

01-25-1999



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**PATENT**

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Document ID#   
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**Conveyance Type**

☐ Assignment ☒ Security Agreement  
☐ License ☐ Change of Name  
☐ Merger ☐ Other   
**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)  
☐ Departmental File ☐ Secret File

**Conveying Party(ies)**

☐ Mark if additional names of conveying parties attached  
Execution Date  
Month Day Year  
08 14 1998

Name (line 1) Read-Rite Corporation

Name (line 2) a Delaware corporation

**Second Party**

Name (line 1)   
Name (line 2)   
Execution Date  
Month Day Year

**Receiving Party**

☐ Mark if additional names of receiving parties attached

Name (line 1) Canadian Imperial Bank of Commerce

Name (line 2) New York Agency, as Agent

Address (line 1) 425 Lexington Avenue

Address (line 2) Seventh Floor

Address (line 3) New York New York 10017  
City State/Country Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name   
Address (line 1)   
Address (line 2)   
Address (line 3)   
Address (line 4)

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**PATENT**  
REEL: 9706 FRAME: 0973

**Correspondent Name and Address**

Area Code and Telephone Number (415) 442-1707

Name Randall A. Richmond

Address (line 1) Brobeck, Phleger & Harrison LLP

Address (line 2) One Market

Address (line 3) Spear Street Tower

Address (line 4) San Francisco, CA 94105

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments.

# 21

**Application Number(s) or Patent Number(s)**

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

**Patent Application Number(s)**

09173472

**Patent Number(s)**

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number

only if a U.S. Application Number has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

**Number of Properties**

Enter the total number of properties involved.

# 1

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00

Method of Payment:  
Deposit Account

Enclosed ☒

Deposit Account ☐

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

#

Authorization to charge additional fees:

Yes ☐

No ☐

**Statement and Signature**

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.*

Randall A. Richmond

Name of Person Signing

Signature

Date

# INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (this "Agreement"), dated as of August 14, 1998, is made between the corporations listed on Schedule 1 hereto (each a "Grantor" and collectively the "Grantors") and Canadian Imperial Bank of Commerce, New York Agency as agent for the Banks referred to below (in such capacity the "Agent").

Read-Rite Corporation (the "Borrower"), certain financial institutions as lenders (the "Banks"), Canadian Imperial Bank of Commerce, New York Agency, as issuer of letters of credit for the account of the Borrower (in such capacity, the "Designated Issuer") and the Agent are parties to a Credit Agreement dated as of October 2, 1997 (as amended, modified, renewed or extended from time to time, the "Credit Agreement").

The Grantors, other than the Borrower, are subsidiaries of the Borrower and receive substantial direct and indirect benefits from the extensions of credit and issuance of Letters of Credit for the Borrower under the Credit Agreement. Such Grantors are party to that certain Continuing Guaranty dated as of even date herewith in favor of the Agreement, Issuing Bank and Banks (as amended, modified, renewed or extended from time to time the "Guaranty"). All the Grantors are party to that certain Security Agreement dated of even date herewith between the Grantors and the Agent (as such agreement is amended, modified, renewed or extended from time to time the "Security Agreement").

It is a condition precedent to the borrowings and the issuance of Letters of Credit under the Credit Agreement that the Grantors enter into this Agreement and grant to the Agent, for itself and for the ratable benefit of the Issuing Bank and the Banks, the security interests in certain of their intellectual property rights hereinafter provided to secure the obligations of the Grantors described below. The Grantors have agreed to execute and deliver this Agreement to Agent for filing by Agent with the United States Patent and Trademark Office (the "PTO") and United States Copyright Office (the "Copyright Office") (and any other relevant recording systems in any domestic or foreign jurisdiction) as further evidence of and to effectuate such grant of a security interest in such intellectual property rights.

