PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3613924

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SONY CORPORATION	10/26/2015
SONY MOBILE COMMUNICATIONS INC.	10/26/2015

RECEIVING PARTY DATA

Name:	SNAPTRACK, INC.	
Street Address: 5775 MOREHOUSE DR.		
City:	SAN DIEGO	
State/Country:	CALIFORNIA	
Postal Code:	92121	

PROPERTY NUMBERS Total: 21

Property Type	Number					
Patent Number:	8674939					
Patent Number:	8471823					
Application Number:	13924904					
Patent Number:	8473014					
PCT Number:	IB2006002708					
Patent Number:	8676869					
Patent Number:	7224221					
Patent Number:	7400863					
Patent Number:	7405728					
Patent Number:	7587683					
Patent Number:	7778672					
Patent Number:	8283887					
Patent Number:	8496390					
Patent Number:	8515504					
Patent Number:	8526190					
Patent Number:	8537217					
Patent Number:	8706954					
Patent Number:	8879273					
Patent Number:	7965976					

PATENT REEL: 037027 FRAME: 0399

503567297

Property Type	Number			
Patent Number:	8421651			
PCT Number:	IB2009007298			

CORRESPONDENCE DATA

Fax Number:

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.

Email: lsabido@qualcomm.com

Correspondent Name: SNAPTRACK, INC.

Address Line 1: 5775 MOREHOUSE DR.

Address Line 4: SAN DIEGO, CALIFORNIA 92121

NAME OF SUBMITTER:	L. SABIDO
SIGNATURE:	/L.Sabido/
DATE SIGNED:	11/12/2015

Total Attachments: 13

source=SONY Row 3 ASST 2015-10-28#page1.tif

source=SONY_Row 3 ASST_2015-10-28#page2.tif

source=SONY_Row 3 ASST_2015-10-28#page3.tif

source=SONY_Row 3 ASST_2015-10-28#page4.tif

source=SONY_Row 3 ASST_2015-10-28#page5.tif

source=SONY_Row 3 ASST_2015-10-28#page6.tif

source=SONY_Row 3 ASST_2015-10-28#page7.tif

source=SONY_Row 3 ASST_2015-10-28#page8.tif

source=SONY_Row 3 ASST_2015-10-28#page9.tif

source=SONY_Row 3 ASST_2015-10-28#page10.tif

source=SONY_Row 3 ASST_2015-10-28#page11.tif

source=SONY Row 3 ASST 2015-10-28#page12.tif

source=SONY Row 3 ASST 2015-10-28#page13.tif

RECORDATION FO	RM COVER SHEET		
PATENT	S ONLY		
To the Director of the U.S. Patent and Trademark Office: Pleas	e record the attached documents or the new address(es) below.		
1. Name of conveying party(ies)	2. Name and address of receiving party(ies) Name: SnapTrack, Inc.		
Sony Corporation; and	Internal Address:		
Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s): Execution Date(s) 10/30/2015; 11/03/2015 Assignment Merger Security Agreement Change of Name Joint Research Agreement Government Interest Assignment Executive Order 9424, Confirmatory License Other 4. Application or patent number(s): A. Patent Application No.(s)	Street Address: 5775 Morehouse Dr. City: San Diego State: CA Country: USA Zip: 92121 Additional name(s) & address(es) attached? Yes No document serves as an Oath/Declaration (37 CFR 1.63). B. Patent No.(s)		
13/924,904; PCT/IB2006/002708; Additional numbers att	8,674,939; 8,471,823; 8,473,014; 8,421,651		
5. Name and address to whom correspondence concerning document should be mailed: Name: SnapTrack, Inc. Internal Address:	6. Total number of applications and patents involved: 54 7. Total fee (37 CFR 1.21(h) & 3.41) \$		
Street Address: 5775 Morehouse Dr.	Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)		
City: San Diego	8. Payment Information		
State: CA			
Phone Number:			
Docket Number:	Deposit Account Number		
Email Address:	Authorized User Name		
9. Signature: /L. Sabido/ Signature L. Sabido	November 12, 2015 Date Total number of pages including cover sheet attachments and documents: 13		
Name of Person Signing Documents to be recorded (including cover sheet Mail Stop Assignment Recordation Services, Director of) should be faxed to (571) 273-0140, or mailed to:		

PATENT

REEL: 037027 FRAME: 0401

Recordation Form Cover Sheet Attachment PATENTS ONLY

1. Additional Name of conveying party(ies):

Sony Mobile Communications Inc.

4. Additional Application or patent number(s):

Country	Application Number	Patent Number
WO	PCT/IB2009/007298	
US	12/209,300	8,676,869
US	11/050,729	7,224,221
US	11/056,266	7,400,863
US	10/487,351	7,405,728
US	11/318,669	7,587,683
US	11/086,155	7,778,672
US	12/582,899	8,283,887
US	12/964,514	8,496,390
US	11/835,729	8,515,504
US	12/815,765	8,526,190
US	12/695,224	8,537,217
US	13/105,538	8,706,954
US	13/178,674	8,879,273
US	11/354,680	7,965,976



Form of Patent Assignment

THIS PATENT ASSIGNMENT ("Assignment"), EFFECTIVE AS OF OCTOBER 28 2015, IS MADE BY AND BETWEEN

Sony Corporation, a Japanese corporation with its principal place of business located at 1-7-1 Konan, Minato-Ku, Tokyo 108-0075, Japan, and Sony Mobile Communications Inc., a Japanese corporation with its principal place of business located at W Building 1-8-15 Konan, Minato-ku, Tokyo 108-0075, Japan (hereinafter "ASSIGNORS"), and SnapTrack, Inc. (hereinafter "ASSIGNEE"), a California corporation, with its principal place of business located at 5775 Morehouse Drive, San Diego, California 92121, United States of America, ASSIGNORS and ASSIGNEE shall collectively be referred to herein as the "PARTIES".

