

**TRADEMARK ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Intellectual Property Security Agreement (Second Lien)

**CONVEYING PARTY DATA**

Name	Formerly	Execution Date	Entity Type
Quantum Corporation		08/22/2006	CORPORATION: DELAWARE

**RECEIVING PARTY DATA**

<b>Name:</b>	KeyBank National Association, as Administrative Agent
<b>Street Address:</b>	Three Embarcadero Center
<b>Internal Address:</b>	Suite 2900
<b>City:</b>	San Francisco
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94111
<b>Entity Type:</b>	national banking association: UNITED STATES

**PROPERTY NUMBERS Total: 61**

Property Type	Number	Word Mark
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

OP \$1540.00 0926161

Registration Number:	1531795	ARCHIVE VP
Registration Number:	1749927	QUANTUM
Registration Number:	1869317	TAPESTOR
Registration Number:	1957517	CONNER
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
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
Serial Number:	76603451	DLTICE
Serial Number:	76613994	SDLT
Serial Number:	78481629	
Serial Number:	78510625	DLT
Serial Number:	78659908	GOVAULT
Serial Number:	78918030	STORAGECARE VISION

**CORRESPONDENCE DATA**

Fax Number: (919)416-8339  
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*  
Phone: 919 286-8049  
Email: PTO\_TMconfirmation@mvalaw.com  
Correspondent Name: Moore & Van Allen PLLC  
Address Line 1: 430 Davis Drive  
Address Line 2: Suite 500  
Address Line 4: Morrisville, NORTH CAROLINA 27560

ATTORNEY DOCKET NUMBER:	020445.5IPSATQUANTUMJES
NAME OF SUBMITTER:	John E. Slaughter
Signature:	/John E. Slaughter/
Date:	09/19/2006

**Total Attachments: 47**  
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INTELLECTUAL PROPERTY SECURITY AGREEMENT  
(SECOND LIEN)

Dated as of August 22, 2006

From

QUANTUM CORPORATION,  
as Debtor,

to

KEYBANK NATIONAL ASSOCIATION  
as Administrative Agent

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**INTELLECTUAL PROPERTY SECURITY AGREEMENT  
(SECOND LIEN)**

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (SECOND LIEN) ("*IP Security Agreement*") is made as of August 22, 2006 by and between QUANTUM CORPORATION, a Delaware corporation ("*Debtor*"), and KEYBANK NATIONAL ASSOCIATION as Administrative Agent ("*KeyBank*" or "*Administrative Agent*") for the parties identified as Lenders (collectively with KeyBank in its capacity as Lender, the "*Lenders*") under that certain Term Loan Agreement of even date among Debtor, the Administrative Agent and Lenders (the "*Credit Agreement*").

**RECITALS**

A. Concurrently herewith Debtor is entering into the Credit Agreement pursuant to which Lenders shall provide Debtor with a senior term loan facility and a senior revolving credit facility (including certain letters of credit, collectively, the "*Facility*").

B. It is a prerequisite to the Lenders' entering into the Credit Agreement that Debtor enter into this IP Security Agreement and grant to the Administrative Agent for itself and for the ratable benefit of the Lenders, the security interest hereafter provided to secure the Obligations.

C. Debtor as owner of the assets encumbered hereby, desires to enter into this IP Security Agreement to secure payment and performance of the Obligations.

**AGREEMENT**

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

**1. DEFINITIONS.**

For purposes of this IP Security Agreement, the following terms shall have the meanings specified below. In addition terms not defined below that are defined in Division 8 or Division 9 of the UCC or in the Credit Agreement shall have the meaning specified therein.

**1.1 Bankruptcy Code.** The term "*Bankruptcy Code*" shall mean the Bankruptcy Reform Act of 1978 (11 U.S.C. § 101-1330) as amended and as hereafter modified.

**1.2 Collateral.** The term "*Collateral*" shall mean:

- (a) The Intellectual Property Collateral;
- (b) All Proceeds thereof; and
- (c) All of the Debtor's Books relating thereto.

Notwithstanding the foregoing, the term "*Collateral*" shall not include any General Intangibles of the Debtor (whether owned or held as licensee or lessee or otherwise) to the extent that the granting of a security interest therein would be contrary to applicable law or create a default under any agreement governing such property, right or license (but solely to the extent that such restrictions are enforceable as a matter of law).

**1.3 Copyrights.** The term "*Copyrights*" shall have the meaning provided in the UCC and shall include, without limitation, any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto.

**1.4 Debtor's Books.** The term "*Debtor's Books*" shall mean all of Debtor's books and records including, but not limited to: minute books; ledgers, records indicating, summarizing or evidencing Debtor's assets, liabilities, the Collateral, the Obligations, and all information relating thereto; records indicating, summarizing or evidencing Debtor's business operations or financial condition; and all computer programs, disc or tape files, printouts, runs, and other computer prepared information and the equipment containing such information.

**1.5 Intentionally Omitted.**

**1.6 Event of Default.** The term "*Event of Default*" shall have the meaning given to such term in Section 9 of this IP Security Agreement.

**1.7 Intellectual Property Collateral.** The term "*Intellectual Property Collateral*" shall mean all of the following assets now owned or hereafter acquired:

- (a) Copyrights, Trademarks, Patents, and Mask Works;
- (b) Licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works, and all license fees and royalties arising from such use to the extent permitted by such license or rights
- (c) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;
- (d) Any and all design rights which may be available to Debtor now or hereafter existing, created, acquired or held;
- (e) Any and all claims for damages by way of past, present and future infringement of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(f) All "domain names" of Debtor, including without limitation those listed on Exhibit D;

(g) All amendments, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works;

(h) All contracts and contract rights relating to any of the foregoing; and

(i) All Proceeds of the foregoing.

**1.8 IP Priority Liens.** The term "*IP Priority Liens*" shall mean and refer to (i) Liens on any imbedded software in any equipment, the purchase price and related acquisition costs of such equipment which are financed by third-party lenders or lessors as permitted by the Credit Agreement; (ii) Liens in existence on the date any asset becomes Collateral, to the extent such Lien is Permitted by the Credit Agreement, subject to such Lien; (iii) Liens (including tax Liens) in favor of any Governmental Authority, which pursuant to the statute or law and other applicable law creating such Lien, have priority over Liens granted under this IP Security Agreement; (iv) the Liens set forth on Exhibit E hereto and (v) Liens permitted under Section 7.02(i) of the Credit Agreement and clauses (c), (d), (e), (i) and (k) of the definition of "Ordinary Course Liens" in the Credit Agreement.

**1.9 IP Security Agreement.** The term "*IP Security Agreement*" shall mean this IP Security Agreement (any concurrent or subsequent rider to this IP Security Agreement) and any extensions, supplements, amendments or modifications to this IP Security Agreement and/or to any such rider.

**1.10 Lender Expenses.** The term "*Lender Expenses*" means: all costs and expenses incurred by Administrative Agent or Lenders which are subject to payment or reimbursement by Debtor pursuant to Section 10.03 of the Credit Agreement.

**1.11 Lenders.** The term "*Lenders*" shall have the meaning given to such term in the preamble to this IP Security Agreement.

**1.12 Licenses.** The term "*Licenses*" shall mean all licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or right.

