501910568 05/04/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Ganesh Balakrishnan	05/03/2012
Anil Krishna	05/02/2012

RECEIVING PARTY DATA

Name:	International Business Machines Corporation
Street Address:	New Orchard Road
City:	Armonk
State/Country:	NEW YORK
Postal Code:	10504

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13464084

CORRESPONDENCE DATA

 Fax Number:
 (845)892-6363

 Phone:
 845 892 4279

 Email:
 efiplaw@us.ibm.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: IBM Corp - Fishkill Drafting Center

 Address Line 1:
 2070 Route 52

 Address Line 2:
 Bldg 321 M/D 482

Address Line 4: Hopewell Junction, NEW YORK 12533

ATTORNEY DOCKET NUMBER:	FIS920120028US1
NAME OF SUBMITTER:	Alexander Viderman

Total Attachments: 4

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PATENT REEL: 028157 FRAME: 0164 CH \$40 00 1346

IBM DOCKET NUMBER: FIS920120028US1

ASSIGNMENT

Whereas, the undersigned Inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") in:

Title of the Invention: SELECTIVE WRITE-ONCE-MEMORY ENCODING IN A FLASH BASED DISK CACHE MEMORY

	eket Number provided above in the header of this Assignment, for tes Patent was executed concurrently herewith or was filed having:
Application No.:	(insert series code /serial number here if/when available)
business at Armonk, New York (herei	hines Corporation, a corporation of New York having a place of in referred to as "IBM"), desires to acquire, and each undersigned entire worldwide right, title, and interest in and to the Invention and and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned Inventor ("ASSIGNOR") hereby sells, assigns, and otherwise transfers to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned Inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned Inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

Each undersigned Inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned Inventor also hereby grants IBM, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

[Inventor Signature Page(s) Follows]

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Assignment Form.Rev2 (Updated 09/01/2009)

IBM DOCKET NUMBER: FIS920120028US1

Executed by Inventor 1			
Signature:	GANESH BALAKRISHNA	Date: 5/3/12	
	Exec	uted by Inventor 2	
Signature:	ANIL KRISHNA	Date:	

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Assignment Form.Rev2 (Updated 09/01/2009)

PATENT REEL: 028157 FRAME: 0166 IBM DOCKET NUMBER: FIS920120028US1

ASSIGNMENT

Whereas, the undersigned Inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") in:

Title of the Invention: SELECTIVE WRITE-ONCE-MEMORY ENCODING IN A FLASH BASED DISK CACHE MEMORY

and further identified by the IBM Docket which an application for a United States P	Number provided above in the header of this Assignment, for attent was executed concurrently herewith or was filed having:
Application No.:	(insert series code /serial number here if/when available)
business at Armonk, New York (herein re:	s Corporation, a corporation of New York having a place of ferred to as "IBM"), desires to acquire, and each undersigned e worldwide right, title, and interest in and to the Invention and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned Inventor ("ASSIGNOR") hereby sells, assigns, and otherwise transfers to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right. title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned Inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned Inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

Each undersigned Inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned Inventor also hereby grants IBM, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

[Inventor Signature Page(s) Follows]

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Assignment Form.Rev2 (Updated 09/01/2009)

ANIL KRISHNA

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IBM DOCKET NUMBER: FIS920120028US1

Executed by Inventor 1			
Signature:	GANESH BALAKRISHNAN	Date:	
	GANESA BALARRISHNAN		
	Executed 1	by Inventor 2	
Signature:		Date: 05/02/2012	

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Assignment Form.Rev2 (Updated 09/01/2009)

RECORDED: 05/04/2012