PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
Atrenta, Inc.	12/29/2005

RECEIVING PARTY DATA

Name:	Hercules Technology Growth Capital, Inc.
Street Address:	525 University Avenue, Suite 700
City:	Palo Alto
State/Country:	CALIFORNIA
Postal Code:	94301

PROPERTY NUMBERS Total: 10

Property Type	Number
Application Number:	11276819
Application Number:	11419624
Application Number:	11423919
Application Number:	11426936
Application Number:	11676232
Application Number:	11692949
Application Number:	11749090
Application Number:	11755764
Application Number:	11837174
Application Number:	11959427

CORRESPONDENCE DATA

Fax Number: (650)849-4800

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

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CH $400.00 11276819

500589695

Correspondent Name:	Mary R. Zimmerman
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Address Line 4:	SAN FRANCISCO, CALIFORNIA 94111-4067

ATTORNEY DOCKET NUMBER:	3002791-0000332073
NAME OF SUBMITTER:	Mary R. Zimmerman

Total Attachments: 8
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PATENT GRANT OF SECURITY INTEREST

This Copyright Grant of Security Agreement ("Agreement") is dated the 29th day of December 2005, between Atrenta, Inc., a Delaware corporation ("Grantor"), which maintains its chief executive office and principal place of business located at 2001 Gateway Place, Suite 440W, San Jose, California 95110, and Hercules Technology Growth Capital, Inc., with its chief executive office and principal place of business located at 525 University Avenue, Suite 700, Palo Alto, CA 94301 ("Secured Party").

RECITALS

A. Grantor owns the Patents and Patent applications and is a party to the Patent licenses listed on Schedule 1 hereto;

B. Grantor and Secured Party are parties to a Loan and Security Agreement dated December 29, 2005 and all ancillary documents entered into in connection with such Loan and Security Agreement, all as may be amended from time to time (hereinafter referred to collectively as the "Loan Agreement");

C. Pursuant to the terms of the Loan Agreement Grantor has granted to Secured Party a security interest in all of the tangible and intangible property of Grantor, including all right, title and interest of Grantor in, to and under all of Grantor's Patents, all of Grantor's Patent applications and all of Grantor's Patent Licenses, whether presently existing or hereafter arising or acquired, and all products and proceeds thereof, including, without limitation, any and all causes of action which may exist by reason of infringement thereof for the full term of the Patents, to secure the payment of the Indebtedness;

D. All capitalized terms not defined herein shall have the meanings set forth in the Loan Agreement;

NOW, THEREFORE, in consideration of the premises contained herein, Grantor agrees with Secured Party as follows:

1. To secure the complete and timely satisfaction of all Secured Obligations, Grantor hereby grants and conveys to Secured Party a continuing security interest in and lien on all of Grantor's entire right, title and interest in and to all Grantor's Patents and Patent applications, including without limitation those listed on Schedule 1 hereto (as may be amended from time to time) and the proceeds thereof (such as, by way of example, license royalties and proceeds of infringements, all rights corresponding thereto throughout the world and all reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof (collectively, the "Patent Collateral"). Secured Party is authorized to file this Agreement with the United States Patent and Trademark Office or any other governmental agency it deems necessary or desirable in order to secure and perfect its rights under this Agreement or the Loan Documents.

2. Grantor represents, warrants and covenants that:

a) Grantor is the sole and exclusive owner of the entire and unencumbered right, title and interest in and to all of the Patent Collateral, free and clear of any liens, charges and encumbrances, including without limitation, pledges, assignments, licenses, shop rights and covenants by Grantor not to sue third persons, except for Permitted Liens;

b) The Patent Collateral is subsisting, and no part of the Patent Collateral has been adjudged invalid or unenforceable, in whole or in part;

c) To the best of Grantor's knowledge, the Patent Collateral is valid and enforceable and Grantor has notified Secured Party in writing of all prior art (including public uses and sales) of which it is aware; and

d) Grantor has the unqualified right to enter into this Agreement and perform its terms.

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3. Grantor agrees that, until all of the Secured Obligations (other than inchoate indemnity obligations) shall have been satisfied in full, it will not enter into any agreement relating to Grantor's Patents (for example, a license agreement) which is inconsistent with Grantor's obligations under this Agreement or the Loan Documents, without Secured Party's prior written consent; provided, that to the extent not inconsistent with the Loan Agreement, so long as no Default or Event shall exist, without the consent of Secured Party, Grantor may grant licenses to third parties to use the Patent Collateral in the ordinary course of business of both Grantor and such third party on arm's length and customary business terms.

4. If, before the Secured Obligations (other than inchoate indemnity obligations) shall have been satisfied in full, Grantor shall obtain rights to any new patentable inventions, become entitled to the benefit of any Patent application or Patent for any reissue, division, continuation, renewal, extension, or continuation-in-part of any Patent, any improvement on any Patent, or any rights that would come within the definition of Patent Collateral had such rights existed on the date hereof, the provisions of paragraph 1 shall automatically apply thereto and Grantor shall give to Secured Party prompt notice thereof in writing. Failure to provide such notice shall constitute a material breach of this Agreement.