**1.13 License Disposition.** The term "*License Disposition*" shall mean in respect of any Intellectual Property Collateral which is material to Debtor (the "*Material IP*") (i) the granting of an exclusive license across all or substantially all fields, uses or regions to any person or entity other than a majority-owned subsidiary of Debtor, (ii) the granting of any license that conveys directly or indirectly to any person or entity other than a majority-owned subsidiary of Debtor, all or substantially all of the economic value of such Material IP, or (iii) the abandonment by the Debtor of such Material IP.

**1.14 Intentionally Omitted.**



**1.15 Intentionally Omitted.**

**1.16 Mask Works.** The term "*Mask Works*" shall have the meaning provided in the UCC and shall include, without limitation, all mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto.

**1.17 Intentionally Omitted.**

**1.18 Patents.** The term "*Patents*" shall have the meaning provided in the UCC and shall include, without limitation, all patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto.

**1.19 Proceeds.** The term "*Proceeds*" shall have the meaning provided in the UCC including without limitation whatever is received upon the sale, lease, exchange, collection or other disposition of Collateral or proceeds, including, without limitation, proceeds of insurance covering the foregoing collateral, tax refunds, and any and all accounts, notes, instruments, chattel paper, equipment, money, deposit accounts, goods, or other tangible and intangible property of Debtor resulting from the sale or other disposition of the Collateral, and the proceeds thereof.

**1.20 Trademarks.** The term "*Trademarks*" shall have the meaning provided in the UCC and shall include, without limitation, any trademarks and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Debtor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto.

**1.21 UCC.** The term "*UCC*" shall mean the California Uniform Commercial Code, as presently in force and effect and any replacements therefore as and when such replacements become effective.

**2. GRANT OF SECURITY INTEREST.**

As security for the prompt and complete payment and performance of all the Obligations, Debtor hereby grants to Administrative Agent for itself and on behalf of and for the ratable benefit of the Lenders, a first priority security interest in all of Debtor's right, title and interest in, to and under the Collateral, subject to IP Priority Liens. Notwithstanding the foregoing, the security interest granted herein shall not extend to and the term "Collateral" shall not include any General Intangibles of the Debtor (whether owned or held as licensee or lessee or otherwise) to the extent that the granting of a security interest therein would be contrary to applicable law or create a default under any agreement governing such property, right or license (but only if such restrictions are enforceable as a matter of law).

### 3. **AUTHORIZATION AND REQUEST.**

Debtor authorizes and requests that the Register of Copyrights and the Commissioner of Patents and Trademarks record this IP Security Agreement or a version thereof.

### 4. **REPRESENTATIONS AND WARRANTIES.**

In addition to the representations and warranties of Debtor set forth in the Credit Agreement, which are incorporated herein by reference, Debtor represents and warrants, and represents to Administrative Agent and the Lenders that:

**4.1 Incorporation: Place of Business.** Debtor is a corporation validly existing and in good standing under the laws of the State of Delaware; Debtor's chief executive office and principal place of business is located at 1650 Technology Drive, Suite 700, San Jose, California 95110.

**4.2 Title to Collateral.** Except as specified on Schedule 4.2 hereto, Debtor has and at all times will have good, marketable and indefeasible title to the Collateral; except for any Intellectual Property Collateral which is being licensed by the Debtor or Collateral which is being leased by the Debtor, and as to such assets, Debtor has the appropriate rights to use such Collateral; the Collateral is and at all times shall remain free and clear of all Liens except for licenses granted by Debtor (subject to the limitations in Section 5.8 of this IP Security Agreement) and except for IP Priority Liens.

**4.3 Intellectual Property.** All of Debtor's U.S. patents and patent applications, registered copyrights, applications for copyright, trademarks, service marks and trade names (whether registered or unregistered), and applications for registration of such trademarks, service marks and trade names, are set forth in Exhibits A, B and C. Debtor represents that none of the copyrights owned by it constitute a material asset of Debtor's business.

**4.4 Domain Names.** All of Debtor's domain names are set forth in Exhibit D.

**4.5 No Conflict.** Performance of this IP Security Agreement does not conflict with or result in a breach of any agreement relating to the intellectual property of Debtor, except to the extent that certain intellectual property agreements prohibit the assignment of the rights thereunder to a third party without the licensor's or other party's consent and this IP Security Agreement constitutes a security interest.

**4.6 IP Enforceability.** To Debtor's knowledge, each of the Patents is valid and enforceable, and no part of the Intellectual Property Collateral has been judged invalid or unenforceable, in whole or in part, and no claim has been made that any part of the Intellectual Property Collateral violates the rights of any third party.

**4.7 Validity of Lien.** This IP Security Agreement creates, and in the case of after acquired Intellectual Property Collateral, this IP Security Agreement will create at the time Debtor first has rights in such after acquired Intellectual Property Collateral, in favor of

Administrative Agent a valid and perfected first priority security interest in the Intellectual Property Collateral in the United States securing the payment and performance of the Obligations which is senior to all other interests except for IP Priority Liens.

**4.8 IP Registration.** To its knowledge, except for, and upon, the filing with the United States Patent and Trademark office with respect to the Patents and Trademarks and the filing with the Register of Copyrights with respect to the Copyrights and Mask Works necessary to perfect the security interests created hereunder and except as been already made or obtained, no authorization, approval or other action by, and no notice to or filing with, any U.S. governmental authority or U.S. regulatory body is required either (i) for the grant by Debtor of the security interest granted hereby or for the execution, delivery or performance of this IP Security Agreement by Debtor in the U.S. or (ii) for the perfection in the United States or the exercise by Administrative Agent of its rights and remedies thereunder.

**4.9 Complete.** All information heretofore, herein or hereafter supplied to Administrative Agent by or on behalf of Debtor with respect to the Intellectual Property Collateral is accurate and complete in all material respects.

**4.10 Continuing Warranties.** Debtor's warranties and representations set forth in this Section 4 and in any exhibit hereto shall be true and correct at the time of execution of this IP Security Agreement by Debtor and at the time of any request for advance and at the time of any advance under the Credit Agreement.

**4.11 Warranties and Representations Cumulative.** The warranties, representations and agreements set forth herein shall be cumulative and in addition to any and all other warranties, representations and agreements which Debtor shall give, or cause to be given, to Administrative Agent, either now or hereafter.

## **5. COVENANTS.**

So long as the Obligations, or any portion thereof, remains unsatisfied.

**5.1 Change in Identity.** Without prior notice to Administrative Agent, Debtor will not change Debtor's name, or state of incorporation; or relocate Debtor's principal place of business or chief executive office.

**5.2 Intentionally Omitted.**

**5.3 Protection of IP.** Debtor shall (i) protect, defend and maintain the validity and enforceability of the Trademarks, Patents, Copyrights, and Mask Works, (ii) use commercially reasonable best efforts to detect infringements of the Trademarks, Patents, Copyrights, and Mask Works and promptly advise Administrative Agent in writing of material infringements detected and (iii) not allow any Trademarks, Patents, Copyrights, or Mask Works to be abandoned, forfeited or dedicated to the public without the written consent of Administrative Agent, which shall not be unreasonably withheld, unless Debtor determines that reasonable business practices suggest that abandonment is appropriate.

**5.4 Copyright Registration.** Debtor shall promptly register the most recent version of any of Debtor's Copyrights, which are material to the business of Debtor, if not already so registered.

