502006910 07/30/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
James David Sawin	07/05/2012
Luke W. Friendshuh	07/03/2012
Sumanth Jannyavula Venkata	07/03/2012
Ryan James Goss	07/09/2012
Mark Allen Gaertner	07/09/2012

RECEIVING PARTY DATA

Name:	Seagate Technology LLC	
Street Address:	10200 South DeAnza Boulevard	
City:	Cupertino	
State/Country:	CALIFORNIA	
Postal Code:	95014	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13543036

CORRESPONDENCE DATA

 Fax Number:
 9528542722

 Phone:
 952-854-2700

Email: tdotter@hdpatlaw.com

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

via US Mail.

Correspondent Name: Hollingsworth Davis

Address Line 1: 8500 Normandale Lake Blvd.

Address Line 2: Suite 320

Address Line 4: Minneapolis, MINNESOTA 55437

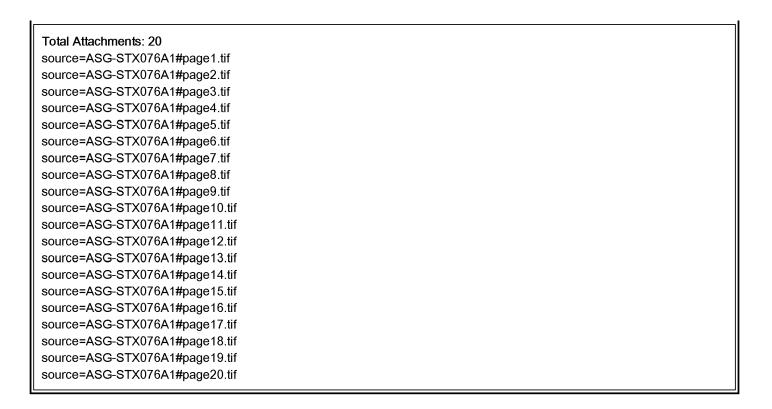
ATTORNEY DOCKET NUMBER: STX.076.A1

NAME OF SUBMITTER: William B. Ashley

PATENT

502006910 REEL: 028677 FRAME: 0339

4367



PATENT REEL: 028677 FRAME: 0340

Seagate Docket No.:
Atty. Docket No.:

STL17297.00US STX.076.A1

ASSIGNMENT

Ανε	IEREAS, I/we James David Sawin of 3 Heather Lane, Sterling, MA 01564, Luke enue, Elko, MN 55020, Sumanth Jannyavula Venkata of 1482 Savanna Drive, S	hakopee, MN 55379, Ryan
	nes Goss of 5088 Pondsedge Lane, Prior Lake, MN 55372, and Mark Allen Gae	
	Inais Heights, MN 55127 are the inventor(s) of an invention entitled <u>DEFINING</u>	
<u>CA</u>	CHE SPECULATIVE READ DATA that is the subject matter of: (check all that a	pply)
	a provisional application for Letters Patent which is identifiable in the United States by Application No filed on;	
\bowtie	an application for Letters Patent which is identifiable in the United States Paten	it and Trademark Office by
	Application No and/or executed on and/or executed on	even date herewith: and
	an international application for Letters Patent filed pursuant to the Patent Coop	
	identifiable in the United States Receiving Office by Application No.	filed on
	; and/or executed on even date herewith:	

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under the laws of the State of Delaware and the United States of America, and having offices at 10200 South DeAnza Boulevard, Cupertino, California, 95014 USA, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/we transfer to Assignee, its successors and assigns, my/our entire right, title and interest in and to the invention, the above-identified applications, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I/we authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

I/We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. I/We further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries and appoint Assignee the common representative in the above identified international application and any international application for the invention.

Seagate Docket No. : Atty. Docket No.:

STL17297.00US STX.076.A1

	Jaum Java Hasem James David Sawin (Inventor)
***	7/5//A Date
State of MassachuseHs)	2
County of Worcester	
On July 5th, 2012 before me. M	artha Lloret - Notary Public (insert name and title of the officer)
whose name is subscribed to the within instrument and a	proved to me on the basis of satisfactory evidence to be the person knowledged to me that he/she executed the same in his/her instrument the person, or the entity upon behalf of which the person
I certify under PENALTY OF PERJURY under the laws of paragraph is true and correct.	the State of MassachuseHs that the foregoing
WITNESS my hand and official seal.	MARTHA LLORET
Signature Of Notary Public (Seal)	Commensedit of Massachuses My Commission Explices Mey 24, 2048
	Luke W. Friendshuh (Inventor)
State of	Luke W. Friendshuh (Inventor) Date
State of)	· · · · · · · · · · · · · · · · · · ·
County of)	Date
	Date
County of	Date
County of	Date (insert name and title of the officer) proved to me on the basis of satisfactory evidence to be the person sknowledged to me that he/she executed the same in his/her astrument the person, or the entity upon behalf of which the person
County of	Date (insert name and title of the officer) proved to me on the basis of satisfactory evidence to be the person sknowledged to me that he/she executed the same in his/her astrument the person, or the entity upon behalf of which the person
On	Date (insert name and title of the officer) proved to me on the basis of satisfactory evidence to be the person sknowledged to me that he/she executed the same in his/her astrument the person, or the entity upon behalf of which the person