5. Grantor authorizes Secured Party unilaterally to modify this Agreement by amending Schedule 1 to include any future Patents and Patent applications which are Patents under paragraph 1 or paragraph 4 hereof.

6. If any Event of Default shall have occurred and be continuing, Secured Party shall have, in addition to all other rights and remedies given it by this Agreement or the Loan Agreement, those allowed by law and the rights and remedies of a secured party under the Uniform Commercial Code as enacted in any jurisdiction in which either the Patents may be located or is otherwise applicable and, without limiting the generality of the foregoing, Secured Party may immediately, without demand of performance and without other notice (except as set forth below) or demand whatsoever to Grantor, all of which are hereby expressly waived, and without advertisement, sell at public or private sale or otherwise realize upon, the whole or from time to time any part of the Patents, or any interest which the Grantor may have therein, and after deducting from the proceeds of sale or other disposition of the Patents all expenses (including reasonable expenses for brokers' fees and legal services), shall apply the residue of such proceeds toward the payment of the Secured Obligations. Any remainder of the proceeds after payment in full of the Secured Obligations shall be paid over to Grantor. Notice of any sale or other disposition of the Patents shall be given to Grantor at least ten (10) days before the time of any intended public or private sale or other disposition of the Patents is to be made, which Grantor hereby agrees shall be reasonable notice of such sale or other disposition. At any such sale or other disposition Secured Party or its Transferee (defined in Section 14, below) may, to the extent permissible under applicable law, purchase the whole or any part of the Patents sold, free from any right of redemption on the part of Grantor, which right is hereby waived and released.

7. Grantor hereby authorizes and empowers Secured Party to make, constitute and appoint any officer or agent of Secured Party, as Secured Party may select in its exclusive discretion, as Grantor's true and lawful attorney-in-fact, with the power, during the existence of an Event of Default, to endorse Grantor's name on all applications, documents, papers and instruments necessary or desirable for Secured Party to use the Patents, or to grant or issue any exclusive or nonexclusive license under the Patents to any third person, or necessary or desirable for Secured Party to assign, pledge, convey or otherwise transfer title in or dispose of the Patents to any third person as a part of Secured Party's realization on such collateral upon acceleration of the Secured Obligations following an Event of Default. Grantor hereby ratifies all that such attorney shall lawfully do or cause to be done by virtue hereof. This power of attorney being coupled with an interest shall be irrevocable for the life of this Agreement.

8. If Grantor fails to comply with any of its obligations hereunder, Secured Party may do so in Grantor's name or in Secured Party's name, but at Grantor's expense, and Grantor hereby agrees to reimburse Secured Party in full for all expenses, including reasonable attorneys' fees, incurred by Secured Party in protecting, defending and maintaining the Patent Collateral.

9. Any and all fees, costs and expenses, of whatever kind or nature, including the reasonable attorneys' fees and legal expenses incurred by Secured Party in connection with the preparation of this Agreement and all other documents relating hereto and the consummation of this transaction, the filing or recording of any documents (including all taxes in connection therewith) in public offices, the payment or discharge of any taxes, counsel fees, maintenance fees, encumbrances or otherwise protecting, maintaining or preserving the Patent

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Collateral, or in defending or prosecuting any actions or proceedings arising out of or related to the Patent Collateral, shall be borne and paid by Grantor on demand by Secured Party and until so paid shall be added to the principal amount of the Indebtedness and shall bear interest at the Default Rate.

10. Grantor shall have the duty to prosecute diligently any material Patent applications pending as of the date of this Agreement or thereafter until the Secured Obligations (other than inchoate indemnity obligations) shall have been paid in full, to make application on unpatented but patentable inventions and to preserve and maintain all rights in material Patent applications and material Patent Collateral, including without limitation, the payment of all maintenance fees to the extent required by sound commercial practices. Any expenses incurred in connection with such an application shall be borne by Grantor. The Grantor shall not abandon any right to file a material Patent application, or any pending material Patent application or material Patent Collateral without the consent of Secured Party, which consent shall not be unreasonably withheld, except as shall be consistent with sound commercial practices.

11. No course of dealing between Grantor and Secured Party, nor any failure to exercise, nor any delay in exercising, on the part of Secured Party, any right, power or privilege hereunder or under the Loan Agreement shall operate as a waiver thereof; nor shall any single or partial exercise of any right, power or privilege hereunder or thereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

12. All of Secured Party's rights and remedies with respect to the Patents, whether established hereby, the Loan Agreement, any other agreements or by law shall be cumulative and may be exercised singularly or concurrently.