**5.5 New IP Filings.** If and when Debtor shall obtain rights to any new patents, trademarks, service marks, trade names or material copyrights, or otherwise acquire or become entitled to the benefit of, or apply for registration of, any of the foregoing, Debtor (i) shall promptly notify Administrative Agent thereof and (ii) hereby authorizes Administrative Agent to modify, amend, or supplement the schedules attached hereto to reflect such fact and from time to time to include any of the foregoing and make all necessary or appropriate filings with respect thereto and to perfect Administrative Agent's Lien thereon.

**5.6 Notice to Administrative Agent.** Debtor shall promptly advise Administrative Agent of any material adverse change in the composition of the Collateral, including but not limited to any subsequent ownership right of the Debtor in or to any Trademark, Patent, Copyright, or Mask Work specified in this IP Security Agreement. Upon any executive officer of Debtor obtaining actual knowledge thereof, Debtor will promptly notify Administrative Agent in writing of any event that materially adversely affects the value of any material Intellectual Property Collateral, the ability of Debtor to dispose of any material Intellectual Property Collateral of the rights and remedies of Administrative Agent or Lenders in relation thereto, including the levy of any legal process against any of the Intellectual Property Collateral.

**5.7 Intentionally Omitted.**

**5.8 Intentionally Omitted.**

**5.9 Further Assurances.** Debtor shall, from time to time, execute and file such other instruments, and take such further actions as Administrative Agent may reasonably request from time to time to perfect or continue the perfection of Administrative Agent's interest in the Intellectual Property Collateral.

## **6. ADMINISTRATIVE AGENT'S RIGHTS TO COMPEL ACTION.**

Administrative Agent shall have the right, but not the obligation, to take, at Debtor's sole expense, any actions that Debtor is required under this IP Security Agreement to take but which Debtor fails to take, after ten (10) days' notice to Debtor. Debtor shall reimburse and indemnify Administrative Agent for all reasonable costs and reasonable expenses incurred in the reasonable exercise of its rights under this Section 6.

## **7. INSPECTION RIGHTS.**

At any time during regular business hours and as often as reasonably requested upon reasonable notice, permit Administrative Agent or any Lender, or any employee, Administrative Agent or representative thereof, to examine, audit and make copies and abstracts from Debtor's records and books of account, including quality control records, relating to the Intellectual

Property Collateral and to visit and inspect its properties related thereto, and, upon request, furnish promptly to Administrative Agent or any Lender true copies of all financial information and internal management reports related to the Intellectual Property Collateral. Notwithstanding any provision of this Agreement to the contrary, so long as no Event of Default shall have occurred and be continuing, Debtor shall not be required to disclose, permit the inspection, examination, photocopying or making extracts of, or discuss, any document, information or other matter that (i) constitutes non-financial trade secrets or non-financial proprietary information, or (ii) the disclosure of which to Administrative Agent or any Lender, or their designated representative, is then prohibited by law or any agreement binding on Debtor that was not entered into by Debtor for the purpose of concealing information from the Administrative Agent or Lenders. Debtor shall, however, furnish to Administrative Agent such information concerning Debtor's Intellectual Property Collateral as is reasonably necessary to permit Administrative Agent (on behalf of itself and the other Lenders) to perfect a security interest in such intellectual property; provided, however, nothing herein shall entitle Administrative Agent access to Debtor's trade secrets and other proprietary information.

## **8. FURTHER ASSURANCES: ATTORNEY FACT.**

**8.1** On a continuing basis, Debtor will, subject to any prior licenses, encumbrances and restrictions and prospective licenses, make, execute, acknowledge and deliver, and file and record in the proper filing and recording places in the United States, all such instruments, including appropriate financing and continuation statements and collateral agreements and filings with the United States Patent and Trademark Office and the Register of Copyrights, and take all such action as may reasonably be deemed necessary or advisable, or as requested by Administrative Agent, to perfect Administrative Agent's security interest in all Copyrights, Patents, Trademarks, and Mask Works and otherwise to carry out the intent and purposes of this IP Security Agreement, or for assuring and confirming to Administrative Agent the grant or perfection of a security interest in all Intellectual Property Collateral.

**8.2** Debtor hereby irrevocably (until the Obligations are paid in full and the Revolving Commitments have been terminated) appoints Administrative Agent as Debtor's attorney-in-fact, with full authority in the place and stead of Debtor and in the name of Debtor, Administrative Agent or otherwise, from time to time in Administrative Agent's discretion, upon Debtor's failure or inability to do so, to take any action and to execute any instrument which Administrative Agent may deem necessary or advisable to accomplish the purposes of this IP Security Agreement, including:

(a) To modify, in its sole discretion, this IP Security Agreement without first obtaining Debtor's approval of or signature to such modification by amending Exhibit A, Exhibit B, Exhibit C, and Exhibit D hereof, as appropriate, to include reference to any right, title or interest in any Copyrights, Patents, Trademarks or Mask Works acquired by Debtor after the execution hereof or to delete any reference to any right, title or interest in any Copyrights, Patents, Trademarks, or Mask Works in which Debtor no longer has or claims any right, title or interest; and

(b) To file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Intellectual Property Collateral without the signature of Debtor where permitted by law.

## 9. EVENTS OF DEFAULT.

The occurrence of any of the following shall constitute an Event of Default under this IP Security Agreement:

**9.1 Breach of IP Security Agreement.** (i) Any representation or warranty hereunder proves to have been incorrect in any material respect when made or deemed made, (ii) Debtor breaches any provision of this IP Security Agreement which cannot be cured or (iii) the breach by Debtor of any other provision of this IP Security Agreement that remains uncured for a period of thirty (30) days.

**Breach of Other Agreements.** The occurrence and continuance of an Event of Default under the Credit Agreement.

**9.2 Lien Priority.** Administrative Agent shall cease to have a valid and perfected first priority security interest upon any material item of the Collateral subject only to the IP Priority Liens.

**9.3 Material Impairment.** If there is a material impairment of the value of the Collateral.

**9.4 Seizure of Assets.** If all or any material item of Collateral is attached, seized, subjected to a writ or distress warrant, or are levied upon.

## 10. REMEDIES.

The exercise of remedies hereunder shall be made by Administrative Agent on behalf of itself and for the ratable benefit of the Lenders upon the terms and conditions contained herein. If an Event of Default shall have occurred and be continuing and not been cured or waived in accordance with the terms hereof or the Credit Agreement, Administrative Agent shall have the following rights and powers and may, at Administrative Agent's option, without notice of its election and without demand, to the extent permitted by Section 8.03 of the Credit Agreement, do any one or more of the following (in addition to the rights and remedies permitted under the Credit Agreement), all of which are authorized by Debtor:

**10.1 UCC Rights.** Administrative Agent shall have all of the rights and remedies of a secured party under the UCC and under all other applicable laws.

**10.2 Intentionally Omitted.**

**10.3 Intentionally Omitted.**

**10.4 Protection of Collateral.** Without notice to or demand upon Debtor or any guarantor, make such payments and do such acts as Administrative Agent considers necessary or reasonable to protect its security interest in the Collateral to pay, purchase, contest or compromise any encumbrance, charge or lien which in the opinion of Administrative Agent appears to be prior or superior to Administrative Agent's security interest and to pay all expenses incurred in connection therewith.

**10.5 Assembly of Collateral.** Administrative Agent may require Debtor to assemble the Collateral and make it available to Administrative Agent at a place designated by Administrative Agent.