PATENT

REEL: 028677 FRAME: 0342

State of) County of) On before me,(insert name and title of the officer) personally appeared Sumanth Jannyavula Venkata (Inventor), who proved to me on the basis of satisfactory evidence person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of that the foregoing paragraph is true and correct.	6.A1
State of	
State of	
County of	
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Onbefore me,(insert name and title of the officer) personally appeared Sumanth Jannyavula Venkata (Inventor), who proved to me on the basis of satisfactory evidence person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same ir authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of that the foregoing	
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I certify under PENALTY OF PERJURY under the laws of the State of that the foregoing paragraph is true and correct.	n his/her
WITNESS my hand and official seal.	
Signature (Seal) Signature of Notary Public	
Ryan James Goss (Inventor)	
Date State of)	
County of)	
Onbefore me,(insert name and title of the officer)	
personally appeared Ryan James Goss (Inventor), who proved to me on the basis of satisfactory evidence to be the p whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the acted, executed the instrument.	ir
I certify under PENALTY OF PERJURY under the laws of the State of that the foregoing paragraph is true and correct.	
WITNESS my hand and official seal.	
Signature (Seal) Signature of Notary Public	

- U.S. Assignment - Seagate Technology LLC

-3-

Rev: 03-07-2011

Seagate Docket No.: STL17297.00US

		Seagate Docket No. : Atty. Docket No.:	
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		Mark Allen Gaertner (Inventor)	<u>.</u>
State of)	Date	
County of)		
On	before me,	(insert name and title of the officer)	
		(insert name and title of the officer)	
whose name is subscribe	d to the within instrument and a that by his/her signature on the	o proved to me on the basis of satisfactory evid acknowledged to me that he/she executed the instrument the person, or the entity upon behi	same in his/her
I certify under PENALTY paragraph is true and cor	OF PERJURY under the laws or rect.	of the State ofthat the	foregoing
WITNESS my hand and o	official seal.		
Olain akuun	(0	as.	

Signature of Notary Public

ASSIGNMENT

WHEREAS, I/we James David Sawin of 3 Heather Lane, Sterling, MA 01564, Luke W. Friendshuh of 27555 Jonquil Avenue, Elko, MN 55020, Sumanth Jannyavula Venkata of 1482 Savanna Drive, Shakopee, MN 55379, Ryan James Goss of 5088 Pondsedge Lane, Prior Lake, MN 55372, and Mark Allen Gaertner of 3273 Costa Drive, Vadnais Heights, MN 55127 are the inventor(s) of an invention entitled DEFINING ADDRESS RANGES USED TO CACHE SPECULATIVE READ DATA that is the subject matter of: (check all that apply)

a provisional application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. _______ filed on _______;

an application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. _______ filed on ______ and/or executed on even date herewith: and ______ an international application for Letters Patent filed pursuant to the Patent Cooperation Treaty which is identifiable in the United States Receiving Office by Application No. _______ filed on ______ filed on _______ filed on ______ and/or executed on even date herewith:

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under the laws of the State of Delaware and the United States of America, and having offices at 10200 South DeAnza Boulevard, Cupertino, California, 95014 USA, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/we transfer to Assignee, its successors and assigns, my/our entire right, title and interest in and to the invention, the above-identified applications, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I/we authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

I/We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. I/We further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries and appoint Assignee the common representative in the above identified international application and any international application for the invention.

