

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Jia-Yang Juang</td> <td>01/31/2012</td> </tr> <tr> <td>Hal J. Rosen</td> <td>01/17/2012</td> </tr> <tr> <td>Barry Cushing Stipe</td> <td>01/09/2012</td> </tr> <tr> <td>Timothy Carl Strand</td> <td>01/16/2012</td> </tr> <tr> <td>Petrus Antonius VanDerHeijden</td> <td>01/31/2012</td> </tr> </tbody> </table>		Name	Execution Date	Jia-Yang Juang	01/31/2012	Hal J. Rosen	01/17/2012	Barry Cushing Stipe	01/09/2012	Timothy Carl Strand	01/16/2012	Petrus Antonius VanDerHeijden	01/31/2012
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Petrus Antonius VanDerHeijden	01/31/2012												
RECEIVING PARTY DATA													
Name:	HITACHI GLOBAL STORAGE TECHNOLOGIES NETHERLANDS B.V.												
Street Address:	LOCATELLIKADE 1, PARNASSUSTOREN												
City:	1076 AZ AMSTERDAM												
State/Country:	NETHERLANDS												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13102959</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13102959								
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Application Number:	13102959												
CORRESPONDENCE DATA													
Fax Number:	(408)717-9155												
Email:	tom.berthold@comcast.net												
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>													
Correspondent Name:	HITACHI GLOBAL STORAGE TECHNOLOGIES												
Address Line 1:	5600 COTTLE ROAD												
Address Line 4:	San Jose, CALIFORNIA 95193												
ATTORNEY DOCKET NUMBER:	HSJ920100115US1												
NAME OF SUBMITTER:	Thomas R. Berthold												
Total Attachments: 5 source=HSJ920100115US1_AssignmentSigned#page1.tif source=HSJ920100115US1_AssignmentSigned#page2.tif source=HSJ920100115US1_AssignmentSigned#page3.tif source=HSJ920100115US1_AssignmentSigned#page4.tif source=HSJ920100115US1_AssignmentSigned#page5.tif													

CH \$40.00 13102959

## ASSIGNMENT FOR PATENT APPLICATION

Whereas, I/we the undersigned inventor(s) have invented certain improvements as set forth in the patent application entitled:


### MAGNETIC RECORDING DISK DRIVE WITH SHINGLED WRITING AND WIDE-AREA THERMAL ASSISTANCE

and filed on 5/6/2011 as Application No.: 13/102,959:

Whereas, **Hitachi Global Storage Technologies Netherlands B.V.**, having a place of business at Locatellikade 1, Parnassustoren, 1076 AZ Amsterdam, The Netherlands (hereinafter referred to as "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, I/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.

Signed on the date(s) indicated beside my (our) signature(s).

1.	Full Name	Jia-Yang Juang	
	Inventor's Signature		date 01/31/2012
2.	Full Name	Hal J. Rosen	
	Inventor's Signature		date
3.	Full Name	Barry Cushing Stipe	
	Inventor's Signature		date

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1.	Full Name	Jia-Yang Juang
	Inventor's Signature	date
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	Inventor's Signature	date 1/17/12
3.	Full Name	Barry Cushing Stipe
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	Inventor's Signature		date
2.	Full Name	Hal J. Rosen	
	Inventor's Signature		date
3.	Full Name	Barry Cushing Stipe	
	Inventor's Signature	<i>Barry Cushing Stipe</i>	date 1/9/2012

4.	Full Name	Timothy Carl Strand
	Inventor's Signature	<i>Timothy Carl Strand</i> date 1/16/2012
5.	Full Name	Petrus Antonius VanDerHeijden
	Inventor's Signature	date

4.	Full Name	Timothy Carl Strand	
	Inventor's Signature		date
5.	Full Name	Petrus Antonius VanDerHeijden	
	Inventor's Signature		date 1/31/2012