13. The provisions of this Agreement are severable, and if any clause or provision shall be held invalid and unenforceable in whole or in part in any jurisdiction, then such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

14. Grantor acknowledges and understands that Secured Party may, subject to the limitations set forth in the Loan Agreement, sell, assign and/or transfer all or part of its interest hereunder to any person or entity (a "Transferee"). After such assignment the term "Secured Party" as used in this Agreement shall mean and include such Transferee, and such Transferee shall be vested with all rights, powers and remedies of Secured Party hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Secured Party shall retain all rights, powers and remedies hereby given. No such assignment by Secured Party shall relieve Grantor of any of its obligations hereunder. Grantor may not sell, assign or transfer its rights and obligations hereunder without the prior written consent of Secured Party.

15. This Agreement is subject to modification only by a writing signed by both parties, except as provided in paragraph 5.

16. The validity and interpretation of this Agreement and the rights and obligations of the parties shall be governed by the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction. To the extent the provisions of the Uniform Commercial Code govern any aspect of this Agreement, the Uniform Commercial Code as the same is, from time to time, in effect in the State of California shall govern; provided, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, the security interest granted on the Patent Collateral is required to be governed by the Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of California, then such jurisdiction's Uniform Commercial Code, as in effect, from time to time, shall govern only to the extent required by applicable law.

17. All judicial proceedings arising in or under or related to this Agreement may be brought in any state or federal court of competent jurisdiction located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to personal jurisdiction in San Mateo County, State of California; (b) waives any objection as to jurisdiction or venue in San Mateo County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in the Loan Agreement, and shall be deemed effective and received as set forth in Section 12.3 of the Loan Agreement. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

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WITNESS the execution hereof under seal as of the day and year first above written.

ATRENTA, INC.

By: _____

Name: _Ajay K. Bose_____

Title: _Chairman, President + CEO_

HERCULES TECHNOLOGY GROWTH CAPITAL, INC.

By: _____

Name: _Scott Harvey_____

Title: _Chief Legal Officer_____

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WITNESS the execution hereof under seal as of the day and year first above written.

ATRENTA, INC.

By: _____

Name: _____

Title: _____

HERCULES TECHNOLOGY GROWTH CAPITAL INC.

By: _____

Name: Scott Harvey

Title: Chief Legal Officer

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Patent No.	Application No.	Issue Date	Filing Date	Description
6,876,934	10/217,535	04-05-2005	08-14-2002	Method for Determining Fault Coverage from RTL Descriptions
6,993,733	10/118,242	01-31-2006	09-04-2002	Apparatus and Method for Handling of Multi-Level Circuit Design Data
7,073,146	10/695,803	07-04-2006	10-30-2003	Method for Clock Synchronization Validation in Integrated Circuit Design
7,076,748	10/631,755	07-11-2006	08-01-2003	Identification and Implementation of Clock Gating in the Design of Integrated Circuits
7,152,216	10/711,971	12-19-2006	10-15-2004	Method, System, and Computer Program Product for Automatic Insertion and Correctness Verification of Level Shifters in Integrated Circuits with Multiple Voltage Domains
7,216,321	10/783,091	05-08-2007	02-23-2004	Pattern Recognition in an Integrated Circuit Design
7,277,840	10/172,996	10-02-2007	06-18-2002	Method for Detecting Bus Contention from RTL Description
7,349,835	10/711,493	03-25-2008	09-21-2004	Method, System and Computer Program for Generating and Verifying Isolation Logic Modules in Design of Integrated Circuits
	60/689,545		06-13-2005	A Bus Representation for Efficient Physical Synthesis of Integrated Circuit Designs
	10/906,571		02-24-2005	A Method for Automatically Recognizing Handshake Data Exchange at Clock Domain Boundaries
	11/260,225		10-28-2005	Chip Development System Enabled for the Handling of Multi-Level Circuit Design Data
	11/276,819		03-15-2006	Method for Clock Synchronization Validation in Integrated Circuit (IC) Design
	11/419,624		05-22-2006	Method of Optimization of Clock Gating in Integrated Circuit Designs
	11/423,919		06-13-2006	Bus Representation for Efficient Physical Synthesis of Integrated Circuit Designs
	11/426,936		06-27-2006	Method for Recognizing and Verifying Fifo Structures in Integrated Circuit Designs
	11/676,232		02-16-2007	Method for Generating Timing Exceptions
	11/692,949		03-29-2007	Method for Accelerating the Generation of an Optimized Gate-Level Representation from a RTL Representation
	11/749,090		05-15-2007	Method for Modeling and Verifying

A/72559097.1

Patent No.	Application No.	Issue Date	Filing Date	Description
				Timing Exceptions
	11/755,764		05-31-2007	Method for Checking Constraints Equivalence of an Integrated Circuit Design
	11/837,174		08-10-2007	Method for Computing Power Savings and Determining the Preferred Clock Gating Circuit of an Integrated Circuit Design
	11/959,427		12-18-2007	Method, System, and Computer Program Product for Generating and Verifying Isolation Logic Modules in Design of Integrated Circuits