**10.6 Possession of Collateral.** Administrative Agent, without a breach of the peace, may enter any of the premises of Debtor and search for, take possession of, remove, keep or store any or all of the Collateral. If Administrative Agent seeks to take possession of any or all of the Collateral by court process, Debtor irrevocably and unconditionally agrees that a receiver may be appointed by a court for such purpose without regard to the adequacy of the security for the Obligations. Administrative Agent shall have the right to remain on Debtor's premises or cause a custodian to remain thereon in exclusive control of such premises without charge for as long as Administrative Agent deems necessary in order to complete the enforcement of its rights under this IP Security Agreement. If Administrative Agent seeks possession of any or all of the Collateral by court process, Debtor irrevocably waives (a) any bond and any surety or security relating thereto required by any statute, court rule or otherwise as an incident or condition to such possession; (b) any demand for possession prior to the commencement of any suit or action to recover possession; and (c) any requirement that Administrative Agent retain possession of and not dispose of such Collateral until after trial or final judgment.

**10.7 License.** Administrative Agent shall have a nonexclusive, royalty free license to use the Copyrights, Patents, Trademarks, and Mask Works to the extent reasonably necessary to permit Administrative Agent to exercise its rights and remedies upon the occurrence of an Event of Default. All of Administrative Agent's rights and remedies with respect to the Intellectual Property Collateral shall be cumulative.

## **11. INDEMNITY.**

Debtor agrees to defend, indemnify and hold harmless Administrative Agent and Lenders and their officers, employees, and Administrative Agents against: (a) all obligations, demands, claims, and liabilities claimed or asserted by any other party related to or in connection with the transactions contemplated by this IP Security Agreement or the Collateral, and (b) all losses or expenses in any way suffered, incurred, or paid by Administrative Agent and Lenders as a result of or in any way arising out of, following or consequential to the transactions between Administrative Agent and Lenders and Debtor under this IP Security Agreement or the Collateral (including without limitation, reasonable attorneys fees and reasonable expenses), except for losses arising from or out of Administrative Agent or Lender's gross negligence or willful misconduct.

## 12. GENERAL.

**12.1 Taxes and Other Expenses Regarding the Collateral.** If Debtor fails to pay promptly when due to any person or entity, monies which Debtor is required to pay by this IP Security Agreement, Administrative Agent may, but need not, pay the same and charge Debtor's account therefor, and Debtor shall promptly reimburse Administrative Agent therefor. Any payments made by Administrative Agent shall not constitute; (a) an agreement by Administrative Agent to make similar payments in the future, or (b) a waiver by Administrative Agent of any default under this IP Security Agreement. Administrative Agent need not inquire as to, or contest the validity of, any such expense, tax, security interest, encumbrance or lien and the receipt of the usual official notice for the payment thereof shall be conclusive evidence that the same was validly due and owing.

**12.2 Notices.** All notices, demands, or requests from one party to another shall, unless otherwise specified herein, be made in the manner set forth in the Credit Agreement.

### **12.3 Intentionally Omitted.**

**12.4 Release of Collateral.** Administrative Agent shall promptly file UCC termination statements and any other documents or instruments as necessary upon any Disposition by Debtor of any items or item of Collateral, to the extent such Disposition is permitted under the Credit Agreement.

**12.5 Termination.** At such time as Debtor shall completely satisfy all of the obligations secured hereunder, Administrative Agent shall execute and deliver to Debtor all instruments as may be necessary or proper to reinvest in Debtor full title to the property assigned hereunder, subject to any disposition thereof which may have been made by Administrative Agent pursuant hereto.

**12.6 Course of Dealing.** No course of dealing, nor any failure to exercise, nor any delay in exercising any right, power or privilege hereunder shall operate as a waiver thereof.

### **12.7 Intentionally Omitted.**

**12.8 Amendments.** This IP Security Agreement may be amended only by a written instrument signed by both parties hereto.

**12.9 Agreement Binding, Assignment.** This IP Security Agreement shall be binding and deemed effective when executed by Debtor and Administrative Agent. This IP Security Agreement shall bind and inure to the benefit of the respective successors and assigns of each of the parties; provided, however, that Debtor may not assign this Security Agreement or any rights hereunder without Administrative Agent's prior written consent and any prohibited assignment shall be absolutely void. No consent to an assignment by Administrative Agent shall release Debtor from its obligations to Administrative Agent. Administrative Agent reserves the right to sell, assign, transfer, negotiate or grant participations in all or any part of, or any interest in, Administrative Agent's rights and benefits hereunder to the extent and in the manner provided for



in Section 10.04 of the Credit Agreement. In connection therewith, Administrative Agent may disclose all documents and information that Administrative Agent now has or hereafter may have relating to Debtor or Debtor's business, subject to Debtor's reasonable confidentiality requirements.

**12.10 Article and Section Headings.** Article and section headings and article and section numbers have been set forth herein for convenience only. Unless the contrary is compelled by the context, everything contained in each article and section applies equally to this entire IP Security Agreement.

**12.11 Construction.** Neither this IP Security Agreement nor any uncertainty or ambiguity herein shall be construed or resolved against Administrative Agent or Debtor, whether under any rule of construction or otherwise. On the contrary, this IP Security Agreement has been reviewed by all parties and shall be construed and interpreted according to the ordinary meaning of the words used so as to fairly accomplish the purposes and intentions of all parties hereto.

**12.12 Performance of Covenants.** Debtor shall perform all of its covenants under this IP Security Agreement at its sole cost and expense.

**12.13 Term.** This IP Security Agreement shall continue in full force and effect as long as any of the Obligations are outstanding.

**12.14 Conflict or Credit Agreement Modifications.** To the extent that there is an explicit conflict between the terms of the Credit Agreement and this IP Security Agreement, the terms of the Credit Agreement shall control. Any future changes or modifications to the Credit Agreement, shall apply to and modify this IP Security Agreement, to the extent that such change or modification would reasonably be construed to apply to this IP Security Agreement.

**12.15 Severability.** Each provision of this IP Security Agreement shall be severable from every other provision of this IP Security Agreement for the purpose of determining the legal enforceability of any specific provision.

**12.16 Successors.** This IP Security Agreement shall be binding upon and inure to the benefit of Debtor and the Administrative Agent and their respective permitted successors and assigns.

**12.17 Counterparts.** This IP Security Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.

### **13. CHOICE OF LAW AND VENUE.**

The validity of this IP Security Agreement, its construction, interpretation and enforcement, and the rights of the parties hereunder and concerning the Collateral, shall be determined under, governed by and construed in accordance with the laws of the State of

California. The parties agree that all actions or proceedings arising in connection with this Security Agreement shall be tried and litigated only in the state courts or federal courts located in the city and county of San Francisco, California.

**14. INTERCREDITOR PROVISIONS.**


Notwithstanding anything herein to the contrary, the lien and security interest granted to the Administrative Agent pursuant to this IP Security Agreement and the exercise of any right or remedy by the Administrative Agent hereunder are subject to the Intercreditor Agreement, as the same any be amended, supplemented, modified or replace from time to time. In the event of any conflict between the terms of this IP Security Agreement and the Intercreditor Agreement, the terms of the Intercreditor Agreement shall govern.

