505185744 11/12/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5232513

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
APPLIED SPINTRONICS TECHNOLOGY, INC.	10/19/2007

RECEIVING PARTY DATA

Name:	MAGIC TECHNOLOGIES, INC.
Street Address:	463-471 SOUTH MILPITAS BLVD.
City:	MILPITAS
State/Country:	CALIFORNIA
Postal Code:	95035

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11236049

CORRESPONDENCE DATA

Fax Number: (845)471-2064

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 8454523204

Email: elise@saileackerman.com
Correspondent Name: SAILE ACKERMAN LLC
Address Line 1: 28 DAVIS AVENUE

Address Line 4: POUGHKEEPSIE, NEW YORK 12603

ATTORNEY DOCKET NUMBER:	HT03-025/31B
NAME OF SUBMITTER:	STEPHEN B ACKERMAN
SIGNATURE:	/Stephen B Ackerman/
DATE SIGNED:	11/12/2018

Total Attachments: 10

PATENT 505185744 REEL: 047473 FRAME: 0875

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> PATENT REEL: 047473 FRAME: 0876

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Applied Spintronics Technology, Inc.	10/19/2007

RECEIVING PARTY DATA

Name:	MagIC Technologies, Inc.
Street Address:	463-471 South Milpitas Blvd.
City:	Milpitas
State/Country:	CALIFORNIA
Postal Code:	95035

PROPERTY NUMBERS Total: 22

7480172 7085183 7184302
7184302
7321507
6974708
6960480
7449345
7211447
7208807
7241632
7611912
7071009
7180769
7394122
7132707

" PATENT " 501188309 REEL: 024445 FRAME: 0250

PATENT

Patent Number:	7067330
Patent Number:	6979586
Patent Number:	7211874
Patent Number:	7362644
Patent Number:	7609543
Application Number:	11497162
Application Number:	11789324

CORRESPONDENCE DATA

Fax Number:

(845)471-2064

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

Phone:

845-452-5863

Email:

cathys@saileackerman.com

Correspondent Name:

Saile Ackerman LLC

Address Line 1:

28 Davis Avenue

Address Line 4:

Poughkeepsie, NEW YORK 12603

ATTORNEY DOCKET NUMBER:	APP SPINTRONICS TO MAGIC
NAME OF SUBMITTER:	Stephen B Ackerman
Total Attachments: 7 source=Applied Spintronics to Magic#page1.tif	

source=Applied Spintronics to Magic#page1.tif source=Applied Spintronics to Magic#page2.tif source=Applied Spintronics to Magic#page3.tif source=Applied Spintronics to Magic#page4.tif source=Applied Spintronics to Magic#page5.tif source=Applied Spintronics to Magic#page6.tif source=Applied Spintronics to Magic#page7.tif

> PATENT REEL: 024445 FRAME: 0251

PATENT REEL: 047473 FRAME: 0878

ASSIGNMENT OF PATENTS

THIS ASSIGNMENT OF PATENTS is made as of October 25, 2007 by APPLIED SPINTRONICS TECHNOLOGY, INC., a Cayman Islands company ("ASTI"), and its whollyowned subsidiary, APPLIED SPINTRONICS, INC., a California corporation ("ASI") (each, a "Seller" and collectively, the "Sellers"), in favor of and for the benefit of MAGIC TECHNOLOGIES, INC., a Delaware corporation ("Buyer").

WHEREAS, Buyer and Sellers are parties to that certain Asset Purchase Agreement, dated as of August 10, 2007 (the "Agreement"), pursuant to which Buyer has agreed to purchase and acquire from Sellers, and Sellers have agreed to sell, assign and convey to Buyer, the Acquired Assets, upon the terms and subject to the conditions set forth therein.

