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08-08-2006



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Daniel Wayne Bedell; Wen-Chien David Hsiao; Ming Jiang; Hieu Lam; Kim Y. Lee; Jyh-Shuey Lo; and Aron Pentek	Name: Hitachi Global Storage Technologies Netherlands B.V.
Lam, Kim Y. Lee, Syn-Shuey Lo, and Alon Femer	Internal Address:
Additional name(s) of conveying party(ies) attached? Yes V No	Street Address: Locatellikade 1, Parnassustoren, 1076 AZ
3. Nature of conveyance/Execution Date(s): Execution Date(s) 3/28/06; 3/31/06; 3/27/06; 4/04/06; 4/5 \ \(\text{Data} \)	Street Address. Locatemikade 1, Famassustoren, 1076 AZ
✓ Assignment	<u>Amsterdam</u>
Security Agreement Change of Name	City:
Joint Research Agreement	State:
Government Interest Assignment	
Executive Order 9424, Confirmatory License	Country: The Netherlands Zip:
Other	Additional name(s) & address(es) attached? Yes Vo
4. Application or patent number(s):	document is being filed together with a new application.
A. Patent Application No.(s)	B. Patent No.(s)
11/399,821	
Additional numbers at	ached? ☐ Yes ✔ No
5. Name and address to whom correspondence	6. Total number of applications and patents
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
5. Name and address to whom correspondence concerning document should be mailed: Name: David W. Lynch	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card
5. Name and address to whom correspondence concerning document should be mailed: Name: David W. Lynch Internal Address: Chambliss Bahner & Stophel, P.C.	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged to deposit account
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5. Name and address to whom correspondence concerning document should be mailed: Name: David W. Lynch Internal Address: Chambliss Bahner & Stophel, P.C. Street Address: 1000 Tallan Bldg., Two Union Square	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)
5. Name and address to whom correspondence concerning document should be mailed: Name: David W. Lynch Internal Address: Chambliss Bahner & Stophel, P.C. Street Address: 1000 Tallan Bldg., Two Union Square City: Chattanooga	6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers
5. Name and address to whom correspondence concerning document should be mailed: Name: David W. Lynch Internal Address: Chambliss Bahner & Stophel, P.C. Street Address: 1000 Tallan Bldg., Two Union Square City: Chattanooga State: Tennessee Zip:37402	6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number _50-2587
5. Name and address to whom correspondence concerning document should be mailed: Name: David W. Lynch Internal Address: Chambliss Bahner & Stophel, P.C. Street Address: 1000 Tallan Bldg., Two Union Square City: Chattanooga State: Tennessee Zip:37402 Phone Number: (423) 757-0264	6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers
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Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450 Form PTO-1595 (Rev. 07/05)

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J.S. DEPARTMENT OF COMMERCE

OMB No. 0651-0027 (exp. 6/30/2008) nited States Patent and Trademark Office RE To the Director of the U.S. Patent and Trademark Office: Please/record the attached documents or the new address(es) below. 2. Name and address of receiving party(ies) Name of conveying party(ies) Daniel Wayne Bedell: Wen-Chien David Hsiao; Ming Jiang; Hieu Name: Hitachi Global Storage Technologies Netherlands B.V. Lam; Kim Y. Lee; Jyh-Shuey Lo; and Aron Pentek Internal Address: Additional name(s) of conveying party(ies) attached? Ves 🗸 No 3. Nature of conveyance/Execution Date(s): Street Address: Locatellikade 1, Parnassustoren, 1076 AZ Execution Date(s) Amsterdam Merger ✓ Assignment City: Security Agreement Joint Research Agreement Government Interest Assignment Country: The Netherlands Zip: Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? ☐ Yes ✓ No 4. Application or patent number(s): This document is being filed together with a new application. B. Patent No.(s) A. Patent Application No.(s) 11/399,821 Additional numbers attached? Yes √ No 6. Total number of applications and patents 5. Name and address to whom correspondence concerning document should be mailed: involved: 1 Name: David W. Lynch 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Internal Address: Chambliss, Bahner & Stophel, P.C. Authorized to be charged by credit card ✓ Authorized to be charged to deposit account **Enclosed** Street Address: 1000 Tallan Building, Two Union Square None required (government interest not affecting title) 8. Payment Information City: Chattanooga a. Credit Card Last 4 Numbers _____ Zip:37402 State: Tennessee Expiration Date ____ Phone Number: (423) 757-0264 b. Deposit Account Number 50-2587 Fax Number: (423) 508-1264 Authorized User Name Hitachi Global Storage Email Address: dlynch@cbslawfirm.com 9. Signature: Date Signature 4 06/06/2006 DBYRNE 00000229 502587