**[SIGNATURE PAGES FOLLOW]**

IN WITNESS WHEREOF, the parties hereto have executed this IP Security Agreement on the day and year first above written.

**Debtor:**

**QUANTUM CORPORATION**

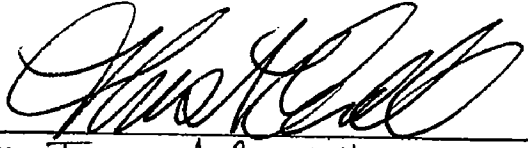
By:   
Name: Richard E. Belluzo  
Title: Chairman and Chief Executive Officer

QUANTUM CORPORATION  
IP SECURITY AGREEMENT (SECOND LIEN)

TRADEMARK  
REEL: 003393 FRAME: 0030

**Administrative Agent:**

**KEYBANK NATIONAL ASSOCIATION**

By:   
Name: Thomas A. Crandell  
Title: Senior Vice President

QUANTUM CORPORATION  
IP SECURITY AGREEMENT (SECOND LIEN)

TRADEMARK  
REEL: 003393 FRAME: 0031

**EXHIBIT A**  
**COPYRIGHTS**

<b>REG. NO.</b>	<b>TITLE</b>	<b>OWNER</b>
TX-979-601	Control Program for 8049 Microprocessor	Quantum Corporation
TX-1-307-338	Control Program for Intel 8051 control Microprocessor in rotating disk data storage devices	Quantum Corporation
TX-2-323-157	Prodrive control program software	Quantum Corporation
TXu-446-027	RF71V102	Quantum Corporation
TXu-446-028	RF71V103	Quantum Corporation
TXu-446-030	RF71V104	Quantum Corporation
TXu-446-031	RF71V105	Quantum Corporation
TXu-446-025	RF30V102	Quantum Corporation
TXu-446-024	RF30V103	Quantum Corporation
TXu-446-026	RF30V104	Quantum Corporation
TXu-446-029	RF30V105	Quantum Corporation

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**EXHIBIT B****PATENTS****PATENT APPLICATIONS**

<b>APPL. NUMBER</b>	<b>APPL. DATE</b>	<b>TITLE</b>	<b>OWNER</b>
09888093	06/21/2001	Optical Recording Article	Quantum Corporation
09911740	07/25/01	Method Of Tension Control During Unthread	Quantum Corporation
10001735	10/23/2001	Using NAS Appliance To Build A Non-Conventional Distributed Video Server	Quantum Corporation
10071860	02/08/2002	Method And Apparatus For Attaching More Than Two Disk Devices To An IDE Bus	Quantum Corporation
10072437	02/05/2002	Emulated Backup Tape Drive Using Data Compression	Quantum Corporation
10075121	02/13/2002	Use Of The Universal Serial Bus As An Internal Architecture Within IDE Disk Array	Quantum Corporation
10183329	06/25/5002	Method Of Producing Flux Guides In Magnetic Recording Heads	Quantum Corporation
10198188	07/17/2002	Multi-Channel Magnetic Tape System Having Optical Tracking Servo	Quantum Corporation
10225760	08/22/2002	Tape Cartridge With Multiple Keying Features	Quantum Corporation
10259524	09/30/02	A Tape Drive Apparatus With A Head Alignment System	Quantum Corporation
10259738	09/30/02	A Motor/Encoder Assembly For Tape Drives	Ashok B. Nayak; Robert R. Heinze
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
10349498	01/21/2003	Butterfly Tape Reel	Quantum Corporation
10359365	02/05/2003	Method And System For Tracking Magnetic Media With Embedded Optical Servo Tracks	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
10387653	03/12/2003	Adapter For A Tape Cartridge Bay	Quantum Corporation
10390380	03/14/2003	Extended Error Correction Codes	Quantum Corporation
10391115	03/17/2003	Creating A Backup Volume Using A Data Profile Of A Host Volume	Quantum Corporation
10412043	04/10/2003	Recovery Of Data On A Primary Data Volume	Quantum Corporation
10445279	05/23/2003	Optical Apparatus For Tracking A Magnetic Tape	Quantum Corporation

APPL. NUMBER	APPL. DATE	TITLE	OWNER
10454420	06/03/2003	Correcting Data Using Redundancy Blocks	Quantum Corporation
10481157	12/17/2003	Self-Centering Tape Reel For Single Reel Tape Cartridges	Quantum Corporation
10490807	07/06/2004	Improved Performance Tape Cartridge Leader For Single Reel Tape Cartridges	Quantum Corporation
10491864	04/07/2004	Tape Cartridge Write Protect Mechanism	Quantum Corporation
10492515	07/12/2004	Magnetic Tape Cartridge Having A Data Storage Medium Connected To An Integral Cleaning Tape Section	Quantum Corporation
10497294	05/28/2004	Tape Media Identification Code	Quantum Corporation
10607483	06/27/03	Magnetic Recording Tape Drive With Tape Guide Assembly Having Dampening Disk (As Amended)	Seagate Removable Storage Solutions LLC
10627371	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
10641969	08/15/2003	Automated Storage Library Gripper Apparatus And Method	Quantum Corporation
10642032	08/15/2003	Automated Storage Library Gripper With Finger Position Detector	Quantum Corporation
10642038	08/15/2003	Automated Storage Library Cartridge Gripper With Cartridge Detector	Quantum Corporation
10652750	08/28/2003	Correlation Receiver For Demodulating Servo Track Information	Quantum Corporation
10656656	09/04/2003	Tape Cartridge Soft Load System	Quantum Corporation
10673181	09/30/03	Channel Processor Using Reduced Complexity LDPC Decoder	Certance LLC
10675376	09/29/2003	Cartridge Transport Assembly	Quantum Corporation
10676567	09/30/2003	System And Method For Library Robotics Positional Accuracy Using Parallax Viewing	Quantum Corporation
10676591	09/30/2003	System And Method For Library Inventory	Quantum Corporation
10688027	10/17/2003	Correcting Data Having More Data Blocks With Errors Than Redundancy Blocks	Quantum Corporation
10697101	10/31/03	A Tape Drive Head Cleaner	Certance LLC
10739287	12/19/03	Tape Drive Apparatus Having An Arrangement For Capturing And Retaining A Leader Pin From A Tape Cartridge	Certance LLC
10739325	12/19/03	A Locking Dual Hub Tape Reel For Tape Drives	Certance LLC
10741636	12/18/2003	Multi-Format Thinfilmm Head And Associated Methods	Quantum Corporation
10758935	01/14/2004	Auxiliary Memory In A Tape Cartridge	Quantum Corporation
10765184	01/28/04	A Head Actuator Assembly For A Tape Drive	Certance LLC
10782990	02/19/2004	Error Correction Decoder Using Cells With Partial Syndrome Generation	Quantum Corporation
10794661	03/05/2004	Multiple Format Magnetic Storage Media Drive	Quantum Corporation