Seagate Docket No.: Atty. Docket No.:

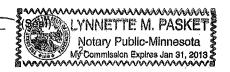
STL17297.00US STX.076.A1

James David Sawin (Inventor)	
Date	
State of)	
County of	
On before me, (insert name and title of the officer)	
(insert name and title of the officer)	
personally appeared James David Sawin (Inventor), who proved to me on the basis of satisfactory evidence to be whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which acted, executed the instrument.	nis/her
I certify under PENALTY OF PERJURY under the laws of the State of that the foregoing paragraph is true and correct.	}
WITNESS my hand and official seal.	
Signature (Seal) Signature of Notary Public	
Lyke W. Friendshuh (Inventor)	,
Date	
State of Minnesota	
County of Scott On Scott before me, Cinsert name and title of the officer)	
on 20173,2012 before me, Lynnalle m. Paskert	
(insert name and title of the officer)	
personally appeared Luke W. Friendshuh (Inventor), who proved to me on the basis of satisfactory evidence to be whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in hi authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which acted, executed the instrument.	s/her
I certify under PENALTY OF PERJURY under the laws of the State of wine sobe that the foregoing	

WITNESS my hand and official seal.

paragraph is true and correct.

Signature Signature of Notary Public - U.S. Assignment - Seagate Technology LLC



Rev: 03-07-2011

	Sumanth Jannyavula Venkata (Inventor)
State of)	
County of)	
On before me,	
	(insert name and title of the officer)
person whose name is subscribed to the within instrume	ntor), who proved to me on the basis of satisfactory evidence to be the nt and acknowledged to me that he/she executed the same in his/her instrument the person, or the entity upon behalf of which the person
I certify under PENALTY OF PERJURY under the laws of paragraph is true and correct.	of the State of that the foregoing
WITNESS my hand and official seal.	
Signature (Seal Signature of Notary Public)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Ryan James Goss (Inventor)
State of)	
County of)	
On before me,	
	(insert name and title of the officer)
whose name is subscribed to the within instrument and a	proved to me on the basis of satisfactory evidence to be the person acknowledged to me that he/she executed the same in his/her instrument the person, or the entity upon behalf of which the person
I certify under PENALTY OF PERJURY under the laws of paragraph is true and correct.	of the State of that the foregoing
WITNESS my hand and official seal.	
Signature (Seal	)

Rev: 03-07-2011

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·
	Mark Allen Gaertner (Inventor)
State of)	Date
County of)	
On before me,	
	(insert name and title of the officer)
whose name is subscribed to the within instrument and ac	proved to me on the basis of satisfactory evidence to be the person cknowledged to me that he/she executed the same in his/her nstrument the person, or the entity upon behalf of which the person
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WITNESS my hand and official seal.	
Signature (Seal) Signature of Notary Public	

Seagate Docket No.: Atty, Docket No.:

STL17297.00US STX.076.A1

ASSIGNMENT

WHEREAS, I/we James David Sawin of 3 Avenue, Elko, MN 55020, Sumanth Janny James Goss of 5088 Pondsedge Lane, Pr Vadnais Heights, MN 55127 are the invent CACHE SPECULATIVE READ DATA that	ravula Venkata of 1482 Savanna Drive for Lake, MN 55372, and Mark Allen (tor(s) of an invention entitled <u>DEFINI</u> N	e, Shakopee, MN 55379, Ryan Gaertner of 3273 Costa Drive, NG ADDRESS RANGES USED TO
□ a provisional application for Letters Paby Application No. □ an application for Letters Patent which Application No. □ an international application for Letters identifiable in the United States Received: □ ; and/or exections.	filed on	; atent and Trademark Office by on even date herewith: and ooperation Treaty which is

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under the laws of the State of Delaware and the United States of America, and having offices at 10200 South DeAnza Boulevard, Cupertino, California, 95014 USA, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/we transfer to Assignee, its successors and assigns, my/our entire right, title and interest in and to the invention, the above-identified applications, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I/we authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

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Seagate Docket No.:
Atty. Docket No.:

STL17297.00US STX.076.A1

James David Sawin (Inventor) Date State of ______) County of _________) On _______before me, ______(insert name and title of the officer) personally appeared James David Sawin (Inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument, I certify under PENALTY OF PERJURY under the laws of the State of ______ that the foregoing paragraph is true and correct. WITNESS my hand and official seal. ____ (Seal) Signature of Notary Public Luke W. Friendshuh (Inventor) Date State of ______) County of ______) On _______before me, _______(insert name and title of the officer) personally appeared Luke W. Friendshuh (Inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of ______ that the foregoing paragraph is true and correct. WITNESS my hand and official seal. (Seal) Signature of Notary Public - U.S. Assignment - Seagate Technology LLC -2-Rev: 03-07-2011

