505301774 01/29/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5348552

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
III HOLDINGS 3, LLC	06/19/2018

RECEIVING PARTY DATA

Name:	SEAGATE TECHNOLOGY LLC
Street Address:	10200 S. DE ANZA BLVD.
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

PROPERTY NUMBERS Total: 11

Property Type	Number
Application Number:	12459090
Application Number:	14830322
Application Number:	14920986
Application Number:	10096925
Application Number:	11176390
Application Number:	11672485
Application Number:	12525265
Application Number:	12225901
Application Number:	10811429
Application Number:	09864060
Application Number:	10950563

CORRESPONDENCE DATA

Fax Number: (405)553-2855

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

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 4055532828

Email: danderson@hallestill.com

Correspondent Name: HALL ESTILL ATTORNEYS AT LAW
Address Line 1: 100 N. BROADWAY, SUITE 2900
Address Line 4: OKLAHOMA CITY, OKLAHOMA 73102

PATENT 505301774 REEL: 048167 FRAME: 0929

ATTORNEY DOCKET NUMBER:	GEN074412 (#4)		
NAME OF SUBMITTER:	RANDALL K. MCCARTHY		
SIGNATURE:	/Randall K. McCarthy/		
DATE SIGNED:	01/29/2019		
Total Attachments: 13			
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ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, III Holdings 3, LLC, a Delaware limited liability company, with an address at 251 Little Falls Drive, Wilmington, DE 19808 ("Assignor"), does hereby sell, assign, transfer, and convey unto Seagate Technology LLC, a Delaware limited liability company with an address at 10200 S De Anza Blvd, Cupertino, CA 95014 ("Assignee"), all of Assignor's right, title, and interest in and to the following (collectively, the "Assigned Patent Rights"):

- (a) the patents and patent applications listed on Appendix 1 (the "Patents");
- (b) any future reissues, reexaminations, extensions, continuations, continuing prosecution application, requests for continuing examinations, divisions, and registrations of any of the Patents;
- (c) rights to apply in any or all countries of the world for future patents, certificates of invention, utility models, industrial design protections, design patent protections, or other future governmental grants or issuances of any type related to the Patents; and
- (d) causes of action and enforcement rights of any kind under, or on account of, any of the Patents and/or any of the items described in either of the foregoing categories (b) or (c), including, without limitation, all causes of action, enforcement rights and all other rights to seek and obtain any other remedies of any kind for past, current and future infringement.

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all future patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Assigned Patent Rights in the name of Assignee, as the assignee to the entire interest therein. This Assignment of Patent Rights will inure for the benefit of any permitted successors or assigns of Assignee.

Assignor will, at the reasonable request of Assignee, take all reasonable steps necessary and proper, to confirm the assignment to Assignee of the Assigned Patent Rights pursuant to this Assignment of Patent Rights, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by-country basis, to assist Assignee in obtaining and perfecting the Assigned Patent Rights.

IN WITNESS WHEREOF this Assignment of Patent Rights is executed on 6-19, 2018, to be effective as of June 20, 2018.

ASSIGNOR:

By:
Name:
Title:

RES (DEAT

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	COUNTY OF CHY	or Daw)		
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assic Seaga	ener Te Technology LL	Declan C. F Notary Pul Commissioned Arthur Cox Bt 10 Earlsfort T Dublin 2, Ire	olic for Life pilding errace	
By: Name; Title:				A STATE OF THE STA
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	COUNTY OF)		
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	instrument the persor instrument,	i, or the entity upon behali	of which the person acted	l, executed the
	WITNESS my hand and	d official seal.		
	Signature		(Seal)	

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

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Description of Attached Document Asgmt of Title or Type of Document: Number of Pages: Capacity(ies) Claimed by Signer(s)	Patent Rights Document Date: han Named Above:
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Notary Public - California Santa Clara County Commission # 2175216 My Comm, Expires Dec 15, 2020	Signature of Notary Public
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subscribed to the within instrument and acknowledge	bry evidence to be the person(s) whose name(s) is/are owledged to me that he/she/they executed the same in a his/her/their signature(s) on the instrument the person(s), acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws
personally appeared	Name(s) of Signer(s)
Date personally appearedKat	Here Insert Name and Title of the Officer
On June 20, 2018 before me, Der	metrios Nicholas Mavrikis / Notary Public
County of Santa Clara)
State of California)