APPL. NUMBER	APPL. DATE	TITLE	OWNER
10794697	03/04/2004	Feedback-Controlled Optical Servo Writer	Quantum Corporation
10820388	04/07/2004	Methods For Controlling The Use Of A Cleaning Cartridge For Tape Drives	Quantum Corporation
10826639	04/15/2004	Methods And Systems For Overwrite Protected Storage Media	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
10849202	05/20/04	Tape Drive With Automatic Adaptation For Different Size Tape Cassettes	Certance LLC
10854078	05/24/2004	Servo Track Having Periodic Frames Of Tone Field And Embedded Synchronization Marks	Quantum Corporation
10856970	05/28/2004	Storage Drive Having Universal Format Across Media Types	Quantum Corporation
10858911	06/01/2004	Emulation Of Auxiliary Memory	Quantum Corporation
10861220	06/04/2004	Dual Source Tracking Servo Systems And Associated Methods	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
10923347	08/20/2004	Shock Indicator For A Data Storage Tape Device	Quantum Corporation
10923443	08/20/2004	Bounding Defective Regions Of A Tape Storage Medium	Quantum Corporation
10927732	08/27/2004	Diffraction Position Sensors And Control Systems	Quantum Corporation
10928229	08/27/2004	Methods And Systems For Magnetic Recording	Quantum Corporation
10928837	08/26/04	Method And Apparatus For Reinitializing A Tape Drive After A Power Loss	Certance LLC
10929039	08/27/2004	Servo Methods And Systems Using Existing Data Structures And Optical Masks	Quantum Corporation
10940111	09/13/04	Cartridge Carrier	Certance LLC
10942658	09/15/2004	Servo Methods And Systems Using Existing Data Structures And Medium Edge Position	Quantum Corporation
10942678	09/15/2004	Servo Methods And Systems Using Masked Medium Edge Position Sensors	Quantum Corporation
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



APPL. NUMBER	APPL. DATE	TITLE	OWNER
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
10985434	11/10/04	System And Method For Tape Drive Control	Certance LLC
10985443	11/10/04	System And Method For Controlling The Speed Of A Tape Drive	Certance LLC
10985624	11/10/04	System And Method For Tape Drive Under Run Control	Certance LLC
10986256	11/10/04	System And Method For Measuring The Position Of A Tape Drive Head	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
11014640	12/15/2004	Media cartridge having reel suspension system and method of manufacture	Quantum Corporation
11024511	12/28/2004	Focalizer Alignment	Quantum Corporation
11065705	02/23/05	Current Control Loop Bias Calibration By Integration	Certance LLC
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]
11136836	05/24/05	Stationary Guide Assembly For Tape Drives	Quantum Corporation
11137882	5/25/05	Cartridge Carrier	Quantum Corporation
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
11243938	10/04/05	A Motor/Encoder Assembly For Tape Drives	Ashok B Nayak; Robert R Heinze;
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
11316049	12/21/05	Computer Peripheral Device Mounting Arrangement With Two Locking Elements	Douglas A. Green; Scott L. Hanson; Mark R Thompson
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

**PATENTS**

<b>PAT. NUM.</b>	<b>ISSUE DATE</b>	<b>TITLE</b>	<b>OWNER</b>
D337760	07/27/1993	Combined Media Cartridge Loader And Associated Magazine	Quantum Corporation
D395879	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	Seagate Removable Storage Solutions LLC
RE33661	8/13/91	Head Positioning Assembly	Seagate Removable Storage Solutions 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
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	Seagate Removable Storage Solutions LLC
4874975	10/17/1989	Brushless Dc Motor	Quantum Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
4899434	2/13/90	Method Of Making A Thin Film Magnetic Head With A Leveler Layer And Superstrate	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
4972336	11/20/90	Read While Write Magnetic Head Assembly	Seagate Removable Storage Solutions 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
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	Seagate Removable Storage Solutions 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

PAT. NUM.	ISSUE DATE	TITLE	OWNER
5099367	03/24/1992	Method Of Automatic Gain Control Basis Selection And Method Of Half-Track Servng	Quantum Corporation
5101311	3/31/92	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
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 Changer 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

PAT. NUM.	ISSUE DATE	TITLE	OWNER
5191492	3/2/93	Mechanisms For A Closed Loop Head Positioner For Streaming Tape Drives	Seagate Removable Storage Solutions 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
5218501	6/8/93	Device For Aligning Magnetic Tape To A Read-Write Head	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC and Ardat, Inc.
5255130	10/19/93	Adjustable Write Equalization For Tape Drives	Seagate Removable Storage Solutions LLC
5257091	10/26/93	Optical Alignment System For Aligning A Multiple Gap Tape Head Assembly	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC and Matsushita Electric Industrial Co., Ltd.
5267096	11/30/93	Adjustable Write Equalization For Tape Drives	Seagate Removable Storage Solutions LLC
5285333	2/8/94	Mass Storage And Retrieval System For Magnetic Tape Cartridges	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5327059	7/5/94	Tape Drive Capstan Motor Servo System With Static Friction Compensation	Seagate Removable Storage Solutions LLC

PAT. NUM.	ISSUE DATE	TITLE	OWNER
5327305	7/5/94	Tape Format Detection System	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
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	Seagate Removable Storage Solutions LLC
5381292	1/10/95	Method For Self-Cleaning DAT Drive Tape Heads	Seagate Removable Storage Solutions LLC
5386545	1/31/95	Target Management Method For Data Backup To A Shared Transfer Station, Multiple Media Element Device	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5402273	3/28/95	Circuit For Determining Window Margin For Data Transitions In A Streaming Data Device	Seagate Removable Storage Solutions LLC
5402285	3/28/95	Five And One-Quarter Inch Form Factor Combination DAT Tape Drive And Cassette Magazine Loader	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5455729	10/3/95	Multi-Channel Rotating Transformer	Seagate Removable Storage Solutions LLC
5459742	10/17/1995	Solid State Disk Memory Using Storage Devices With Defects	Quantum Corporation
5474253	12/12/1995	Wedged 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	Seagate Removable Storage Solutions LLC

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5491595	2/13/96	Magnetic Head Guidance And Calibration System And Method Description	Seagate Removable Storage Solutions LLC
5513326	4/30/96	System For Optimizing Data Transfer	Quantum Corporation
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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5585978	12/17/96	Arcuate Scan Tape Drive	Seagate Removable Storage Solutions LLC
5589746	12/31/96	Brushless Motor Speed Control Arrangement Having Derived Common Mode Supply Signal Component	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5642461	6/24/97	Economical Wide Range Speed Control System	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5671389	09/23/1997	Adaptive Compression Caching For Tape Recording	Quantum Corporation
5675447	10/7/97	Method And Arrangement For Initiating Search For Start Of Data In Arcuately Recorded Data Tracks	Seagate Removable Storage Solutions LLC
5680278	10/21/1997	Apparatus For Combining Linear And Rotational Motion Of An Azimuth Read/Write Head	Quantum Corporation
5690293	11/25/97	Belt Drive Mechanism For A Tape Drive	Seagate Removable Storage Solutions LLC
5729890	3/24/98	Method Of Making An Arcuate Scan Tape Drive	Seagate Removable Storage Solutions LLC
5748396	5/5/98	Arrangement And Method For Optimizing The Recorded Signal To Noise Ratio In Contact Recording Systems	Seagate Removable Storage Solutions 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
5774306	6/30/98	Multi-Channel, High Speed, Tape Head Contour	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5833161	11/10/98	Low Profile Mechanism For Biased Driving Of Driven Roller In Tape Cartridge	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5854877	12/29/98	Economical Wide Range Speed Control System	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5892631	4/6/99	Method And An Arrangement For Detecting State Transitions In A Read Signal During A Bit Cell Timing Window	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC



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5925119	7/20/99	Computer Architecture For Automated Storage Library	Quantum Corporation
5936795	8/10/99	Magazine Cassette Locking Device	Seagate Removable Storage Solutions LLC
5940238	8/17/99	Mechanism To Reduce Adjacent Track Interference In A Magnetic Tape Data Storage System	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
5986846	11/16/99	Methods And Apparatus For Track Centering An Arcuate Scanner Head Assembly	Seagate Removable Storage Solutions LLC
5986856	11/16/99	Magnetoresistive Sensor With Improved Stability	Seagate Removable Storage Solutions LLC
6003802	12/21/99	Tape Leader Pin Assembly And Method For Making The Same	Seagate Removable Storage Solutions 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
6031681	2/29/00	Method And Arrangement For Servoing And Formatting Magnetic Recording Tape	Seagate Removable Storage Solutions LLC
6034839	3/7/00	Mechanism And Method For Loading A Tape From A Cartridge To A Take-Up Reel	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC

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6059212	5/9/00	Tape Moving Mechanism Using A Direct Drive Motor	Seagate Removable Storage Solutions LLC
6061199	5/9/00	Method And Arrangement For Servoing And Formatting Magnetic Recording Tape	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
6082652	7/4/00	Independent Double Hub Take-Up Reel Arrangement For Use With A Single Reel Cartridge Tape Drive	Seagate Removable Storage Solutions LLC
6088183	7/11/00	Arcuate Scan Read/Write Assembly	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
6115218	9/5/00	Tape Support System For Arcuate Scan Rotating Head	Seagate Removable Storage Solutions LLC
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	Seagate Removable Storage Solutions 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

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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	Seagate Removable Storage Solutions LLC
6288870	09/11/2001	Self-Aligned Metal Film Core Multi-Channel Recording Head For Tape Drives	Quantum Corporation
6292325	9/18/01	Offset Gear Segment Arm Employed To Accommodate The Meshing Alignment In A Tape Cartridge-Loading Mechanism	Seagate Removable Storage Solutions LLC
6297949	10/2/01	Recessed Bezel Apparatus	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions 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

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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	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
6392837	5/21/02	Technique For Opening Door Of A Tape Cartridge To Access The Tape Leader Pin	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC
6424481	7/23/02	Five And One-Quarter Inch Form Factor Combination DAT Tape Drive And Cassette Magazine Loader	Seagate Removable Storage Solutions 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

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6470291	10/22/02	Velocity Feedback Measurement Method	Seagate Removable Storage Solutions LLC
6473262	10/29/02	Techniques For Compensating For High Initial Unloading Force Requirement In Tape Cartridge-Loading Mechanism	Seagate Removable Storage Solutions 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	Seagate Removable Storage Solutions LLC, Hewlett-Packard Company, and IBM Corporation
6508428	01/21/2003	Multi-Purpose Wide Media Cartridges And Cartridge Chassis Subassemblies	Quantum Corporation
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 Bi-Directional Contact Recording And Method For Making The Same	Quantum Corporation
6580582	06/17/2003	Cartridge Magazine For A Tape Library	Quantum Corporation

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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
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

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6704171	03/09/2004	Apparatus And Systems For Lifting A Tape Drive Transducer Head	Quantum Corporation
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
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

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6801383	10/05/2004	Method For Calibrating A Tape Media Using Staggered Calibration Tracks	Quantum Corporation
6816331	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	1u 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
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



PAT. NUM.	ISSUE DATE	TITLE	OWNER
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
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

**EXHIBIT C****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	ATL 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
76613994	09/30/2004	SDLT	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
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	Conner Peripherals, Inc.
73465592	1414004	10/21/1986	FLOPPYTAPE	Conner Peripherals, Inc.
73553051	1414785	10/28/1986	FASTAPE	Seagate Removable Storage Solutions LLC
73610341	1442874	06/16/1987	ARCHIVE	Seagate Removable Storage Solutions LLC
73610993	1452091	08/11/1987	ARCHIVE	Seagate Removable Storage Solutions LLC
73653438	1462655	10/27/1987	ARCHIVEXL	Seagate Removable Storage Solutions LLC
73655202	1464451	11/10/1987	VIPER	Seagate Removable Storage Solutions LLC
73673453	1478488	03/01/1988	DISCACHE	Quantum Corporation
73685306	1489175	05/24/1988	QIC STREAM	Seagate Removable Storage Solutions LLC
73667641	1501056	08/23/1988	HARDCARD	Quantum Corporation
73747179	1531795	03/28/1989	ARCHIVE VP	Seagate Removable Storage Solutions LLC
74242149	1749927	02/02/1993	QUANTUM	Quantum Corporation

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
74429328	1869317	12/27/1994	TAPESTOR	Certance LLC
74614091	1957517	02/20/1996	CONNER	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	ULTRIUM	Certance LLC, IBM Corporation and Hewlett-Packard Ltd.
75462012	2487985	09/11/2001	LTO	Certance LLC, IBM Corporation and Hewlett-Packard Ltd.
76123461	2490615	09/18/2001	TURNING TRANSACTIONS INTO LOYAL CUSTOMERS	Quantum Corporation
75660932	2496768	10/09/2001	LANVAULT	Quantum Corporation
75823333	2518368	12/11/2001	DLT SUPER TAPE	Quantum Corporation
75659483	2576453	06/04/2002	ULTRIUM LTO	Certance LLC, IBM Corporation and Hewlett-Packard Ltd.
76236199	2737984	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	DLTTAPE	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

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
76325313	2987717	08/23/2005	SUPERLOADER	Quantum Corporation
76518536	3018998	11/29/2005	STORAGECARE	Quantum Corporation
76613992	3078209	04/11/2006	SDLTTAPE	Quantum Corporation

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**EXHIBIT D**

**DOMAIN NAMES**

<b>DOMAIN NAME</b>	<b>OWNER</b>
atlp.com	Quantum Corporation
certance.com	Quantum Corporation
colorprotect.com	Quantum Corporation
dlt sage.com	Quantum Corporation
dltstorage.com	Quantum Corporation
dlttape.com	Quantum Corporation
dltvs.com	Quantum Corporation
dltvs.net	Quantum Corporation
govault.net	Quantum Corporation
hp600rebate.com*	Quantum Corporation
ibmtr7offer.com*	Quantum Corporation
myfirstautoloader.com	Quantum Corporation
networkstorageu.com	Quantum Corporation
qa-apac.com	Quantum Corporation
qntm.com	Quantum Corporation
quantum.com	Quantum Corporation
quantumacademy.com	Quantum Corporation
storagedataservices.com	Quantum Corporation
tape4tapelessworld.com	Quantum Corporation
welcometoquantum.com	Quantum Corporation

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**EXHIBIT E**

**PRIORITY LIENS**

**TRADEMARK LIENS**

1. Evidence of the release of a security interest executed 11/22/00 in favor of The Chase Manhattan Bank, as collateral agent, has not yet been filed against the following trademarks.