Accordingly, Grantors and Agent hereby agree as follows:

SECTION 1 Definitions; Interpretation. All capitalized terms used in this Agreement and not otherwise defined herein shall have the meanings assigned to them in the Security Agreement and the rules of construction set out in the Security Agreement shall be equally applicable hereto.

## SECTION 2 Grant of Security Interest.

As a continuing security for the payment and performance of the Obligations, the Grantors hereby grant and convey a security interest in and mortgage to Agent of all of their respective rights, title and interests in, to and under the following property, whether now existing

or owned or hereafter acquired, developed or arising (collectively, the "Intellectual Property Collateral"):

(i) all intellectual property rights of any nature or character including, without limitation, and whether domestic or foreign: (i) all patents and patent applications, all licenses relating to any of the foregoing and all income and royalties with respect to any licenses, all rights to sue for past, present or future infringement thereof, all rights arising therefrom and pertaining thereto and all reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof; (ii) all copyrights and applications for copyright, together with the underlying works of authorship (including titles), whether or not the underlying works of authorship have been published and whether said copyrights are statutory or arise under the common law, and all other rights and works of authorship, all rights, claims and demands in any way relating to any such copyrights or works, including royalties and rights to sue for past, present or future infringement, and all rights of renewal and extension of copyright; (iii) all state (including common law), federal and foreign trademarks, service marks and trade names, and applications for registration of such trademarks, service marks and trade names, all licenses relating to any of the foregoing and all income and royalties with respect to any licenses, whether registered or unregistered and wherever registered, all rights to sue for past, present or future infringement or unconsented use thereof, all rights arising therefrom and pertaining thereto and all reissues, extensions and renewals thereof; and (iv) all trade secrets, trade dress, trade styles, logos, other source of business identifiers, mask-works, mask-work registrations, mask-work applications, software, confidential information, customer lists, license rights, advertising materials, operating manuals, methods, processes, know-how, algorithms, formulae, databases, quality control procedures, product, service and technical specifications, operating, production and quality control manuals, sales literature, drawings, specifications, blue prints, descriptions, inventions, name plates and catalogs (the foregoing rights and interests collectively, the "Intellectual Property Rights") and including, without limitation, those Intellectual Property Rights listed, from time to time, on the Exhibits to this Agreement; and

(ii) the entire goodwill of or associated with the businesses now or hereafter conducted by Grantors connected with and symbolized by any of the aforementioned properties and assets; and

(iii) all products and proceeds at any time of any and all of the foregoing including products of products and proceeds of proceeds.

Notwithstanding the foregoing provisions of this Section 2, the grant of a security interest as provided herein shall not extend to, and the term "Intellectual Property Collateral" shall not include, any General Intangibles of a Grantor (whether owned or held as licensee or lessee, or otherwise), to the extent that (i) such General Intangibles are not assignable or capable of being encumbered as a matter of law or under the terms of the license or lease applicable thereto (but solely to the extent that any such restriction shall be enforceable under applicable law against an assignee), without the consent of the licensor or lessor thereof and (ii) such consent has not been obtained; provided, however, that the foregoing grant of security interest shall extend to, and the term "Intellectual Property Collateral" shall include, (A) any General Intangible which is an Account or a Proceed of, or otherwise related to the enforcement or collection of, any Account, or goods which are the subject of any Account, (B) any and all

Proceeds of any General Intangibles which are otherwise excluded to the extent that the assignment or encumbrance of such Proceeds is not so restricted, and (C) upon obtaining the consent of any such licensor or lessor with respect to any such otherwise excluded General Intangibles, such General Intangibles as well as any and all Proceeds thereof that might have theretofore have been excluded from such grant of a security interest and the term "Intellectual Property Collateral."

