

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>Zvonimir Z. Bandic</td> <td>03/01/2012</td> </tr> <tr> <td>Cyril Guyot</td> <td>03/01/2012</td> </tr> <tr> <td>Tomohiro Harayama</td> <td>02/29/2012</td> </tr> <tr> <td>Hitoshi Kamei</td> <td>02/28/2012</td> </tr> <tr> <td>Takaki Nakamura</td> <td>02/28/2012</td> </tr> <tr> <td>Timothy Tsai</td> <td>03/01/2012</td> </tr> </tbody> </table>		Name	Execution Date	Zvonimir Z. Bandic	03/01/2012	Cyril Guyot	03/01/2012	Tomohiro Harayama	02/29/2012	Hitoshi Kamei	02/28/2012	Takaki Nakamura	02/28/2012	Timothy Tsai	03/01/2012
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RECEIVING PARTY DATA															
Name:	Hitachi Global Storage Technologies Netherlands B.V.														
Street Address:	Locatellikade 1, Pamassustoren														
City:	1076 AZ Amsterdam, Netherlands														
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>13410089</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13410089										
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Application Number:	13410089														
CORRESPONDENCE DATA															
Fax Number:	(312)670-7864														
Phone:	312-670-0736														
Email:	jpenningtonatty@cs.com														
<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:	Joan Pennington														
Address Line 1:	535 N. Michigan Avenue														
Address Line 2:	Unit 1804														
Address Line 4:	Chicago, ILLINOIS 60611														
ATTORNEY DOCKET NUMBER:	HSJ920120001US1														
NAME OF SUBMITTER:	Joan Pennington														
Total Attachments: 2 source=HSJ920120001US1_Assignment_03-01-12#page1.tif source=HSJ920120001US1_Assignment_03-01-12#page2.tif															

CH \$40.00 13410089

PATENT

ASSIGNMENT FOR PATENT APPLICATION


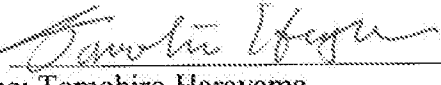
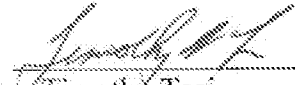
Whereas, I/we the undersigned inventor(s) have invented certain improvements as set forth in the patent application entitled:

IMPLEMENTING LARGE BLOCK RANDOM WRITE HOT SPARE SSD FOR SMR RAID

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) Signature: 
Typed Name: Zvonimir Z. Bandic Date: 03/01/2012
- 2) Signature: 
Typed Name: Cyril Guyot Date: 03/01/2012
- 3) Signature: 
Typed Name: Tomohiro Harayama Date: 2/29/2012
- 4) Signature: _____
Typed Name: Hitoshi Kamei Date: _____
- 5) Signature: _____
Typed Name: Takaki Nakamura Date: _____
- 6) Signature: 
Typed Name: Timothy Tsai Date: 3-1-12

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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.

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