation
7,184,233	2/27/2007	Dual Source Tracking Servo Systems And Associated Methods	Quantum Corporation
7,180,708	2/20/2007	Stationary Guide Assembly For Tape Drives	Quantum Corporation
7,177,108	2/13/2007	Emulation Of Auxiliary Memory On Magnetic Tape Media	Quantum Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
7,170,721	1/30/2007	Method Of Producing Flux Guides In Magnetic Recording Heads	Quantum Corporation
7,168,648	1/30/2007	Improved Performance Tape Cartridge Leader For Single Reel Tape Cartridges	Quantum Corporation
7,163,171	1/16/2007	Backward Compatible Dlt4 Data Cartridge With Integrated Cleaning Tape Section	Quantum Corporation
7,162,678	1/9/2007	Extended Error Correction Codes	Quantum Corporation
7,161,894	1/9/2007	Optical Recording Article	Quantum Corporation
7,158,338	1/2/2007	Servo Track Having Periodic Frames Of Tone Field And Embedded Synchronization Marks	Quantum Corporation
7,156,335	1/2/2007	Main Assembly Process And Features	Quantum Corporation
7,154,695	12/26/2006	System And Method For Controlling The Speed of A Tape Drive	Quantum Corporation
7,154,691	12/26/2006	Multi-Format Thinfilm Head And Associated Methods	Quantum Corporation
7,153,336	12/26/2006	Systems And Method For Forming A Servo Pattern On A Magnetic Tape	Quantum Corporation
7,149,050	12/12/2006	Diffraction Position Sensors And Control Systems	Quantum Corporation
7,149,049	12/12/2006	Optical Apparatus For Tracking A Magnetic Tape	Quantum Corporation
7,146,492	12/5/2006	Method And Apparatus For Attaching More Than Two Disk Devices To An Ide Bus	Quantum Corporation
7,145,272	12/5/2006	A Motor/Encoder Assembly for Tape Drives	Quantum Corporation
7,139,152	11/21/2006	Servo Methods And Systems Using Existing Data Structures And Optical Masks	Quantum Corporation
7,136,255	11/14/2006	Servo Methods And Systems Using Masked Medium Edge Position Sensors	Quantum Corporation
7,134,624	11/14/2006	A Locking Dual Hub Tape Reel For Tape Drives	Quantum Corporation
7,133,262	11/7/2006	A Tape Drive Apparatus With A Head Alignment System	Quantum Corporation
7,126,786	10/24/2006	A Motor/Encoder Assembly For Tape Drives	Quantum Corporation
7,126,799	10/24/2006	Tape Media Identification Code	Quantum Corporation
7,124,124	10/17/2006	Data Storage Devices For Large-Size Data Structures	Quantum Corporation
7,117,068	10/3/2006	System And Method For Library Robotics Positional Accuring Using Parallax	Quantum Corporation
7,116,514	10/3/2006	Servo Methods And Systems For Magnetic Recording And Reading	Quantum Corporation
7,111,781	9/26/2006	System And Methods For Library Inventory	Quantum Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
7,110,210	9/19/2006	Multi-Channel Magnetic Tape System Having Optical Tracing Servo	Quantum Corporation
7,102,849	9/5/2006	Data Storage	Quantum Corporation
7,102,845	9/5/2006	Servo Methods And Systems Using Existing Data Structures And Medium Edge Position	Quantum Corporation
7,100,858	9/5/2006	Self-Centering Tape Reels For Single Reel Tape Cartridges	Quantum Corporation
7,099,103	8/29/2006	Methods For Controlling The Use Of A Cleaning Cartridge For Tape Drives	Quantum Corporation
7,099,102	8/29/2006	Multiple Format Magnetic Storage Media Drive	Quantum Corporation
7,097,125	8/29/2006	Tape Drive With Automatic Adaptation For Different Size Tape Cassettes	Quantum Corporation

SCHEDULE B

TRADEMARKS

TRADEMARK APPLICATIONS

SER. NO.	FILING DATE	WORD MARK	OWNER
76329838	10/25/2001	COLOR PROTECT	Quantum Corporation
76449769	09/09/2002	TAPECARE	Quantum Corporation
76471251	11/18/2002	ATE VALUELOADER	Quantum Corporation
76471252	11/18/2002	ATL SUPERLOADER	Quantum Corporation
76539221	08/20/2003	EMP60	Quantum Corporation
76539222	08/20/2003	MP60	Quantum Corporation
76585004	04/05/2004	TRUVUE	Quantum Corporation
76603451	07/22/2004	DLTICE	Quantum Corporation
78481629	09/10/2004	(Design Only)	Quantum Corporation
78510625	11/03/2004	DLT	Quantum Corporation
78659908	06/28/2005	GOVAULT	Quantum Corporation
78918030	06/27/2006	STORAGECARE VISION	Quantum Corporation

