Form PTO (SL) 04-12-20			
Form PTO (SLS 1-31 92 REC)	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		
To the Honorable Commissioner 1013183	10		
1. Name of conveying party(ies): Execution Date: KYUSIK SIN 12-20-99 YINGJIAN CHEN 12-20-99 NINGJA ZHU 12-20-99 BILL CRUE 03-07-00 Additional name(s) of conveying party(ies) attached? [] Yes Additional name(s) of conveying party(ies) attached? [] Yes X Nature of conveyance: [X] Assignment [] Merger [] Security Agreement [] Other Execution Date: See above 4. Application number(s) or patent number(s): If this document is being filed together with a new application Herewite	2. Name and address of receiving party(ies): Name: <u>READ-RITE CORPORATION</u> Internal Address: Robert N. King Street Address: 44100 Osgood Road City: Fremont State: CA Zip: 94539 Additional name(s) & address(es) attached? [] Yes [X] No		
A. Patent Application No.(s)	B. Patent No.(s)		
Additional numbers atta	iched? [] Yes [x] No		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:		
Name: <u>MICHAELSON & WALLACE</u> Internal Address: Eric J. Aagaard	7. Total fee (37 CFR 3.41):\$40.00		
Internal Address. Ene J. Aagaard	[] Enclosed		
Street Address: 1001 Partridge Drive, Suite 330 City: Ventura State: CA Zip: 93003	[X] Authorized to be charged to deposit account <u>50-0338</u>		
	 Charge any excess or credit any refund to deposit account number: 		
	50-0338 (Attach duplicate copy of this page if paying by deposit account)		
DO NOT USE THIS SPACE			
9. Statement and signature. To the best of my knowledge and belief, the foregoing inform true copy of the original document. <u>Eric J. Aagaard</u> Reg. No. 40,478 Name of Person Signing Signature	nation is true and correct and any attached copy is a		
4/11/2000 TTON11 00000206 500338 09523587	v L		
1 FC:581 40.00 CH Total number of pa	ges comprising cover sheet: 1		
OMB No. 0651-0011			

PATENT REEL: 010671 FRAME: 0885

PATENT

Read-Rite Case No. RR 1594 Attorney Docket No. READ/056-99

Page 1 of 5

ASSIGNMENT

WHEREAS, Kyusik Sin, residing at 1080 Tanland Drive, #207, Palo Alto, California 94303; Yingjian Chen, residing at 39078 Guardino Drive, #207, Fremont, California 94538; Ningja Zhu residing at 41047 Chiltern Drive, Fremont, California 94539; and Bill Crue, residing at 3001 Marshall Road #112, Pittsburgh, Pennsylvania 15222; ("Assignors") have made certain new and useful inventions in HARD BIASED CURRENT PERPENDICULAR TO THE PLANE SENSOR AND METHOD OF FABRICATION and have disclosed the same in an application for Letters Patent of the United States therefor, said application having been executed by Assignor contemporaneously herewith;

WHEREAS, READ-RITE CORPORATION ("Assignee"), a California corporation having offices at 44100 Osgood Road, Fremont, CA 94539, desires to acquire the entire right, title and interest in and to all inventions disclosed in said application;

NOW, THEREFORE, in consideration of good and valuable consideration to Assignor paid by Assignee, the receipt of which is hereby acknowledged, Assignor hereby does sell, assign and transfer unto said Assignee, its successors and assigns, the entire right, title and interest throughout the world in and to said inventions disclosed in said application; and in and to said application, including all priority rights for other countries arising from said application; and in and to all substitutions, divisions and continuations thereof; and in and to all Letters Patent, United States and foreign, and corresponding foreign rights, that may be granted for said inventions; and in and to all extensions, renewals and reissues thereof.

And Assignor hereby authorizes and requests the Commissioner of Patents of the United States and the duly constituted authorities of foreign countries to issue any Letters Patent which may be granted on said inventions, on any patent applications related thereto, and on any substitute, continuation, divisional or reissue applications on any of them, to said Assignee, its successor and assigns, as assignee of the entire right, title and interest therein and thereto.

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PATENT REEL: 010671 FRAME: 0886

Page 2 of 5

IN WITNESS WHEREOF, the undersigned ha	s executed and delivered this instrument this
day of <u>Pecember</u>	, 19 <u>99</u> , and has executed the referenced
patent application on the 20 day of	De canha , 19 55.
Klynich.	li
KYUSIK SIN, Ass	signor
STATE OF California)
COUNTY OF Alameda) ss)

On <u>December</u> 20, 1^{Gugg} before me, <u>Olivia Guggar</u> $\frac{2}{Mg}$, personally appeared <u>Kygg5ik Sim</u>, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument and acknowledged to me that he she executed the same in his herauthorized capacity, and that by his her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

Signature Olern Gan-Petty



Page 3 of 5

IN WITNESS WHEREO	F, the undersigned has	s executed and deliver	red this instrument this
20 day of	December	, 1999 , and I	has executed the referenced
patent application on the	<u>20</u> day of _	December	, 19 <u>99</u> .
	ing	R	
	YINGJIAN CHEN	, Assignor	