> PATENT REEL: 028677 FRAME: 0350

Seagate Docket No.: STL17297.00US Atty. Docket No.: STX.076.A1 Sumanth Jannyavula Venkata (Inventor) State of Thomas School before me. (insert name and title of the officer) personally appeared Sumanth Jannyavula Venkata (Inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of paragraph is true and correct. WITNESS my hand and official seal. LYNNETTE M. PASKET Notary Public-Wirmesota , sons y Public-İvimnesota My Commission Expires Jen 91, 2018 V Signature of Notary Public Ryan James Goss (Inventor) Date State of) before me, (insert name and title of the officer) personally appeared Ryan James Goss (Inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of ______ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)
Signature of Notary Public

		Seagate Docket No. : Atty. Docket No.:	
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		Mark Allen Gaertner (Inventor)	
State of)	Date	
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I certify under PENALTY OF paragraph is true and correc	FPERJURY under the laws of st.	the State of that the	foregoing
WITNESS my hand and offic	cial seal.		
Signatura	/Canti		

Signature of Notary Public

ASSIGNMENT

WHEREAS, I/we James David Sawin of 3 Heather Lane, Sterling, MA 01564, Luke W. Friendshuh of 27555 Jonquil Avenue, Elko, MN 55020, Sumanth Jannyavula Venkata of 1482 Savanna Drive, Shakopee, MN 55379, Ryan James Goss of 5088 Pondsedge Lane, Prior Lake, MN 55372, and Mark Allen Gaertner of 3273 Costa Drive, Vadnais Heights, MN 55127 are the inventor(s) of an invention entitled DEFINING ADDRESS RANGES USED TO CACHE SPECULATIVE READ DATA that is the subject matter of: (check all that apply)

a provisional application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. _______ filed on _______;

an application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. _______ filed on ______ and/or executed on even date herewith: and ______ an international application for Letters Patent filed pursuant to the Patent Cooperation Treaty which is identifiable in the United States Receiving Office by Application No. _______ filed on ______ filed on _______ filed on ______ and/or executed on even date herewith:

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under the laws of the State of Delaware and the United States of America, and having offices at 10200 South DeAnza Boulevard, Cupertino, California, 95014 USA, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

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	James David Sawin (Inventor)
State of)	Date
County of)	
On before me,	(insert name and title of the officer)
personally appeared James David Sawin (Inventor), who whose name is subscribed to the within instrument and a	proved to me on the basis of satisfactory evidence to be the person acknowledged to me that he/she executed the same in his/her instrument the person, or the entity upon behalf of which the person
WITNESS my hand and official seal.	
Signature (Seal) Signature of Notary Public)
	Luke W. Friendshuh (Inventor)
State of)	Date
County of)	
On before me,	(insert name and title of the officer)
whose name is subscribed to the within instrument and a	proved to me on the basis of satisfactory evidence to be the person icknowledged to me that he/she executed the same in his/her instrument the person, or the entity upon behalf of which the person
I certify under PENALTY OF PERJURY under the laws o paragraph is true and correct.	f the State of that the foregoing
WITNESS my hand and official seal.	
Signature (Seal))
- U.S. Assignment - Seagate Technology LLC	-2- Rev: 03-07-201

PATENT REEL: 028677 FRAME: 0354

	Seagate Docket No.: ST Atty. Docket No.:	STX.076.A1
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So	umanth Jannyavula Venkata (Inventor)	_
State of)	Date	-
County of)		
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personally appeared Sumanth Jannyavula Venkata (Inventor), who person whose name is subscribed to the within instrument and ac authorized capacity, and that by his/her signature on the instrume acted, executed the instrument.	o proved to me on the basis of satisfactory knowledged to me that he/she executed th	e same in his/her
I certify under PENALTY OF PERJURY under the laws of the State paragraph is true and correct.	e of that the foreg	oing
WITNESS my hand and official seal.		
Signature (Seal) Signature of Notary Public		
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: D.	an James Goss (Inventor)	
, ry	7/9/12	
State of MN	Date	
County of Scatt		
On $7-9-13$ before me, $Rhonda$ (insert	name and title of the officer)	-1
personally appeared Ryan James Goss (Inventor), who proved to r whose name is subscribed to the within instrument and acknowled authorized capacity, and that by his/her signature on the instrument acted, executed the instrument.	ged to me that he/she executed the same	in his/her
I certify under PENALTY OF PERJURY under the laws of the State paragraph is true and correct.	e of that the forego	ping
WITNESS my hand and official seal. Signature	RHONDA M. CARL Notary Public-Minnesota Commission Expires Jan 31, 2016	
- U.S. Assignment Seagate Technology LLC -3-		Rev: 03-07-2011