REGISTERED TRADEMARKS

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
76613994	3170393	11/14/2006	SDLT	Quantum Corporation
74009022	1610492	08/21/1990	AMASS	Advanced Digital Information Corporation
74605165	2030788	01/14/1997	SCALAR	Advanced Digital Information Corporation
75187710	2123355	12/23/1997	ADIC	Advanced Digital Information Corporation
74330814	2211317	12/15/1998	FILESERV	Advanced Digital Information Corporation
75339045	2294666	11/23/1999	FASTSTOR	Advanced Digital Information Corporation
75799829	2468420	07/10/2001	STORNEXT	Advanced Digital Information Corporation

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
75873863	2481663	08/28/2001	(design only)	Advanced Digital Information Corporation
78093622	2669251	12/31/2002	PATHLIGHT	Advanced Digital Information Corporation
78093626	2745109	07/29/2003	SNC	Advanced Digital Information Corporation
78124228	2881314	09/07/2004	SCALAR	Advanced Digital Information Corporation
76117778	2835721	04/27/2004	VPS	Advanced Digital Information Corporation
72327773	0926161	12/28/1971	QUANTUM	Quantum Corporation
73127739	1089619	04/18/1978	QUANTUM	Quantum Corporation
73322102	1199437	06/29/1982	SIDEWINDER	Archive Corporation
73589198	1410326	09/23/1986	IRWIN	Comner Peripherals, Inc.
73465592	1414004	10/21/1986	FLOPPY TAPE	Comner Peripherals, Inc.
73553051	1414785	10/28/1986	FASTAPE	Certance LLC
73610341	1442874	06/16/1987	ARCHIVE	Certance LLC
73610993	1452091	08/11/1987	ARCHIVE	Certance LLC
73653438	1462655	10/27/1987	ARCHIVEXL	Certance LLC
73655202	1464451	11/10/1987	VIPER	Certance LLC
73673453	1478488	03/01/1988	DISCACHE	Quantum Corporation
73685306	1489175	05/24/1988	QIC STREAM	Certance LLC
73667641	1501056	08/23/1988	HARDCARD	Quantum Corporation
73747179	1531795	03/28/1989	ARCHIVE VP	Certance LLC
74242149	1749927	02/02/1993	QUANTUM	Quantum Corporation
74429328	1869317	12/27/1994	TAPESTOR	Certance LLC
74678698	2012843	10/29/1996	QUANTUM SIROCCO	Quantum Corporation
75052261	2075239	07/01/1997	QUANTUM	Quantum Corporation
75399623	2373379	08/01/2000	DLT TAPE	Quantum Corporation
75387699	2386775	09/19/2000	QUANTUM	Quantum Corporation
75604153	2392749	10/10/2000	QUANTUM	Quantum Corporation
75601999	2411810	12/12/2000	QUANTUM	Quantum Corporation
75608837	2434568	03/13/2001	QUANTUM	Quantum Corporation
75552214	2472677	07/31/2001	QUANTUM	Quantum Corporation
75462005	2487984	09/11/2001	ULTRUM	Certance LLC, IBM Corporation and Hewlett-Packard Ltd.