WHEREAS, the Acquired Assets include, without limitation, all of the United States and foreign patents and patent applications owned or held by Sellers, whether severally or jointly, in connection with the conduct or operation of the Business (collectively, the "Patents"), including, without limitations, all of the patents and patent applications listed on Exhibit A attached hereto.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Sellers hereby severally and jointly sell, assign, transfer, convey, deliver to and set over unto Buyer all world-wide right, title and interest of Sellers, whether owned or held severally or jointly, in and to the Patents, including, without limitation, all reissuances, continuations, renewals and extensions thereof under the laws now or hereafter in effect in the United States or any other country or jurisdiction, and all rights to sue or recover profits or damages for infringement thereof, whether arising prior to or subsequent to the date hereof, all of which to be held and enjoyed by Buyer and its successors and assigns as fully and entirely as the same would have been held and enjoyed by Sellers had this Assignment of Patents not been made,

Each Seller covenants and agrees, upon the request of Buyer and without any additional consideration therefor, to execute and deliver such further instruments and documents and to take such further actions as may be reasonably necessary or desirable to more fully and effectively assign, transfer and convey to and vest in Buyer and its successors and assigns, and to place Buyer and its successors and assigns in possession and control of, the Patents.

Without in any manner limiting the preceding paragraph, each Seller hereby makes, constitutes and appoints Buyer the true and lawful agent and attorney-in-fact of such Seller, with full power of substitution and resubstitution, to act in the name, place and stead of such Seller, but on behalf of and for the benefit of Buyer and its successors and assigns, to execute, certify, acknowledge, verify, deliver, file, publish and record any and all instruments and documents and to take or cause to be taken any and all other acts and actions, as may be deemed by Buyer to be reasonably necessary or desirable to more fully and effectively assign, transfer and convey to and vest in Buyer and its successors and assigns, and to place Buyer and its successors and assigns in possession and control of, the Patents. The foregoing power of attorney is coupled with an interest and shall be irrevocable and shall survive the dissolution or other termination of the legal existence of Sellers.

Los Angeles; 252366-v3

PATENT

REEL: 024445 FRAME: 0252

This Assignment of Patents shall be governed by, construed and enforced in accordance with the laws of the State of California, without regard to conflicts-of-law or choice-of-law principles that might otherwise require the application of any other law.

All capitalized terms used herein but which are not otherwise defined herein shall have the respective meanings ascribed to them in the Agreement.

[Signature pages (2) follow.]

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Los Angeles; 252366-v3

PATENT

REEL: 024445 ERAME: 0253

IN WITNESS WHEREOF, each Seller has duly executed this Assignment of Patents as of the day and year first written above.

APPLIED SPINTRONICS TECHNOLOGY, INC., a Cayman Islands company

Name: David D. Tsang

Title: Chief Executive Officer

APPLIED SPINTRONICS, INC.,

a Delaware corporation California

Title: Chief Executive Officer

NOTARIAL ACKNOWLEDGMENT

STATE OF CALIFORNIA)
SANTA CIARA)
COUNTY OF LOS ANGELES)

On <u>OCT.19</u>, 2007, before me, <u>DAMIANA. DERA</u>, a notary public for the State of California, personally appeared <u>DAUID DAH TIANA</u> personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/a/e subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/har/their authorized capacity(is), and that by his/har/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DAMIAN A. DEPA
Commission # 1781732
Notary Public - California
Santo Clora County
My Comm. Expres Am 18, 2011

[Scall]

WITNESS my hand and official seal.

Notary's Signature

3

Los Angeles; 252366-v3

PATENT

REEL: 024445 FRAME: 0254

IN WITNESS WHEREOF, each Seller has duly executed this Assignment of Patents as of the day and year first written above.

