U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

(Rev. 6-93) OMB No. 0651-0011 (Exp. 4/94) Docket No. <u>HSJ920030086US1 (HITG.034PA)</u> 10-08-2003

To the Commissioner of Patents and Trademarks: Please record .	Cuments or copy thereof.
Name of conveying party(ies):	2. Name and address of receiving party(ies):
Hardayal Singh GILL G. 7 U.07	Hitachi Global Storage Technologies Netherlands B.V. Locatellikade 1 1076 AZ Amsterdam NETHERLANDS
Additional name(s) of conveying party(ies) attached?	Additional name(s) & address(es) attached?
Execution Date: September 23, 2003	
 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the state of the state of	B. Patent No.(s)
5. Name and address of party to whom correspondence concerning document should be mailed: Name: David W. Lynch Address: CRAWFORD MAUNU PLLC 1270 Northland Drive Suite 390 St. Paul, MN 55120	ched? ☐ Yes ☒ No
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9. Statement and signature: To the best of my knowledge and belief, the foregoing informati original document. David W. Lynch Name of Person Signing	on is true and correct and any attached copy is a true copy of the 4
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10/07/2003 LINUELLER 00000119 502587 10672992 40.00 MA 01 FC:8021

> **PATENT REEL: 014554 FRAME: 0866**

ASSIGNMENT

WHEREAS, I/we, Hardayal Singh Gill, residing at 545 Lytton Ave., Palo Alto, CA 94301, made certain new and useful inventions and improvements for which I/we herewith file an application for letters Patent of the United States, which is entitled METHOD FOR PROVIDING A SELF-PINNED DIFFERENTIAL GMR SENSOR AND SELF-PINNED DIFFERENTIAL GMR SENSOR (Atty. Docket No. HSJ920030086US1 / HITG.034PA).

AND WHEREAS, Hitachi Global Technologies Netherlands B.V., a corporation organized under the laws of The Netherlands and having an office and place of business at Locatellikade 1, 1076 AZ Amsterdam, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, I/we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I/we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, I/we do hereby agree that I/we and my/our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to me/us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions,

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HSJ920030086US1 (HITG.034PA)

PATENT REEL: 014554 FRAME: 0867 applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore I/we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me/us and that full right to convey the same as herein expressed is possessed by me/us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 231day of

Sept. , 2003.

Hardayal Singh Gill

RECORDED: 09/26/2003

REEL: 014554 FRAME: 0868

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