**SECTION 3 Further Assurances: Appointment of Agent as Attorney-in-Fact.**

The Grantors at their expense shall execute and deliver, or cause to be executed and delivered, to Agent any and all documents and instruments, in form and substance satisfactory to Agent, and take any and all action, which Agent may request from time to time, to perfect and continue perfected, maintain the priority of or provide notice of Agent's security interest in the Intellectual Property Collateral and to accomplish the purposes of this Agreement. Agent shall have the right, in the name of the Grantors, or in the name of Agent or otherwise, upon notice to but without the requirement of assent by the Grantors, and the Grantors hereby constitute and appoint Agent (and any of Agent's officers or employees or agents designated by Agent) as the Grantors' true and lawful attorney-in-fact with full power and authority, to: (i) sign any financing statements and documents and instruments which Agent deems necessary or advisable to perfect or continue perfected, maintain the priority of or provide notice of Agent's security interest in the Intellectual Property Collateral; (ii) assert, adjust, sue for, compromise or release any claims under any policies of insurance; and (iii) execute any and all such other documents and instruments, and do any and all acts and things for and on behalf of the Grantors, which Agent may deem necessary or advisable to maintain, protect, realize upon and preserve the Intellectual Property Collateral and Agent's security interest therein and to accomplish the purposes of this Agreement, including (A) to defend, settle, adjust or institute any action, suit or proceeding with respect to the Intellectual Property Collateral, (B) to assert or retain any rights under any license agreement for any of the Intellectual Property Collateral, including without limitation any rights of the Grantors arising under Section 365(n) of the Bankruptcy Code, and (C) to execute any and all applications, documents, papers and instruments for Agent to use the Intellectual Property Collateral, to grant or issue any exclusive or non-exclusive license or sub-license with respect to any Intellectual Property Collateral, and to assign, convey or otherwise transfer title in or dispose of the Intellectual Property Collateral; provided, however, that Agent agrees that, except upon and during the continuance of a Default, it shall not exercise the power of attorney pursuant to clauses (ii) and (iii). The power of attorney set forth in this Section 3, being coupled with an interest, is irrevocable so long as this Agreement shall not have terminated.

**SECTION 4 Future Rights.** Except as otherwise expressly agreed to in writing by Agent, if and when any of the Grantors shall obtain rights to any new Intellectual Property Rights, or obtain rights or benefits with respect to any reissue, division, continuation, renewal, extension or continuation-in-part of any Intellectual Property Rights, or any improvement of any Intellectual Property Rights, which Intellectual Property Rights if existing at the date hereof would be within the scope of Section 2, the provisions of Section 2 shall automatically apply thereto. The Grantors shall give to Agent, at the times required under Section 5 of the Security Agreement, notice of any registrations or applications any Grantor may make or obtain to any Intellectual Property Rights. The Grantors shall do all things deemed necessary or advisable by Agent to ensure the validity, perfection, priority and enforceability of the security interests of Agent in such future acquired Intellectual Property Collateral. The Grantors hereby authorize

Agent to modify, amend, or supplement the Exhibits hereto and to reexecute this Agreement from time to time on Grantors' behalf and as their attorney-in-fact to include any such future Intellectual Property Collateral and to cause such reexecuted Agreement or such modified, amended or supplemented Exhibits to be filed with the PTO and/or Copyright Office as appropriate.

SECTION 5 Agent's Duties. Notwithstanding any provision contained in this Agreement, Agent shall have no duty to exercise any of the rights, privileges or powers afforded to it and shall not be responsible to the Grantors or any other Person for any failure to do so or delay in doing so. Except for the accounting for moneys actually received by Agent hereunder or in connection herewith, Agent shall have no duty or liability to exercise or preserve any rights, privileges or powers pertaining to the Intellectual Property Collateral.

SECTION 6 Agent's Rights and Remedies.

(a) Upon and during the continuation of a Default, Agent shall have all rights and remedies available to it under this Agreement, the Security Agreement and applicable law with respect to the security interests in any of the Intellectual Property Collateral. Grantors agree that such rights and remedies include, but are not limited to, the right of Agent as a secured party to sell or otherwise dispose of the Intellectual Property Collateral pursuant to the UCC.