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
73322102	1199437	06/29/1982	SIDEWINDER	Archive Corporation
74429328	1869317	12/27/1994	TAPESTOR	Certance LLC
73589198	1410326	09/23/1986	IRWIN	Conner Peripherals, Inc.
73465592	1414004	10/21/1986	FLOPPYTape	Conner Peripherals, Inc.
73553051	1414785	10/28/1986	FASTAPE	Seagate Removable Storage Solutions LLC
73610341	1442874	06/16/1987	ARCHIVE	Seagate Removable Storage Solutions LLC
73610993	1452091	08/11/1987	ARCHIVE	Seagate Removable Storage Solutions LLC
73653438	1462655	10/27/1987	ARCHIVEXL	Seagate Removable Storage Solutions LLC
73655202	1464451	11/10/1987	VIPER	Seagate Removable Storage Solutions LLC
73685306	1489175	05/24/1988	QIC STREAM	Seagate Removable Storage Solutions LLC
73747179	1531795	03/28/1989	ARCHIVE VP	Seagate Removable Storage Solutions LLC

2. Certain of the Company's trademarks are subject to an unreleased security interest executed 12/17/02 in favor of Keybank N.A. pursuant to the 2002 secured financing.
3. Evidence of the releases of security interests executed 01/06/92, 02/18/92 and 03/24/94 in favor of Morgan Guaranty Trust Corp. of New York by previous owner, Memorex Telex N.V. have not yet been filed against the following trademarks.

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
73127739	1089619	04/18/1978	QUANTUM	Quantum Corporation
72327773	0926161	12/28/1971	QUANTUM	Quantum Corporation

### PATENT LIENS

1. Evidence of the release of a security interest executed 10/03/96 in favor of Canadian Imperial Bank of Commerce has not yet been filed against the following patents.

PAT. NUM.	ISSUE DATE	TITLE	OWNER
D395879	07/07/1998	Tape Drive Bezel	Quantum Corporation
5671389	09/23/1997	Adaptive Compression Caching For Tape Recording	Quantum Corporation
5769346	06/23/1998	Tape Buckling Mechanism For Single Reel Cartridge Tape Recording	Quantum Corporation
5841600	11/24/1998	Randomly Ordered Data Block Envelope Tape Format	Quantum Corporation
5862014	01/19/1999	Multi-Channel Magnetic Tape Head Module Including Flex Circuit	Quantum Corporation
5949604	09/07/1999	Method Of Writing And Reading Servo On Tracks Having A Longitudinal Gap	Quantum Corporation

2. Various patents and patent applications are subject to an unreleased security interest executed 12/17/02 in favor of Keybank N.A.

- Evidence of the release of a security interest executed 4/24/90 in favor of Barclays Bank PLC granted by predecessor Irwin Magnetic Systems, Inc. has not yet been filed against the following patents.

PAT. NUM.	ISSUE DATE	TITLE	OWNER
4849841	4/18/89	Transducer Head Core Structure With Recessed Magnetic Closures	Archive Corporation
4954921	9/4/90	Magnetic Transducer Head Structure	Irwin Magnetic Systems, Inc.

### COPYRIGHT LIENS

- Evidence of the released of a security interest in favor of Canadian Imperial Bank of Commerce, dated 10/03/94, has not yet been filed against the following copyrights:

REG. NO.	TITLE	OWNER
TXu-446-027	RF71V102	Quantum Corporation
TXu-446-028	RF71V103	Quantum Corporation
TXu-446-030	RF71V104	Quantum Corporation
TXu-446-031	RF71V105	Quantum Corporation
TXu-446-025	RF30V102	Quantum Corporation
TXu-446-024	RF30V103	Quantum Corporation
TXu-446-026	RF30V104	Quantum Corporation
TXu-446-029	RF30V105	Quantum Corporation

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**SCHEDULE 4.2**

1. The following patents and applications of Quantum Corporation are still listed as owned (or partially owned) by their inventors:

PAT. /APP. NUM.	APP./ ISSUE DATE	TITLE	OWNER	COMMENTS
11243938	10/04/05	A Motor/Encoder Assembly For Tape Drives	Ashok B Nayak; Robert R Heinze;	Not assigned by inventors
10259738	09/30/02	A Motor/Encoder Assembly For Tape Drives	Ashok B. Nayak; Robert R. Heinze	Not assigned by inventors
11316049	12/21/05	Computer Peripheral Device Mounting Arrangement With Two Locking Elements	Douglas A. Green; Scott L. Hanson; Mark R Thompson	Not assigned by inventors
10412043	04/10/2003	Recovery Of Data On A Primary Data Volume	Quantum Corporation	Inventor David Leory Rand has assigned his interest to Quantum, but Lloyd Alan Poston has not.
6092754	07/25/2000	Buckler For A Tape Drive	Quantum Corporation	Inventor Sheldon Helms assigned his interest to Quantum, but Christopher Rathweg has not.
6434674	08/13/2002	Multiport Memory Architecture With Direct Data Flow	Advanced Digital Information Corporation	Original assignment to predecessor holder Pathlight Technology, Inc. was from Mark DeWilde and Said Rahmani Khezri. Named inventors were Mark DeWilde and Stephen Stone.

2. **Missing Irwin Assignment:** The following patents of Quantum Corporation are missing an assignment from Irwin Magnetic Systems, Inc. to Archive Corporation in their chain of title.

PAT. NUM.	ISSUE DATE	TITLE	OWNER
4954921	9/4/90	Magnetic Transducer Head Structure	Irwin Magnetic Systems, Inc.

3. **Missing Archive Corp Assignment:** The following patents of Quantum Corporation are missing an assignment from Archive Corporation to Connor Peripherals, Inc. in their chain of title.

PAT. NUM.	ISSUE DATE	TITLE	OWNER
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PAT. NUM.	ISSUE DATE	TITLE	OWNER
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
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
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
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
4963810	10/16/90	Variable Load Motor Drive Control	Archive Corporation
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
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
5081547	1/14/92	Apparatus And Method For Automatic Adjustment Of Read Amplitude Threshold In A Digital Tape Drive	Archive Corporation
5101311	3/31/92	Tape And Mechanism Protection Methods For Dat Drives	Archive Corporation
5109308	4/28/92	Stationary Head Tape Drive With A Movable Door Opening Mechanism	Archive Corporation
5122916	6/16/92	Electromagnetic Head Having Interference Compensation Circuitry	Archive Corporation
5157564	10/20/92	Storage Module Changer For A Computer Data Storage Drive	Archive Corporation

PAT. NUM.	ISSUE DATE	TITLE	OWNER
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
5182687	1/26/93	Method And Apparatus For Aligning Cartridges With A Cartridge Insertion Slot	Archive Corporation
5198947	3/30/93	Apparatus For Adjusting A Tape Head For A Magnetic Tape	Archive Corporation
4849841	4/18/89	Transducer Head Core Structure With Recessed Magnetic Closures	Archive Corporation
4954921	9/4/90	Magnetic Transducer Head Structure	Irwin Magnetic Systems, Inc.

4. **Missing Conner Change of Name:** The following trademarks of Quantum Corporation are missing a change of name from Conner Peripherals, Inc. to Seagate Technology, Inc. in their chain of title.

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
73589198	1410326	09/23/1986	IRWIN	Conner Peripherals, Inc.
73465592	1414004	10/21/1986	FLOPPYTAPE	Conner Peripherals, Inc.

5. **Missing Archive Corp Assignment:** The following trademark of Quantum Corporation is missing an assignment from Archive Corporation to Connor Peripherals, Inc. in their chain of title.

SER. NO.	REG. NO.	REG. DATE	WORD MARK	OWNER
73322102	1199437	06/29/1982	SIDEWINDER	Archive Corporation

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