Appendix 1 to Exhibit A

Patent/		Issue Date/	• •
Application Number	Country	Filing Date	Title of Patent and Inventors
7769015 (11/853306)	US	8/3/2010 (9/11/2007)	High performance network adapter (HPNA)
			Kaiyuan Huang; Michael F. Kemp; Kenneth E. Neudorf
7908372 (11/761827)	US	3/15/2011 (6/12/2007)	Token based flow control for data communication
			Kaiyuan Huang; Michael F. Kemp; Ernst Munter
8631106 (11/761865)	US .	1/14/2014 (6/12/2007)	Secure handle for intra- and inter-processor communications
			Kaiyuan Huang; Michael F. Kemp; Ernst Munter
7664026 (11/761804)	US	2/16/2010 (6/12/2007)	Methods and systems for reliable data transmission using selective retransmission
			Kaiyuan Huang; Michael F. Kemp; Ernst Munter
9501447 (14/107913)	US	11/22/2016 (12/16/2013)	Secure handle for intra- and inter-processor communications
			Kaiyuan Huang; Michael F. Kemp; Ernst Munter
9836431 (14/816403)	US	12/5/2017 (8/3/2015)	Secure handle for intra- and inter-processor communications
			Kaiyuan Huang; Michael F. Kemp; Ernst Munter
15/830334	US	12/4/2017	SECURE HANDLE FOR INTRA-AND INTER- PROCESSOR COMMUNICATIONS
			Kaiyuan Huang; Michael F. Kemp; Ernst Munter

	Issue Date/	
Country	Filing Date	Title of Patent and Inventors
US	5/30/2018	SECURE HANDLE FOR
		INTRA-AND INTER-
		PROCESSOR
		COMMUNICATIONS
		Kaiyuan Huang; Michael F.
		Kemp; Ernst Munter;
US		Memory emulation using
	(10/17/2007)	resistivity-sensitive memory
		Robert Norman
US	10/5/2010	Transient storage device
	(12/3/2008)	emulation using resistivity-
		sensitive memory
		Robert Norman
US	1/25/2011	Memory emulation using
	(9/16/2009)	resistivity-sensitive memory
		Robert Norman
US	11/22/2011	System using non-volatile
	(10/5/2010)	resistivity-sensitive memory
		for emulation of embedded
		flash memory
		Robert Norman
US	9/18/2012	Integrated circuits using non
	(11/22/2011)	volatile resistivity sensitive
		memory for emulation of
		embedded flash memory
		Robert Norman
US	9/18/2012	Memory emulation using
	(1/24/2011)	resistivity-sensitive memory
		Robert Norman
US	7/6/2010	Media player with non-volatile
	(12/21/2007)	memory
		Robert Norman
US	8/16/2011	Solid state drive with non-
	(12/2/2008)	volatile memory for a media
		device
		Robert Norman
	US US US US US US	US 9/22/2009 (10/17/2007) US 10/5/2010 (12/3/2008) US 1/25/2011 (9/16/2009) US 11/22/2011 (10/5/2010) US 9/18/2012 (11/22/2011) US 9/18/2012 (1/24/2011) US 7/6/2010 (12/21/2007) US 8/16/2011

Patent/	Commen	Issue Date/	Title of Datont and Larrantee
Application Number 8000122	Country US	Filing Date 8/16/2011	Title of Patent and Inventors
(12/803809)	au	(7/6/2010)	Media player with non-volatile memory
			Robert Norman
7327600	US	2/5/2008	Storage controller for multiple
(11/342491)		(1/30/2006)	configurations of vertical memory
			Robert Norman
7649788	US	1/19/2010	Buffering systems for
(12/006970)		(1/8/2008)	accessing multiple layers of
			memory in integrated circuits
			Robert Norman
7961527	US	6/14/2011	Buffering systems for
(12/657385)		(1/19/2010)	accessing multiple layers of
,			memory in integrated circuits
			Robert Norman
8120970	US	2/21/2012	Buffering systems for
(13/134734)		(6/14/2011)	accessing multiple layers of
			memory in integrated circuits
			Robert Norman
7765380	US	7/27/2010	Fast data access through page
(11/655599)		(1/19/2007)	manipulation
			Robert Norman
7836273	US	11/16/2010	Fast data access through page
(12/804630)		(7/26/2010)	manipulation
			Robert Norman
6993649	US	1/31/2006	Method of altering a computer
(10/321772)		(12/17/2002)	operating system to boot and
(,		,	run from protected media
			John Alan Hensley
7934033	US	4/26/2011	PCI-express function proxy
(12/265695)	·	(11/5/2008)	
,			Kiron Malwankar; Daniel
			Talayco; Ali Ekici;
8037037	US	10/11/2011	System for tracking media
(11/848071)		(8/30/2007)	content transactions
			Scott White; Ian C. Schmehl
		L	