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David W. Lynch

Name of Person Signing

Total number of pages including cover

sheet, attachments, and documents:

ASSIGNMENT

INVENTOR AND CITY

Whereas, I/we

- (1) Daniel Wayne Bedell of 7566 Edinburgh Way, Gilroy, CA 995020.
- (2) Wen-Chien David Hsiao of 1338 Quail Creek Circle, San Jose, CA 95120.
- (3) Ming Jiang of 4774 Calendula Court, San Jose, CA 95136.
- (4) Hieu Lam of 1403 Traughber Street, Milpitas, CA 95035.
- (5) Kim Y. Lee of 2672 Benchmark Avenue, Fremont, CA 94536.
- (6) Jyh-Shuey Lo of 6568 Rocky Crest Drive, San Jose, CA 95120
- (7) Aron Pentek of 1437 Corte De Rosa, San Jose, CA 95120

has invented certain improvements in

TITLE

DATE

METHOD AND APPARATUS FOR INTEGRATING A STAIR NOTCH AND A GAP BUMP AT A POLE TIP IN A WRITE HEAD

DATES THAT INVENTORS SIGNED THE DECLARATION and executed, respectively, a United States patent application therefore on

Ų),	V1/2X1 2006
(2)	03/31/2006
(3)	03/27/2006
(4)	04/04/2006
(5)	17 17
(6)	
(7)	04/06/2006
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11 00 1201 2001

Whereas, HITACHI GLOBAL STORAGE TECHNOLOGIES NETHERLANDS B.V., having a place of business at Locatellikade 1, Parnassustoren, 1076 AZ Amsterdam, The Netherlands (hereinafter called HITACHI), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefore;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby sell, assign, and transfer to HITACHI, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to HITACHI, its successors and assigns; and we hereby agree that HITACHI may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by HITACHI.

Ming Jiang

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CITY	(1) Signed at 4 n 10 so Saul Wayne Dell SIGNATURE	
DATE	on 3/28 , 2006, Daniel Wayne Bedell	INVENTOR
CITY	(1) Signed at <u>San Jose</u>	
	Well Mrs SIGNATURE	
DATE	on 3/3 , 2006, Wen-Chien David Hsiao	INVENTOR
CITY	(1) Signed at San Jose	

Page 1 of 2

PATENT REEL: 018146 FRAME: 0532

INVENTOR

INVE	NTOR
AND	CITY

Whereas, I/we

- (1) Daniel Wayne Bedell of 7566 Edinburgh Way, Gilroy, CA 995020.
- (2) Wen-Chien David Hsiao of 1338 Quail Creek Circle, San Jose, CA 95120.
- (3) Ming Jiang of 4774 Calendula Court, San Jose, CA 95136.
- (4) Hieu Lam of 1403 Traughber Street, Milpitas, CA 95035.
- (5) Kim Y. Lee of 2672 Benchmark Avenue, Fremont, CA 94536.
- (6) Jyh-Shuey Lo of 6568 Rocky Crest Drive, San Jose, CA 95120.
- (7) Aron Pentek of 1437 Corte De Rosa, San Jose, CA 95120.

has invented certain improvements in

TITLE

METHOD AND APPARATUS FOR INTEGRATING A STAIR NOTCH AND A GAP BUMP AT A POLE TIP IN A WRITE HEAD

DATES THAT INVENTORS SIGNED THE DECLARATION and executed, respectively, a United States patent application therefore on

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Whereas, HITACHI GLOBAL STORAGE TECHNOLOGIES NETHERLANDS B.V., having a place of business at Locatellikade 1, Parnassustoren, 1076 AZ Amsterdam, The Netherlands (hereinafter called HITACHI), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefore;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby sell, assign, and transfer to HITACHI, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to HITACHI, its successors and assigns; and we hereby agree that HITACHI may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by HITACHI.