(b) The cash proceeds actually received from the sale or other disposition or collection of Intellectual Property Collateral, and any other amounts received in respect of the Intellectual Property Collateral the application of which is not otherwise provided for herein, shall be applied as provided in the Security Agreement.

SECTION 7 Security Agreement. The provisions of Sections 11 through (and including) 20 and Section 24 of the Security Agreement are incorporated herein by reference and shall be applied as if references to the "Collateral," and "Agreement" therein were references to the Intellectual Property Collateral and this Agreement respectively. The Grantors acknowledge that the rights and remedies of the Agent with respect to the security interests in the Intellectual Property Collateral granted hereby are more fully set forth in the Security Agreement and that such rights and remedies are cumulative.

SECTION 8 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under all applicable laws and regulations. If, however, any provision of this Agreement shall be prohibited by or invalid under any such law or regulation in any jurisdiction, it shall, as to such jurisdiction, be deemed modified to conform to the minimum requirements of such law or regulation, or, if for any reason it is not deemed so modified, it shall be ineffective and invalid only to the extent of such prohibition or invalidity without affecting the remaining provisions of this Agreement, or the validity or effectiveness of such provision in any other jurisdiction.

SECTION 9 Counterparts. This Agreement may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute but one and the same agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement,  
as of the date first above written.

THE GRANTORS


READ-RITE CORPORATION

By:   
Title: President and COO

Address: 345 Los Coches  
Milpitas, CA 95035


Attn: \_\_\_\_\_  
Fax No.: 408/956-3203

SUNWARD TECHNOLOGIES, INC.

By:   
Title: VP Business Development  
General Counsel and Secretary  
Address: 345 Los Coches  
Milpitas, CA 95035

Attn: \_\_\_\_\_  
Fax No.: 408/956-3203

SUNWARD TECHNOLOGIES, CALIFORNIA

By:   
Title: VP Business Development  
General Counsel and Secretary  
Address: 345 Los Coches  
Milpitas, CA 95035

Attn: \_\_\_\_\_  
Fax No.: 408/956-3203

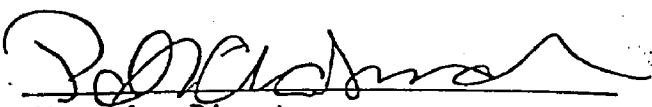
[COUNTERPART SIGNATURE PAGE TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT]

PATENT

REEL: 9706 FRAME: 0979

THE AGENT:

CANADIAN IMPERIAL BANK OF  
COMMERCE, NEW YORK AGENCY, as Agent

By:   
Title: Managing Director  
CIBC Oppenheimer Corp., AS AGENT

[COUNTERPART SIGNATURE PAGE TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT] **PATENT**



**SCHEDULE 1**  
**to the Intellectual Property Security Agreement**

**GRANTORS**

**Read-Rite Corporation**

**Sunward Technologies, Inc.**

**Sunward Technologies, California**

# EXHIBIT A

## Issued U.S. Patents of Grantors

<u>Grantor</u>	<u>Patent No.</u>	<u>Issue Date</u>	<u>Inventors</u>	<u>Title</u>	<u>Agent</u>
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Refer to Attached Schedule entitled "U.S. Patents of Grantors".