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Patent/		Issue Date/	
Application Number	Country	Filing Date	Title of Patent and Inventors
8447777	US	5/21/2013	System for tracking media
(13/228529)		(9/9/2011)	content transactions
			Scott White; Ian C. Schmehl
9219743	US	12/22/2015	System for tracking media
(13/868212)		(4/23/2013)	content transactions
			Scott White; Ian C. Schmehl
14/974986	US	12/18/2015	SYSTEM FOR TRACKING
14/2/4200	05	12/10/2015	MEDIA CONTENT
			TRANSACTIONS
	:		TRANSACTIONS
			Scott White; Ian C. Schmehl
7921268	US	4/5/2011	Method and system for
(11/939633)		(11/14/2007)	function-specific time-
			configurable replication of
			data
			Holger Jakob
12/262308	US	10/31/2008	Method and system for
			function-specific time-
			configurable replication of
			data manipulating functions
			Holger Jakob
DE602008009721.8	DE	9/14/2011	Method and system for
(DE602008009721.8)		(11/13/2008)	function-specific time-
(,		(,	configurable replication of
			data manipulating functions
			Holger Jakob
FR2060973	FR	9/14/2011	Method and system for
(FR08019846.8)	FK	(11/13/2008)	function-specific time-
(FKU6019640.6)		(11/13/2006)	configurable replication of
			data manipulating functions
			data mampulating functions
			Holger Jakob
GB2060973	GB	9/14/2011	Method and system for
(GB08019846.8)		(11/13/2008)	function-specific time-
			configurable replication of
			data manipulating functions
			Holger Jakob

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<u>Patent/</u>		Issue Date/	
Application Number	Country	Filing Date	Title of Patent and Inventors
7689007	US	3/30/2010	Methods and systems for
(11/227620)		(9/16/2005)	protection of identity
			Joseph M. Bous; Gabriel A.
			Assaad; James Marciano
7991201	US	8/2/2011	Methods and systems for
(12/632626)		(12/7/2009)	protection of identity
			Joseph M. Bous; Gabriel A.
			Assaad; James Marciano
8520904	US	8/27/2013	Methods and systems for
(13/569766)		(8/8/2012)	protection of identity
			Joseph M. Bous; Gabriel A.
			Assaad; James Marciano
9087214	US	7/21/2015	Methods and systems for
(13/970171)		(8/19/2013)	protection of identity
			Joseph M. Bous; Gabriel A.
			Assaad; James Marciano
9195775	US	11/24/2015	System and method for
(12/459090)		(6/26/2009)	managing and/or rendering
			internet multimedia content in
			a network
			Osama Al-Shaykh; Rick
			Schwartz; Ralph Neff;
			Magdalena Leuca Espelien;
			Greg Sherwood
CNZL201080027459.0	CN	10/12/2016	System and method for
(CN201080027459.0)		(6/4/2010)	managing and/or rendering
			internet multimedia content in
			a network
			Coorse Al Charles Balat
			Osama Al-Shaykh; Ralph
			Neff; Magdalena Leuca
			Espelien; Rick Schwartz; Greg
			Sherwood