CITY	(1) Signed at	-		
			SIGNATURE	
DATE	on	_, 2006,	Daniel Wayne Bedell	INVENTOR
CITY	(1) Signed at			
			SIGNATURE	
DATE	on	_, 2006,	Wen-Chien David Hsiao	INVENTOR
CITY	(1) Signed at			
			SIGNATURE	
DATE	on	, 2006,	Ming Jiaog	INVENTOR

Page 1 of 2

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	Whereas, I/wc			
INVENTOR AND CITY	(1) Daniel Wayne Bedell of 7566 Edini (2) Wen-Chien David Hsiao of 1338 Q (3) Ming Jiang of 4774 Calendula Cour (4) Hieu Lam of 1403 Traughber Street (5) Kim Y. Lee of 2672 Benchmark Av (6) Jyh-Shuey Lo of 6568 Rocky Crest (7) Aron Pentek of 1437 Corte De Ross has invented certain improvements in	uail Cree rt, San Jo t, Milpita renuc, Fr Drive, S	ek Circle, San Jose, CA 95120. Dose, CA 95136. Dose, CA 95035. Demont, CA 94536. Dan Jose, CA 95120.	
TITLE	METHOD AND APPARATUS FOR I POLE TIP IN A WRITE HEAD	ntegr	ATING A STAIR NOTCH AND	A GAP BUMP AT A
DATES THAT INVENTORS SIGNED THE DECLARATION	and executed, respectively, a United St. (1) (2) (3) (4) (5) (6) (7) Whereas, HITACHI GLOBAL ST. place of business at Locatellikade 1, P. called HITACHI), desires to acquire the invention, and to any United States and Now therefore, for a valuable consistent of the continuation of the said application and countries, and all rights of priority resurrequest the Commissioner of Patents to said application to HITACHI, its successfor foreign Letters Patent on said invertible United States and foreign application.	CORAGE armassuse armassuse armassuse armassuse deration r to HiT invention alting from issue armassors an action and	E TECHNOLOGIES NETHER toren. 1076 AZ Amsterdam, The right, title and interest in the said patents to be obtained therefore; receipt whereof is hereby acknowach, its successors and assigns on therein disclosed for the United the filing of said United States my Letters Patent granted upon the dissigns; and we hereby agree the we will execute all papers neces	Netherlands (hereinafter application and wledged, we, the above the entire right, title distates and forcign application, and we inventions set forth in that HITACHI may apply sary in connection with
CITY	(1) Signed at		_signatu re	
DATE	on,	2006,	Daniel Wayne Bedell	INVENTOR
CITY	(1) Signed at		SIGNATURE	
DATE	on,	2006,	Wen-Chien David Hsiao	INVENTOR
CITY	(1) Signed at		_SIGNATURE	
DATE	on	2006.	SIGNATURE Ming Jiang	INVENTOR
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Page 1 of 2

PATENT REEL: 018146 FRAME: 0534

CITY	(1) Signed at San Jose	SIGNATURE	
DATE	on <u>64/04</u> ,2000	, Hieu Lam	INVENTOR
CITY	(1) Signed at	SIGNATURE	
DATE	on, 200 0	5, Kim Y. Lee	INVENTOR
CITY	(1) Signed at	SIGNATURE	
DATE	on, 200 c	, Jyh-Shuey Lo	INVENTOR
CITY	(1) Signed at San Tox	SIGNATURE	
DATE	on $04/06$, 2000	, Aron Pentek	INVENTOR

Docket	: HSJ920050140US1/(HITG117-005)
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CITY	(1) Signed at		SIGNATURE	
DATE	on		Hieu Lam	INVENTOR
CITY	(1) Signed at FREMONT			
DATE	on April 5	, 2006,	SIGNATURE Kim Y. Lee	INVENTOR
CITY	(1) Signed at		ever la municipie	
DATE	on		SIGNATURE Jyh-Shuey Lo	INVENTOR
CITY	(1) Signed at			
DATE	on	, 2006,	SIGNATURE Aron Pentek	INVENTOR

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CITY	(1) Signed at			
			_SIGNATURE	
DATE	on	_, 2006,	Hieu Lam	INVENTOR
CITY	(I) Signed at			
			_SIGNATURE	
DATE	on	_, 20 06,	Kim Y. Lee	INVENTOR
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CITY	(1) Signed at Sou Jos	<u> </u>		
	Mains.	20	_SIGNATURE	
DATE	on Manch 31	_, 2006,	Jyb-Shuey Lo	INVENTOR
CITY	(1) Signed at			
			SIGNATURE	

on______, 2006, Aron Pentek

INVENTOR

S.q

DATE

408-268-4035

RECORDED: 06/05/2006 REEL: 018146 FRAME: 0537