PATENT REEL: 028677 FRAME: 0355

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	Mark Allen Gaertner (Inventor)
	 Date
State of)	
County of)	
On before me,(ir	
(ir	sert name and title of the officer)
whose name is subscribed to the within instrument and acknow	ed to me on the basis of satisfactory evidence to be the person wledged to me that he/she executed the same in his/her ment the person, or the entity upon behalf of which the person
I certify under PENALTY OF PERJURY under the laws of the paragraph is true and correct.	State of that the foregoing
WITNESS my hand and official seal.	
Signature (Seal) Signature of Notary Public	

# **ASSIGNMENT**

WHEREAS, I/we James David Sawin of 3 Heather Lane, Sterling, MA 01564, Luke W. Friendshuh of 27555 Jonquil Avenue, Elko, MN 55020, Sumanth Jannyavula Venkata of 1482 Savanna Drive, Shakopee, MN 55379, Ryan James Goss of 5088 Pondsedge Lane, Prior Lake, MN 55372, and Mark Allen Gaertner of 3273 Costa Drive, Vadnais Heights, MN 55127 are the inventor(s) of an invention entitled DEFINING ADDRESS RANGES USED TO CACHE SPECULATIVE READ DATA that is the subject matter of: (check all that apply)

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an application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. _______ filed on ______ and/or executed on even date herewith: and ______ an international application for Letters Patent filed pursuant to the Patent Cooperation Treaty which is identifiable in the United States Receiving Office by Application No. _______ filed on ______ filed on _______ filed on ______ and/or executed on even date herewith:

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under the laws of the State of Delaware and the United States of America, and having offices at 10200 South DeAnza Boulevard, Cupertino, California, 95014 USA, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/we transfer to Assignee, its successors and assigns, my/our entire right, title and interest in and to the invention, the above-identified applications, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I/we authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

I/We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. I/We further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries and appoint Assignee the common representative in the above identified international application and any international application for the invention.

		James David Sawin (Inventor)	
		Date	
State of			
County of			
On	before me,	(insert name and title of the officer)	<u> </u>
		(insert name and title of the officer)	
whose name is subscribed	I to the within instrument and a nat by his/her signature on the	o proved to me on the basis of satisfactory evidence acknowledged to me that he/she executed the san instrument the person, or the entity upon behalf o	ne in his/her
I certify under PENALTY C paragraph is true and corr		of the State of that the fore	egoing
WITNESS my hand and o	fficial seal.		
SignatureSignatur	(Sea e of Notary Public	l)	
		Luke W. Friendshuh (Inventor)	
State of	,	Date	_
County of	)		
On	before me,	(insert name and title of the officer)	<u> </u>
whose name is subscribed	I to the within instrument and a nat by his/her signature on the	o proved to me on the basis of satisfactory evidence acknowledged to me that he/she executed the san instrument the person, or the entity upon behalf o	ne in his/her
I certify under PENALTY C paragraph is true and corr		of the State of that the fore	egoing
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**PATENT REEL: 028677 FRAME: 0358** 

Rev: 03-07-2011

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		Sumanth Jannyavula Venkata (Inventor)
		Date
State of)	
County of)	
On	before me,	(insert name and title of the officer)
		(insert name and title of the officer)
person whose name is	s subscribed to the within instrume nd that by his/her signature on the	ntor), who proved to me on the basis of satisfactory evidence to be the nt and acknowledged to me that he/she executed the same in his/her instrument the person, or the entity upon behalf of which the person
I certify under PENAL paragraph is true and		of the State of that the foregoing
WITNESS my hand ar	nd official seal.	
SignatureSign	(Sea ature of Notary Public)
~~~~~~~	~~~~~~	Ryan James Goss (Inventor)
		Date
State of	)	
County of	)	
On	before me,	
		(insert name and title of the officer)
whose name is subsci	ibed to the within instrument and a nd that by his/her signature on the	proved to me on the basis of satisfactory evidence to be the person acknowledged to me that he/she executed the same in his/her instrument the person, or the entity upon behalf of which the person
I certify under PENAL paragraph is true and		f the State of that the foregoing
WITNESS my hand ar	nd official seal.	
SignatureSign	(Sea ature of Notary Public	)

Seagate Docket No.:
Atty. Docket No.:

STL17297.00US

STX.076.A1

Min ale Jeur
Mark Allen Gaertner (Inventor)
7-9-12

Date

State of MU

County of Scott

On 9-9-13 before me,

Ahonda Carl natare
(insert name and title of the officer)

personally appeared Mark Allen Gaertner (Inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _______ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public (Seal)



- U.S. Assignment - Seagate Technology LLC

Rev: 03-07-2011