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EP10792432.6 EP 6/4/2010 System and method for managing and/or rendering internet multimedia content i a network Osama Al-Shaykh; Ralph Neff; Magdalena Leuca	~	<u>'atent/</u>		<u> Issue Date/</u>	
managing and/or rendering internet multimedia content i a network Osama Al-Shaykh; Ralph Neff; Magdalena Leuca Espelien; Rick Schwartz; Gre					Title of Patent and Inventors
internet multimedia content i a network Osama Al-Shaykh; Ralph Neff; Magdalena Leuca Espelien; Rick Schwartz; Gre	EP	P10792432.6	EP	6/4/2010	
a network Osama Al-Shaykh; Ralph Neff; Magdalena Leuca Espelien; Rick Schwartz; Gre					
Osama Al-Shaykh; Ralph Neff; Magdalena Leuca Espelien; Rick Schwartz; Gre					
Neff; Magdalena Leuca Espelien; Rick Schwartz; Gre					a network
Neff; Magdalena Leuca Espelien; Rick Schwartz; Gre					Osama Al-Shavkh: Ralph
Espelien; Rick Schwartz; Gre					
Sherwood					Espelien; Rick Schwartz; Greg
JP 5728675 JP 4/17/2015 System and method for	JP		JP		1 "
(JP2012-517480) (6/4/2010) managing and/or rendering		(P2012-517480)		(6/4/2010)	
					internet multimedia content in
a network					a network
Osama Al-Shaykh; Ralph		•			Osama Al-Shaykh; Ralph
Neff; Magdalena Leuca					1 7 1
Espelien; Rick Schwartz; Gre				-	Espelien; Rick Schwartz; Greg
Sherwood					Sherwood
14/830322 US 8/19/2015 SYSTEM AND METHOD	US	4/830322	US	8/19/2015	
FOR USING AN					
APPLICATION ON A					1
MOBILE DEVICE TO					1
TRANSFER INTERNET MEDIA CONTENT					1
MEDIA CONTENT					MEDIA CONTENT
Greg Sherwood; James J.					Greg Sherwood; James J.
Kosmach; Osama Al-Shaykh	***				Kosmach; Osama Al-Shaykh;
Richard June; Eva MacKay					
9716915 US 7/25/2017 System and Method for	US		US		1 -
(14/920986) (10/23/2015) Managing and/or Rendering		14/920986)		(10/23/2015)	
					Internet Multimedia Content in
a Network					a Network
Osama Al-Shaykh; Ralph					Osama Al-Shaykh; Ralph
Neff; Magdalena Leuca					· · · · · · · · · · · · · · · · · · ·
Espelien; Rick Schwartz;					Espelien; Rick Schwartz;
15/658097 US 7/24/2017 System and method for	US	5/658097	US	7/24/2017	
managing and/or rendering					
					internet multimedia content in
a network					a network
Osama Al-Shaykh; Ralph					Osama Al-Shaykh: Ralph
Neff; Magdalena Leuca					1
Espelien; Rick Schwartz;					, ,

Patent/		Issue Date/	
Application Number	Country	Filing Date	Title of Patent and Inventors
6957292	US	10/18/2005	Universal Serial Bus circuit
(10/096925)		(3/14/2002)	which detects connection
			status to a USB host
			Richard Croyle
JP4267857	JP	2/27/2009	General-purpose serial bus
(JP2002-076882)		(3/19/2002)	circuit
	***************************************		Richard Croyle
DE60217214.4	DE	1/3/2007	Universal serial bus circuit to
(DE60217214.4)		(4/5/2002)	detect connection status
			Richard Croyle
ES2278874	ES	1/3/2007	Universal serial bus circuit to
(ES02252454.0)		(4/5/2002)	detect connection status
			7:1.16
ED 10 40 00 2	TD	1/2/0007	Richard Croyle
FR1248203	FR	1/3/2007	Universal serial bus circuit to
(FR02252454.0)		(4/5/2002)	detect connection status
	***		Dichard Craylo
GB1248203	GB	1/3/2007	Richard Croyle Universal serial bus circuit to
(GB02252454.0)	OB	(4/5/2002)	detect connection status
(GD02232+34.0)		(4/3/2002)	detect connection status
			Richard Croyle
IT1248203	IT	1/3/2007	Universal serial bus circuit to
(IT02252454.0)		(4/5/2002)	detect connection status
(======================================		(,	
			Richard Croyle
NL1248203	NL	1/3/2007	Universal serial bus circuit to
(NL02252454.0)		(4/5/2002)	detect connection status
			Richard Croyle
7177969	US	2/13/2007	Universal serial bus circuit
(11/176390)		(7/8/2005)	which detects connection
			status to a USB host
			Did ald
77.22.200	TIC	5/10/0000	Richard Croyle
7533209	US	5/12/2009	Universal serial bus circuit
(11/672485)		(2/7/2007)	which detects connection
	***		status to a USB host
			Dichard Croyle
**************************************			Richard Croyle

