

**PATENT ASSIGNMENT**

Electronic Version v1.1  
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT												
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT												
<b>CONVEYING PARTY DATA</b>													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Marco Sanvido</td> <td>02/23/2009</td> </tr> <tr> <td>Cyril Guyot</td> <td>02/23/2009</td> </tr> <tr> <td>Anand Krishnamurthi Kulkarni</td> <td>03/08/2009</td> </tr> <tr> <td>Zvonimir Bandic</td> <td>02/23/2009</td> </tr> <tr> <td>Martin Chen</td> <td>02/23/2009</td> </tr> </tbody> </table>		Name	Execution Date	Marco Sanvido	02/23/2009	Cyril Guyot	02/23/2009	Anand Krishnamurthi Kulkarni	03/08/2009	Zvonimir Bandic	02/23/2009	Martin Chen	02/23/2009
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<b>RECEIVING PARTY DATA</b>													
<b>Name:</b>	Hitachi Global Storage Technologies Netherlands, B.V.												
<b>Street Address:</b>	Locatellikade 1, 1076 AZ Amsterdam, 1070 AE												
<b>City:</b>	Amsterdam												
<b>State/Country:</b>	NETHERLANDS												
<b>PROPERTY NUMBERS Total: 1</b>													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12402415</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12402415								
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Application Number:	12402415												
<b>CORRESPONDENCE DATA</b>													
<b>Fax Number:</b>	(650)321-2465												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
<b>Email:</b>	sjc@eecspatents.com												
<b>Correspondent Name:</b>	STEVEN J. CAHILL/ HITACHI GST												
<b>Address Line 1:</b>	P.O. Box 779												
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<b>ATTORNEY DOCKET NUMBER:</b>	HSJ920080201US1												
<b>NAME OF SUBMITTER:</b>	Steven J. Cahill												

Total Attachments: 3  
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**PATENT**

**REEL: 022381 FRAME: 0165**

**500804217**

**CH \$40.00 12402415**



**ASSIGNMENT OF PATENT APPLICATION**

JOINT

WHEREAS, **Marco Sanvido**, of 4106 Marsten Ave., Belmont, CA 94002; **Cyril Guyot**, of 754 The Alameda, San Jose, CA 95126; **Anand Krishnamurthi Kulkarni**, of 274 Cresta Vista Way, San Jose, CA 95119; **Zvonimir Bandic**, of 6035 Admiralty Pl., San Jose, CA 95123; and **Martin Chen**, of 7198 Silver Lode Lane, San Jose, CA 95120; hereinafter referred to as "Assignors," are the inventors of the improvements (hereinafter referred to as "said improvements") described and set forth in the below-identified application for United States Letters Patent (hereinafter referred to as "said patent application"):

Title of Invention: Techniques For Storing Shingle Blocks in a Cache Memory Using a Data Storage Device

Date(s) of execution of Declaration: 02/23/2009; 03/08/2009

Filing Date: 03/11/2009

Application No.: 12/402,415

WHEREAS, **Hitachi Global Storage Technologies Netherlands, B.V.**, Locatellikade 1, 1076 AZ Amsterdam, 1070 AE Amsterdam, The Netherlands, hereinafter referred to as "Assignee," is desirous of acquiring an interest in said improvements and said patent application and in any U.S. Letters Patent and Registrations that may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to said improvements and said patent application and to all foreign counterpart applications (including patent, utility model and industrial designs); in and to any and all continuation applications, continuation-in-part applications, divisional applications, renewal applications, substitute applications, reissue applications, conversions, reexaminations, and extensions thereof, and all other applications filed on said improvements in the United States and all foreign countries; in and to any and all patents, reexamination certificates, reissued patents, and registrations that may be granted on the same in the United States and all countries throughout the world; and to the right to file foreign applications directly in the name of Assignee, and to claim priority from said patent application as provided by the Paris Convention.

The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any patents and registrations that may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterpart applications on said improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for said improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

The Assignors covenant with the Assignee, its successors, and assigns that no assignment, grant, mortgage, license, lien, or other agreement effecting the rights and property herein conveyed has been made to others by the Assignors, and that full right to convey the same as herein expressed is possessed by the Assignors.

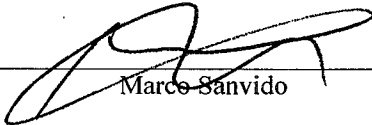
Assignment  
Attorney Docket No.: HSJ920080201US1

The Assignors hereby authorize and request the United States Patent and Trademark Office and any and all foreign Patent Offices to issue any and all Patents, when granted, to said Assignee as the assignee of the entire right, title, and interest in and to the same, for the sole use of said Assignee, its successors, and assigns, to the full end of the term for which said Patents may be granted.

Assignors hereby authorize and request The Law Office of Steven J. Cahill, to insert herein above the application number, the dates of execution of declaration, and the filing date of said patent application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 2/23/09

  
\_\_\_\_\_  
Marco Sanvido

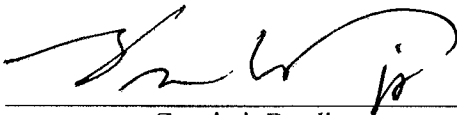
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Cyril Guyot


Dated: \_\_\_\_\_

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Anand Krishnamurthi Kulkarni

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Dated: \_\_\_\_\_

\_\_\_\_\_  
Marco Sanvido

Dated: \_\_\_\_\_

\_\_\_\_\_  
Cyril Guyot

Dated: March 8, 2009

AK Kulkarni  
\_\_\_\_\_  
Anand Krishnamurthi Kulkarni

Dated: \_\_\_\_\_

\_\_\_\_\_  
Zvonimir Bandic

Dated: \_\_\_\_\_

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Martin Chen