APPLIED SPINTRONICS TECHNOLOGY, INC., a Cayman Islands company

Name: David D. Tsang

Title: Chief Executive Officer

APPLIED SPINTRONICS, INC., a Delaware corporation
Colifornia

00

Name: David D. Tsang
Title: Chief Executive Officer

NOTARIAL ACKNOWLEDGMENT

STATE OF CALIFORNIA		
SANTA CIARA)	
COUNTY OF LOS ANGELES)	

On <u>OCT. 19</u>, 2007, before me, <u>NAMLAJA</u>, a notary public for the State of California, personally appeared <u>NAULO NAH TSAMS</u> personally knows to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/ste/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DAMIAN A. DEPA
Commission # 1761732 i
Notary Public - California
Santa Clara County
MyComm Spission 18, 2011

WITNESS my hand and official seal.

Notary's Signature

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Los Angoles; 252366-v3

PATENT

REEL: 024445_ERAME: 0255

EXHIBIT A

Patents and Patent Applications

	Title	Granted No.	Foreign Country Filing	Assignee
1	MRAM ARRAY WITH MAGNETIC WRITE LINES	6870759	China, Europe	ASTI
2	MRAM MEMORIES UTILIZING MAGNETIC WRITE LINES	6909630	China, Europe, Japan	ASTI
3	HIGH DENSITY AND HIGH PROGRAMMING EFFICIENCY MRAM DESIGN	6864551	China, Europe, Japan	ASTI
4	MRAM ARCHITECTURE AND A METHOD AND SYSTEM FOR FABRICATING MRAM MEMORIES UTILIZING THE ARCHITECTURE	7067866	China, Europe, Japan	ASTI
5	MRAM ARRAY WITH SEGMENTED WORD AND BIT LINES	6940749	China, Europe	ASTI
6	MRAM CELLS HAVING MAGNETIC WRITE LINES WITH A STABLE MAGNETIC STATE AT THE END REGIONS	6812538	China, Europe, Japan	ASTI
7	MRAM ARCHITECTURE WITH A FLUX CLOSED DATA STORAGE LAYER	6909633		ASTI
8	METHOD AND SYSTEM FOR PROVIDING TEMPERATURE DEPENDENT PROGRAMMING FOR MAGNETIC MEMORIES	6982916	Europe, Japan	ASTI
9	METHOD AND SYSTEM FOR PERFORMING READOUT UTILIZING A SELF REFERENCE SCHEME	6870760		ASTI
10	MAGNETIC TUNNELING JUNCTION CELL ARRAY WITH SHARED REFERENCE LAYER FOR MRAM APPLICATION	6963500		ASTI
11	MRAM ARCHITECTURE WITH A BIT LINE LOCATED UNDERNEATH THE MAGNETIC TUNNELING JUNCTION DEVICE	6982445	China, Europe	ASTI
12	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC MEMORY HAVING A WRAPPED WRITE LINE	6933550		ASTI