Patent/	C 4	Issue Date/	THE CD 4 1 TY
Application Number	Country	Filing Date 2/11/2008	Title of Patent and Inventors
EP08709981.8	EP	2/11/2008	Dual Or Multiple Row Package
			Peter Dirks; Dirk Groeneveld
8067830	US	11/29/2011	Dual Or Multiple Row
(12/525265)		(2/11/2008)	Package
			Peter Dirks;Dirk Groeneveld
8208214	US	6/26/2012	Magnetic sensor device having
(12/225901)		(3/27/2007)	near field light generation
			section employing a dielectric
			layer between a protruding
			metal layer and magnetic layer
			Noboru Iwata; Shintaro
			Miyanishi; Tomoki Ono;
			Yoshiteru Murakami
JP4004984	JP	8/31/2007	Electromagnetic field
(JP2003-092383)		(3/28/2003)	generating element,
			information recording /
			reproducing head and
			information recording /
			reproducing apparatus
			Shintaro Miyanishi; Kunio
			Kojima; Hiroshi Fuji
7307923	US	12/11/2007	Electro magnetic field
(10/811429)		(3/25/2004)	generating element,
			information recording and
			reproducing head and
			information recording and
			reproducing device
			Shintaro Miyanishi; Hiroshi
			Fuji; Kunio Kojima
6876603	US	4/5/2005	Information write/read head
(09/864060)		(5/23/2001)	including an optical slit having
	1		a light emitting section whose
<u>.</u>			width is shorter than a light
			beam diffraction limit
			Hiroshi Fuji; Hiroyuki
			Katayama; Kunio Kojima;
			Kenji Ohta

Patent/		Issue Date/	
Application Number	Country	Filing Date	Title of Patent and Inventors
7461318	US	12/2/2008	Communication system
(10/950563)		(9/28/2004)	realizing USB
			communications between a
			host computer and its
			peripheral device and a
			communication controller
			transmitting a USB signal
			under the USB standard
			Fumihiro Fukae; Hitoshi
			Naoe; Koji Sakai; Shohei
			Osawa
8930658	US	1/6/2015	Electronic equipment system
(13/421098)		(3/15/2012)	and storage device
			Tatsuaki Amemura
CNZL201210076844.5	CN	4/29/2015	Electronic equipment system
(CN201210076844.5)		(3/21/2012)	and storage device
15/000055	17.6	1/5/2015	Tatsuaki Amemura
15/399277	US	1/5/2017	Electronic equipment system
			and storage device
			Inventorship not available
8271807	US	9/18/2012	SYSTEM AND METHOD
(12/179142)		(7/24/2008)	FOR MANAGING ENERGY
			CONSUMPTION IN A
		4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	COMPUTE ENVIRONMENT
			David B. Jackson
JP5529114	JP	4/25/2014	SYSTEM AND METHOD
(JP2011-506252)		(7/24/2008)	FOR MANAGING ENERGY
		(,,_,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CONSUMPTION IN A
			COMPUTE ENVIRONMENT
			David Drive Jackson
8245059	US	8/14/2012	David Brian Jackson SYSTEM AND METHOD
(12/855318)	US		FOR MANAGING ENERGY
(12/033310)		(8/12/2010)	CONSUMPTION IN A
			COMPUTE ENVIRONMENT
			COMI OTE DIA MONIMENT
			David B. Jackson

Patent/		<u>Issue Date/</u>	
Application Number	Country	Filing Date	Title of Patent and Inventors
8271813	US	9/18/2012	SYSTEM AND METHOD
(12/855357)		(8/12/2010)	FOR MANAGING ENERGY
			CONSUMPTION IN A COMPUTE ENVIRONMENT
			COMPUTE ENVIRONMENT
			David B. Jackson
8276008	US	9/25/2012	SYSTEM AND METHOD
(12/855407)		(8/12/2010)	FOR MANAGING ENERGY
			CONSUMPTION IN A
			COMPUTE ENVIRONMENT
			David B. Jackson
9026807	US	5/5/2015	SYSTEM AND METHOD
(12/855443)		(8/12/2010)	FOR MANAGING ENERGY
			CONSUMPTION IN A
			COMPUTE ENVIRONMENT
			David B. Jackson
8549333	US	10/1/2013	SYSTEM AND METHOD
(13/621989)		(9/18/2012)	FOR MANAGING ENERGY
			CONSUMPTION IN A
			COMPUTE ENVIRONMENT
			David Brian Jackson
9405348	US	8/2/2016	SYSTEM AND METHOD
(14/081610)		(11/15/2013)	FOR MANAGING ENERGY
			CONSUMPTION IN A
			COMPUTE ENVIRONMENT
			David B. Jackson
9411393	US	8/9/2016	System and Method for
(14/702846)		(5/4/2015)	Managing Energy
			Consumption in a Compute
			Environment
			David Brian Jackson

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RECORDED: 01/29/2019

PATENT

REEL: 048167 FRAME: 0943