# U.S. Patents of Grantors

Patent Number	Title	Author(s)	Date Filed	Date Issued
5,087,332	Process for Making a Thin Film Magnetic Head with Single Step Lift-Off	Johnny Chen	8/5/91	2/11/92
5,117,589	Adjustable Transfer Tool for Lapping Magnetic Head Sliders	Bischoff, Cole	3/19/90	6/2/92
5,173,826	Thin Film Head with Coils of Varying Thickness	Bischoff	6/3/91	12/22/92
5,203,119	Automated System for Lapping Air Bearing Surface of Magnetic Heads	Cole	3/22/91	4/20/93
5,214,589	Throat Height Control During Lapping of Magnetic Heads	Tang	3/22/91	5/25/93
5,237,476	Thin Film Tape Head Assembly	Bischoff, Gooden, Leung	5/28/91	8/17/93
5,254,373	Process of Making Thin Film Magnetic Head	Bar	4/19/93	10/19/93
5,255,141	Read-Write Magnetic Head with Flux Sensing Read Element	Valstyn, Nepela	12/16/91	10/19/93
5,255,142	Thin Film Magnetic Head with Narrow Yoke	Williams, Bischoff, Akoh	11/12/91	10/19/93
5,256,266	Alumina Material Useful with Thin Film Heads	Blanchette, Maddex, Shimek	10/31/91	10/26/93
5,282,103	Magnetic Head Suspension Assembly Fabricated with Integral Load Beam and Flexure	Hatch, Leung	10/7/92	1/25/94
5,290,416	Unidirectional Field Generator	Tong, Newman, Wu	7/10/92	3/1/94
5,299,081	Magnetic Head Suspension Assembly	Hatch, Leung, Murray	8/5/92	3/29/94
5,309,305	Dual Element Magnetoiresistive Sensing Head	Dan Nepela, Erich Valstyn	11/16/92	5/3/94
5,327,310	Thin Film Contact Recording Head	Bischoff, Leung, Murray	6/25/92	7/5/94
5,335,458	Processing of Magnetic Head Flexures with Slider Elements	Stoffers, Mokorarat, Peceimer	9/23/91	8/9/94
5,339,702	Test Fixture for Air Bearing Magnetic Head Suspension Assembly	Viches	12/24/92	8/23/94
5,353,180	Air Bearing Magnetic Slider with Wishbone-Shaped Rails	Murray	3/1/93	10/4/94
5,357,389	Alumina Material Useful with Thin Film Heads	Blanchette, Maddex, Shimek	8/29/93	10/18/94
5,359,480	Magnetic Head Air Bearing Slider	Nepela, Leung, Chang	12/21/92	10/25/94

# U.S. Patents of Grantors

Patent Number	Title	Author(s)	Date Filed	Date Issued
5,373,408	Configuring Domain Pattern in Thin Films of Magnetic Heads	Bischoff, Tong, Chen	7/20/92	12/13/94
5,385,637	Stabilizing Domains in Inductive Thin Film Heads	Thayamballi	12/7/92	1/31/95
5,386,666	Automated System for Controlling Taper Length During the Lapping of Air Bearing Surface of Magnetic Heads	Cole	2/11/93	2/7/95
5,396,387	Air Bearing Magnetic Head Sliders	Murray	11/30/92	3/7/95
5,406,432	Air Bearing Magnetic Head Sliders with Separate Center Rail Segments	Murray	9/7/93	4/11/95
5,410,794	Caddy and Carrier Tool for Assembling a Head Arm Stack	Tucker, Heist	4/22/94	5/2/95
5,434,826	Multilayer Hard Bias Films for Longitudinal Biasing in Magnetoresistive Transducer	Ravipati, Shen	9/26/94	7/18/95
5,436,779	Integrated Yoke Magnetoresistive Transducer with Magnetic Shunt	Valstyn	3/31/94	7/25/95
5,438,273	System for Testing the Voice Coil Element of a Disk Drive Rotary Actuator	Gergel, Mahmoudian, Buttar, Motiska	9/1/94	8/1/95
5,438,470	Magnetoresistive Structure with Contiguous Junction Hard Bias Design with Low Lead Resistance	Ravipati, Shen, Cain	5/9/94	8/1/95
5,446,613	Magnetic Head Assembly with MR Sensor (CPP)	Rottmayer	2/28/94	8/29/95
5,452,168	Thin Film Magnetic Heads with Multiple Yokes	Nepela, Cheng, Valstyn, Williams, Bischoff	5/4/92	9/19/95
5,465,477	Method of Assembling a Head Arm Stack for a Magnetic Disk Drive	Tucker, Heist	4/22/94	11/14/95
5,472,736	Method of Making a Bi-Level Coil for a Thin Film Magnetic Transducer	Barr, Hagen	12/7/92	12/5/95
5,473,485	Tripad Air Bearing Magnetic Head Slider	Leung, Gooden, Williams	3/6/92	12/5/95
5,473,486	Air Bearing Thin Film Magnetic Head with a Wear-Resistant End Cap Having Alternating Laminations	Nepela, Schmidt	9/20/93	12/5/95
5,504,999	Method and Apparatus for Compensating for Process Variations in an Automatic Positioning System	Barr	12/7/92	4/9/96