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Los Angeles; 252366-v3

PATENT

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13	METHOD AND SYSTEM FOR	7009266		ASIDICIUWAY
	PROVIDING A MAGNETIC			
	ELEMENT INCLUDING			
	PASSIVATION STRUCTURES	6055000	G: B	ACTIAInadama
14	METHOD AND SYSTEM FOR	6977838	China, Europe	ASTI/Headway
	PROVIDING A PROGRAMMABLE		1	
	CURRENT SOURCE FOR A MAGNETIC MEMORY			
15	METHOD AND SYSTEM FOR	7123506	TBD	ASTI/Hendway
13	PERFORMING MORE	7123300	100	7101211000000
	CONSISTENT SWITCHING OF			
	MAGNETIC ELEMENTS IN A			
	MAGNETIC MEMORY			
16	A Novel Programming Scheme for	Pending	TBD	MagIC/ASI
	Segmented Word Line MRAM Array			
17	Biosensor using Addressable MTJ	Processing	TBD	ASI/Headway
	Array to Detect Magnetically-Detected			
	Label			
18	Adaptive Algorithm for MRAM	Pending	Europe, Japan, Korea,	ASI/Headway
	Manufacturing	a procedura and the latest and the second and the s	Taiwan	THE RESIDENCE AND ASSOCIATION OF THE PARTY O
19	Optimizing the Number of Word Line	Pending	Europe, Japan	ASI/Headway
	Segments in a Segmented MRAM			
	Array			
20	Common Read and Write Word Line	7027324	Europe, Japan	ASTI/Headway
	MRAM Array			
21	A Highly Efficient Segmented Word	Pending	TBD	ASI/Headway
	Line MRAM Array	T2 21	AND TO)
22	Reference Cell Scheme for MRAM A Novel Oxidation Structure/Method	Pending	TBD	MagIC/ASI
23	to Fabricate MTJ for MRAM	6974708	Japan, Korea	ASI/Headway
24	A Novel Structure/Method to	Pending	iya alamay ya da iyaan isi kala kala a saa a saadig isaa o ayaa a saadiga da saa a saa a saa a saa a saadiga da waxa a saadiga da saa a saa a saadiga da saa a saadiga da saadig	ASI/hea/sway
47	Fabricate High Performance MTJ	Lewonik		ADIIICEIWay
	MRAM			
25	A Novel Buffer (Seed) Layer for	6960480	Europe, Japan, Korea,	ASI/Headway
	Making High Performance Magnetic	0500.00	Taiwan	
	Tunnel Junction MRAM			
26	A Novel Capping Structure for	Pending	Europe, Japan, Korea,	ASI/Headway
	Enhancing dR/R of the MTJ Device		Taiwan	-
27	A Novel Structure/Method to	Pending	TBD	ASI/Hearlway
	Fabricate High Performance MTJ for			
28	MRAM Application			
28	A Novel Structure/Method to	Pending	TBD	ASI/Headway
	Fabricate High Performance MTJ for MRAM Application	e.		
29	Method of Fabricating MRAM Cell	Pending	TBD	ASI/Headway
-	Structure Containing Sidewall Spacers	r outming	100	AUNTIGHT WAY
30	MRAM Cell Structure and Method of	Pending	None	ASI/Headway
	Fabrication	- 41101112	. 10,000	LIGHTION
31	A Novel Under Layer for High	Pending	Europe, Japan, Kores,	ASI/Headway
	Performance Magnetic Tunneling		Taiwan	
	Junction MRAM		· ·	

PATENT REEL: 024445 ERAME: 0257

32	MRAM Arrays w/Reduced BIT Line Resistance and Method to Make the Same	Pending	Japan, Taiwan, Korea	ASI/Headway
33	Segmented Word Line MRAM Array with Word Line Segment Select Translator on the Word Line Current Source Side	Pending	TBD	ASI/Headway
34	MRAM Arrary with Thin Conduction Electrical Read	Pending	Europe, Japan, Korea	ASI/Heaclway
35	MRAM Array with Proximity Read and Write Lines Cladded with Magnetic Material	Pending	None	ASI/Headway
36	MRAM Array with Thin Conduction Electrical Read and Write Lines (Continuation In Part of HT03-024)	Pending	None	ASI/Headway
37	MRAM Array with Coupled Soft- Adjacent Magnetic Layer	6979586	Japan, Taiwan, Korea	ASI/Headway
38	MRAM Array with Free Layer Locking Mechanism	Pending	Burope, Japan, Korea, Taiwan	ASI/Hea:iway
39	A Configurable MRAM	Pending	TBD	ASI/Mag/IC
40	A GMR Biosensor with Enhanced Sensitivity	Pending	TBD	ASI/MagIC
41	A Spin-Torque MRAM: SPIN-RAM, Array	Pending	TBD	ASI/MagiC
42	Method and Implementation of Stress Test for MRAM	Pending	TBD	ASI/Mag;IC

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Los Angeles; 252366-v3

RECORDED: 05/27/2010

PATENT

REEL: 024445_FRAME: 0258

PATENT REEL: 047473 FRAME: 0886

RECORDED: 11/12/2018