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
75462012	2487985	09/11/2001	I.I.O	Certance LLC, IBM Corporation and Hewlett-Packard Ltd.
76123461	2490615	09/18/2001	TURNING TRANSACTIONS INTO LOYAL CUSTOMERS	Quantum Corporation of New York
75660932	2496768	10/09/2001	LANVAULT	Quantum Corporation
75823333	2518368	12/11/2001	DLT SUPER TAPE	Quantum Corporation
75659485	2576453	06/04/2002	ULTRUM LTO	Certance LLC, IBM Corporation and Hewlett-Packard Ltd.
76236199	2757984	07/15/2003	VALUSMART TAPE	Quantum Corporation
78079913	2745030	07/29/2003	VALUSMART	Quantum Corporation
76303944	2765102	09/16/2003	RADICAL SIMPLICITY	Quantum Corporation
75659481	2815237	02/17/2004	LTO LINEAR TAPE-OPEN (and design)	Certance LLC, IBM Corporation and Hewlett-Packard Ltd.
76320040	2820244	03/02/2004	THE 3 R S OF DATA PROTECTION: RELIABILITY, REDUNDANCY, AND RECOVERY	Quantum Corporation
75983433	2836782	04/27/2004	LINEAR TAPE- OPEN	Certance LLC, IBM Corporation and Hewlett-Packard Ltd.
76487967	2864338	07/20/2004	DLT	Quantum Corporation
76487968	2864339	07/20/2004	DLT TAPE	Quantum Corporation
78220191	2924217	02/01/2005	(design only)	Certance LLC
78214246	2926907	02/15/2005	CERTANCE	Certance LLC
78080096	2935989	03/29/2005	VS TAPE	Quantum Corporation
76482946	2937229	04/05/2005	WHEN FAILURE IS NOT AN OPTION	Quantum Corporation
78079921	2938735	04/05/2005	VS TAPE VALUSMART	Quantum Corporation
76471253	2957502	05/31/2005	VALUELOADER	Quantum Corporation
76355313	2987717	08/23/2005	SUPERLOADER	Quantum Corporation

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
76518536	3018998	11/29/2005	STORAGECARE	Quantum Corporation
76613992	3078209	04/11/2006	SDLT TAPE	Quantum Corporation

SCHEDULE C

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REG. NO.	TITLE	OWNER
TX979601	Control Program for 8049 Microprocessor	Quantum Corporation
TX1307338	Control Program for Intel 8051 control Microprocessor in rotating disk data storage devices	Quantum Corporation
TX2323157	Prodrive control program software	Quantum Corporation
TXu446027	RF71V102	Quantum Corporation
TXu446028	RF71V103	Quantum Corporation
TXu446030	RF71V104	Quantum Corporation
TXu446031	RF71V105	Quantum Corporation
TXu446025	RF30V102	Quantum Corporation
TXu446024	RF30V103	Quantum Corporation
TXu446026	RF30V104	Quantum Corporation
TXu446029	RF30V105	Quantum Corporation

DOMAIN NAMES

DOMAIN NAME	OWNER
adic.com	Advanced Digital Information Corporation
adic.com.cp	Advanced Digital Information Corporation
adic.de	Advanced Digital Information Corporation
adic.fr	Advanced Digital Information Corporation
adic.us	Advanced Digital Information Corporation
adic-asiapacific.com	Advanced Digital Information Corporation
adicchina.com	Advanced Digital Information Corporation
adic-china.com	Advanced Digital Information Corporation
adic-grau.de	Advanced Digital Information Corporation
adicjapan.com	Advanced Digital Information Corporation
adic-japan.com	Advanced Digital Information Corporation
adic-korea.com	Advanced Digital Information Corporation
adic-southasia.com	Advanced Digital Information Corporation
centravisio.com	Advanced Digital Information Corporation
emass.de	Advanced Digital Information Corporation
emass-grau.de	Advanced Digital Information Corporation
faststor.eu	Advanced Digital Information Corporation
grau.de	Advanced Digital Information Corporation
pathlight.com	Advanced Digital Information Corporation
scalarconsulting.com	Advanced Digital Information Corporation
sharenext.eu	Advanced Digital Information Corporation
snc.eu	Advanced Digital Information Corporation
stornext.com	Advanced Digital Information Corporation
stornext.eu	Advanced Digital Information Corporation
atlp.com	Quantum Corporation
certance.com	Quantum Corporation
colorprotect.com	Quantum Corporation
dlisage.com	Quantum Corporation
dlisorage.com	Quantum Corporation
dlitape.com	Quantum Corporation
dlivs.com	Quantum Corporation
dlivs.net	Quantum Corporation
govault.net	Quantum Corporation
myfirstauto-loader.com	Quantum Corporation
networkstorageu.com	Quantum Corporation

TRADEMARK

REEL: 003588 FRAME: 0900

DOMAIN NAME	OWNER
qa-apac.com	Quantum Corporation
qnm.com	Quantum Corporation
quantum.com	Quantum Corporation
quantumacademy.com	Quantum Corporation
storage.dataservices.com	Quantum Corporation
tape4tapelessworld.com	Quantum Corporation