U.S. Patents of Grantors

Patent Number	Title	Author(s)	Date Filed	Date Issued
5,508,868	Dual Element Magnetoresistive Sensing Head Having In-Gap Flux Guide and Flux Closure Piece with Particular Connection of Magnetoresistive Sensing Elements to Differential Amplifier	Cheng, Nepela	1/23/93	4/16/96
5,516,430	Planarization of Air Bearing Slider Surfaces for Reactive Ion Etching or Ion Milling	Hussinger	3/27/95	5/14/96
5,516,323	Method and Apparatus for Blending Air Bearing Sliders	Carlson, Pa, Allen	6/15/94	5/14/96
5,529,814	Method of Producing Exchange Coupled Magnetic Thin Films with Post-Deposition Annealing	Tan, Tan, Tong	10/19/95	6/25/96
5,535,074	Disk Drive Apparatus having Up and Down Head Suspensions Independently Loadable into a Space Between Immediately Adjacent Disks	Leung	5/4/92	7/9/96
5,568,332	Magnetic Head Suspension	Khan	12/3/93	10/22/96
5,567,864	Method and Apparatus for Calibration of a Transducer Flying Height Measurement Instrument	Coon, Watkins, Kropp	6/22/94	10/22/96
5,568,981	Negative Pressure Air Bearing Slider	Nepela	8/19/94	10/29/96
5,576,914	Compact Read/Write Head Having Biased GMR Element	Rottmayer	11/14/94	11/19/96
5,578,342	Alignment of Magnetic Poles of Thin Film Transducer	Tan	7/5/95	11/26/96
5,602,699	Gimbal Assembly of a Magnetic Head Suspension	Khan	6/29/95	2/11/97
5,606,476	Altitude Insensitive Air Bearing Slider	Chang, Hsia	7/13/95	2/25/97
5,612,098	Method of Forming a Thin Film Magnetic Structure Having Ferromagnetic and Antiferromagnetic Layers	Tan, Tong, Liu, Tan	8/14/96	3/18/97
5,612,839	Contact Recording Slider with Active Contact Surface	Jacques	7/18/94	3/18/97
5,617,278	Magnetic Head Structure with Reduction of Magnetic Domain Instability	Cheng, Tong, Cain	3/20/95	4/1/97
5,627,704	Thin Film Giant Magnetoresistive CPP Transducer with Flux Guide Yoke Structure	Lederman, Kroes	2/12/96	5/6/97
5,646,805	Magnetoresistive Read Transducer with Partially Abutted Junctions	Shen, Rudy, Clark	3/6/95	7/8/97