STATE OF <u>California</u>) COUNTY OF <u>Alameda</u>)) ss

On <u>Decembr</u> 30, 1699 before me, <u>Clivia Guzman-Rithy</u>, personally appeared <u>ying jian</u> <u>Chen</u>, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument and acknowledged to me that he she executed the same is his/berauthorized capacity, and that by fis/her-signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

Signature

Olein Egge Pelty



Page 4 of 5

IN WITNESS WHEREOF, the undersigned has day of <u>December</u>	, 1999, and has executed the referenced		
patent application on the day_of	December , 1999.		
A	- Cm		
NINGJA ZHU, Assignor			
STATE OF Culifornia)		
COUNTY OF Alameda) ss)		
- (OL OL OL OLIG		

On <u>December</u> $\frac{199}{N_{10}}$ before me, <u>Olivia Guuman-Pethy</u> personally appeared <u>Ninga</u> $\frac{244}{244}$, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

r,

Oleun Ergn-Petty Signature



Page 5 of 5

		cuted and delivered this instrument this , 19 . and has executed the referenced	
patent application on the _	day of	, 19, and has executed the referenced, 19	
	BILL CRUE, Assigno	r	
STATE OF)		
COUNTY OF))	SS	
On	before me,	?	
personally appeared		, personally known to	
		evidence to be the person whose name is	
subscribed to this instrument and acknowledged to me that he/she executed the same in his/her			
authorized capacity, and that by his/her signature on the instrument the person, or the entity upon			
behalf of which the person	acted, executed the instru	ment.	

WITNESS my hand and official seal

t

Signature

PATENT

Read-Rite Case No. RR 1594 Attorney Docket No. READ/056-99

Page 1 of 5

ASSIGNMENT

WHEREAS, Kyusik Sin, residing at 1080 Tanland Drive, #207, Palo Alto, California 94303; Yingjian Chen, residing at 39078 Guardino Drive, #207, Fremont, California 94538; Ningja Zhu residing at 41047 Chiltern Drive, Fremont, California 94539; and Bill Crue, residing at 3001 Marshall Road #112, Pittsburgh, Pennsylvania 15222; ("Assignors") have made certain new and useful inventions in HARD BIASED CURRENT PERPENDICULAR TO THE PLANE SENSOR AND METHOD OF FABRICATION and have disclosed the same in an application for Letters Patent of the United States therefor, said application having been executed by Assignor contemporaneously herewith;

WHEREAS, READ-RITE CORPORATION ("Assignee"), a California corporation having offices at 44100 Osgood Road, Fremont, CA 94539, desires to acquire the entire right, title and interest in and to all inventions disclosed in said application;

NOW, THEREFORE, in consideration of good and valuable consideration to Assignor paid by Assignee, the receipt of which is hereby acknowledged, Assignor hereby does sell, assign and transfer unto said Assignee, its successors and assigns, the entire right, title and interest throughout the world in and to said inventions disclosed in said application; and in and to said application, including all priority rights for other countries arising from said application; and in and to all substitutions, divisions and continuations thereof; and in and to all Letters Patent, United States and foreign, and corresponding foreign rights, that may be granted for said inventions; and in and to all extensions, renewals and reissues thereof.

And Assignor hereby authorizes and requests the Commissioner of Patents of the United States and the duly constituted authorities of foreign countries to issue any Letters Patent which may be granted on said inventions, on any patent applications related thereto, and on any substitute, continuation, divisional or reissue applications on any of them, to said Assignee, its successor and assigns, as assignee of the entire right, title and interest therein and thereto.

Page 2 of 5

day of patent application on the		_, 19	, and has executed the referenced, 19
	KYUSIK SIN, Assignor	r	
STATE OF		_)	
COUNTY OF) ss _)	
On	before me,		,

personally appeared ______, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

Page 3 of 5

		suted and delivered this instrument this , 19 , and has executed the referenced
patent application on the	day of	, 19, and has executed the referenced, 19
Ĩ	YINGJIAN CHEN, Assi	ignor
STATE OF))
COUNTY OF)) ss)
On personally appeared	before me,	, personally known to

me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

Page 4 of 5

day of	,	, 19, and has executed the referenced, 19
patent application on the	day of	, 19
N	INGJA ZHU, Assign	nor
STATE OF)
STATE OF) ss
COUNTY OF)
0-	hafara ma	
personally appeared	before me,	, personally known to
me or proved to me on the subscribed to this instrument a	basis of satisfactory nd acknowledged to 1 / his/her signature on	evidence to be the person whose name is me that he/she executed the same in his/her in the instrument the person, or the entity upon

WITNESS my hand and official seal

Page 5 of 5

IN WITNESS WHEREOF, day of	-		delivered this instrument this , and has executed the referenced
patent application on the	day of,		_, and has executed the referenced
	BILL CRUE, Assignor	In_	3/7/2000
STATE OF)	
COUNTY OF) ss)	
On	before me,		,

WITNESS my hand and official seal