# U.S. Patents of Grantors

Patent Number	Title	Author(s)	Date Filed	Date Issued
5,654,851	Head Arm Assembly having an Integral Arm with a Portion Encased in a Rigid Molded Material	Tucker, Heist	7/21/95	8/5/97
5,657,191	Stabilization of Giant Magnetoiresistive Transducers	Yuan	9/18/95	8/12/97
5,668,477	Noise Detecting Apparatus for Magnetic Heads	Mahmoudian, Buttar, Gergel, Motiska	2/16/95	9/16/97
5,680,213	Optics Method and Fixture for Assembling and Testing a Magnetic Head	Hunsaker, Darr	2/7/97	10/21/97
5,685,645	Roll Balanced Sub-ambient Pressure Air Bearing Slider	Nepela, Chang	8/13/96	11/11/97
5,694,276	Shielded Magnetic Head Having an Inductive Coil with Low Mutual Inductance	Shen, Rudy, Retort	7/1/96	12/2/97
5,704,715	Altitude Insensitive Air Bearing Slider	Chang, Hsia, Levi, Lee	12/9/96	1/6/98
5,705,973	Bias-Free Symmetric Dual Spin Valve Giant Magnetoiresistance Transducer	Yuan, Tong, Liu, Tan	8/26/96	1/6/98
5,707,538	Variable Gap Magnetoiresistive Transducer and Method of Making the Same	Shen, Chuang	7/28/95	1/13/98
5,708,358	Spin Valve Magnetoiresistive Transducers having Permanent Magnets	Ravipati	3/21/96	1/13/98
5,717,550	Antiferromagnetic Exchange Biasing using Buffer Layer	Nepela, Lederman	11/1/96	2/10/98
5,726,841	Thin Film Magnetic Head with Trimmed Pole Tips Etched by Focused Ion Beam for Undershoot Reduction	Tong, Liu, Yuan, Riedlin, Thayamballi	6/11/96	3/10/98
5,727,308	Thin Film Magnetic Head and Method of Fabrication	Leung, Bond, Nepela	6/25/96	3/17/98
5,731,937	Giant Magnetoiresistive Transducer with Increased Output Signal	Yuan	8/22/97	3/24/98
5,734,533	Dual Gap Magnetic Head and Method of Making the Same	Nepela	5/15/96	3/31/98
5,739,987	Magnetoiresistive Read Transducer with Multiple Longitudinal Stabilization Layers	Yuan, Nepela, Lederman	6/4/96	4/14/98
5,739,990	Spin-Valve GMR Sensor with Inbound Exchange Stabilization	Ravipati, Yuan	11/13/96	4/14/98
5,740,148	Stationary Optical Data Storage System using Holographic or Acousto-optical Deflection	Ja, Hong	1/7/97	4/14/98

# U.S. Patents of Grantors

Patent Number	Title	Author(s)	Date Filed	Date Issued
5,742,162	Magnetoresistive Spin Valve Sensor with Multilayered Keeper	Nepela, Lederman	7/17/96	4/21/98
5,742,459	Magnetic Head Having Encapsulated Magnetoresistive Transducer and Multilayered Lead Structure	Shen, Tormg, Nepela	6/20/96	4/21/98
5,742,581	Transmissive Optical and Magneto-optical Data Storage Media	Ja	1/7/97	4/21/98
5,748,413	Magnetoresistive Read Transducer with Exchange Biasing of Magnetoresistive Sensor and Soft Adjacent Layer	Lederman, Yuan	6/4/96	5/5/98
5,750,275	Thin Film Heads with Insulated Laminations for Improved High Frequency Performance	Katz, Berger	7/12/96	5/12/98
5,751,528	Multilayer Exchange Coupled Magnetic Poles with Approximate Zero Magnetostriiction	Nepela, Sarhadi	5/15/96	5/12/98
5,754,367	Air Bearing Slider having Etched and Shaped Leading Edge Taper	Chang, Levi	5/19/97	5/19/98
5,758,406	Methods for Assembling and Electrical Testing of a Magnetic Head	Hunsaker, Darr	2/7/97	6/2/98
5,764,451	Multi-Tapped Coil Having Tapped Segments Casaded for Amplification for Improving Signal-to-Noise Ratio	Katz	11/4/97	6/9/98
5,768,073	Thin Film Magnetic Head With Reduced Undershoot	Nepela, Bond,	2/7/97	6/16/98
5,771,138	Head Gimbal Assembly with Transducer Wires Attached at Two Points to Slider	Zarouri, Singh, Bower	7/25/96	6/23/98
5,772,493	Method and Apparatus for Controlling the lapping of Magnetic Heads	Rottmayer, Tang	7/31/95	6/30/98
5,784,224	Compact Read/Write Head having Biased GMR Element	Rottmayer, Zhu	7/17/98	7/21/98
5,784,228	Thin Film Magnetic Head with Compound Angled Insulation Layer	Thomas, Tran, Lee	7/9/97	7/21/98

# U.S. Patents of Grantors

Patent Number	Title	Author(s)	Date Filed	Date Issued
5,792,547	Laminated Thin Film Heads	Liu, Tan, Tong	2/26/96	8/11/98
5,793,550	Magnetoresistive Head Using Sense Currents of Opposite Polarities	Nepela, Rana	4/23/96	8/11/98
5,793,279	Superlattice Spacers for Spin Valves	Nepela	8/26/96	8/11/98
5,793,577	Pole Shaping of Planar Thin Film Heads	Katz, Devillier	11/1/96	8/11/98
5,795,451	Sputtering Apparatus with a Rotating Magnet Array	Tan, Pearson	6/12/97	8/18/98
5,796,558	Adaptive Suspension	Hanrahan, Khan	5/15/97	8/18/98
5,801,531	Testing Apparatus and Method for Magnetic Disk Drive Components	Viches, Mahmoudian, Buttar, Gergel, Weber, Rudman	10/17/95	9/1/98
5,795,448	Magnetic Device for Rotating a Substrate	Hurwitt	12/8/95	8/18/98
The following patents are assigned to Computer & Communications Technology Corp., which was merged into Sunward Technologies, Inc. in 1990. Therefore, Read-Rite Corporation owns these patents by virtue of its ownership of Sunward.				
4,371,905	High Resolution Hall Effect Read Head	Valstyn, Kelley	11/13/80	2/1/83
5,008,768	Disk Head Assembly Flexure	Carlson	4/16/91	3/27/89
5,027,240	Disk Head Assembly Load Beam	Zarouri, Carlson	3/27/89	6/25/91
5,138,507	Disk Head Assembly Flexure with Improved Motion Stability	Zarouri, Carlson, Coon	8/23/90	8/11/92
5,156,704	Method for Fabricating Magnetic Head Air Bearing Sliders	Kemp	6/1/90	10/20/92



# EXHIBIT A

## Pending Patent Applications of Grantors

<u>Grantor</u>	<u>Application No.</u>	<u>Filing Date</u>	<u>Inventors</u>	<u>Title</u>
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(Omitted for confidentiality purposes pursuant to 37 C.F.R. 1.12  
and section 301.01 of the Manual of Patent Examining Procedure.)

EXHIBIT B

U.S. Trademarks of Grantors

<u>Grantor</u>	<u>Registration No.</u>	<u>Registration Date</u>	<u>Filing Date</u>	<u>Registered Owner</u>	<u>Mark</u>
	1,897,359	6/6/95		Read-Rite Corp	Read-Rite and Design
	1,897,360	6/6/95		Read-Rite Corp.	RR Read- Rite and Design

EXHIBIT B

Pending U.S. Trademark Applications of Grantors

<u>Grantor</u>	<u>Application No.</u>	<u>Filing Date</u>	<u>Applicant</u>	<u>Mark</u>
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None.

EXHIBIT C

Copyrights of Grantors

None.

Mask-Works of Grantors

None.

EXHIBIT C

U.S. Copyright/Mask-Work Registrations of Grantors

<u>Grantor</u>	<u>Copyright/Mask Work</u>	<u>Reg. No.</u>	<u>Date of Issue</u>
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None.

EXHIBIT C

U.S. Copyright/Mask-Works Applications of Grantors

<u>Grantor</u>	<u>Copyright/Mask Work</u>	<u>Application No.</u>	<u>Date of Application</u>
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None.

EXHIBIT C

Copyright/Mask-Work Licenses of Grantors

Grantor

Copyright/Mask Work Owner

Reg. No.

Date of Issue

None.