WHEREAS, ASSIGNORS are the joint owner of the issued patents and patent applications listed in the attached Appendix A (hereinafter "the PATENTS"); and

WHEREAS, ASSIGNEE is desirous of acquiring all of ASSIGNORS' right, title and interest in and to the PATENTS.

NOW, THEREFORE, in consideration of the foregoing, and for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound hereby, the PARTIES hereto agree as follows:

- 1. Assignment. ASSIGNORS have sold, assigned and transferred, and does hereby irrevocably sell, assign and transfer to ASSIGNEE all of ASSIGNORS' right, title and interest in and to (i) the PATENTS and all provisional applications relating thereto; (ii) all patents issuing on the PATENTS and all reissues, extensions, revivals, renewals, continuations, continuations-in-part, divisionals, reexaminations and counterparts (whether foreign or domestic) of the PATENTS, and (iii) the right to sue for and recover damages for any past, present or future infringement of the PATENTS, the same to be held and enjoyed by ASSIGNEE for its own use and enjoyment, and for the use and enjoyment of its successors, assigns and other legal representatives, to the end of the term or terms thereof as fully and entirely as the same would have been held and enjoyed by ASSIGNORS, if this assignment and sale had not been made.
- 2. <u>Recordation and Further Actions</u>. **ASSIGNORS** authorize the Commissioner for Patents and any other governmental officials to record and register this Assignment upon request by ASSIGNEE. **ASSIGNORS** shall take such steps and actions following the date hereof, including the execution of any documents, files, registrations, or other similar items, to ensure that the PATENTS are property assigned to ASSIGNEE, or any successor thereto.
- 3. Counterparts. This Assignment may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Assignment delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original copy of this Assignment.
- 4. Governing Law. This Assignment and any claim, controversy, dispute or cause of action based upon, arising out of or relating to this Assignment and the transactions contemplated hereby shall be governed by, and construed in accordance with, the laws of the United States and the State of New York, without giving effect to any choice of law provision or rule (whether of the State of New York or any other jurisdiction.)

[Signature page follows]

IN WITNESS WHEREOF, **ASSIGNORS** have caused this Assignment to be signed by its duly appointed officer having full authority in the circumstances; and **ASSIGNEE** has caused this Assignment to be signed by its duly appointed officer having full authority in the circumstances.

SIGNED for and on behalf of:	
SONY CORPORATION	
By: Solui Sily on	October 16 , 2015 (Date)
(Signature)	(Date)
Printed Name: Sohei Suzuki,	
Title: Senior General Manager, Intel.	lectual Property Division
SONY MOBILE COMMUNICATIONS I	NC.
By: State on	October 26, 2015
(Signature)	(Date)
Printed Name: Takako Suzuki	
Title: Vice President, Global IPR &	Licensing
À	CKNOWLEDGEMENT
	ertificate verifies only the identity of the individual who signed the finot the truthfulness, accuracy, or validity of that document.
State of)	
State of) ss. County of)	
On, 2015, before me,	Notary Public Name of Notary Public
Date	Name of Notary Public
personally appeared	Sohei Suzuki and Takako Suzuki Name of Signer

NOTARIAL CERTIFICATE

- 1. I, the undersigned, Notary, in and for Tokyo, Japan, do hereby certify that Mr. MASAYUKI NAKAMURA, an agent of Mr. SOHEI SUZUKI, Senior General Manager, Intellectual Property Division, of Sony Corporation, Located at 1-7-1 Konan Minato-ku, Tokyo, Japan, has stated in my very presence that the said Mr. SOHEI SUZUKI acknowledged himself that the signature appearing on the attached document is his true and authentic signature.
- 2. I, the undersigned, Notary, in and for Tokyo, Japan, do hereby certify that Mr. MASAYUKI NAKAMURA, an agent of Ms. TAKAKO SUZUKI, Vice President, Global IPR & Licensing of Sony Mobile Communications Inc., Located at 1-8-15 Konan Minato-ku, Tokyo, Japan, has stated in my very presence that the said Ms. TAKAKO SUZUKI acknowledged herself that the signature appearing on the attached document is her true and authentic signature.

Dated this 30th day of October, 2015.

Notary: FUMIO SAKAI

tumes

4-4-7.Kojimachi.Chiyoda-ku.

Tokyo,Japan

Tokyo Legal Affairs Bureau

Tokyo Legal Affairs Bireau NOTARY - OFFICE 4-4-7 Kojimachi Chiyoda-kuu Tokyo Japan

平成 27 年 登 簿 第 /577 号

高器 **高**正

嘱託人 ソニー株式会社(本店 東京都港区港南1丁目7番1号)知的財産センター センター長 鈴木草平 及び 嘱託人 ソニーモバイルコミュニケーションズ株式会社(本店 東京都港区港南1丁目8番15号)グローバル知的財産部 統括部長 鈴木貴子 は、添付証書の署名が自己のものに相違ない旨、それぞれ代理人 中村雅行を通じ本公証人に対し自認した。

よって、これを認証する。

平成27年10月30日、本職役場において 東京都千代田区麹町4丁目4番7号

東京法務局所属

公証人独口之版



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

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

WITNESS my hand and official seal.

SIGNED for and on behalf of:

SNAPTRACK, INC.

by: Lhily y Still & c

Printed Name: Philip J. Fries, Jr.

Title: Assistant Secretary

Appendix A

Family No.	Country	Application No.	Filing Date	Patent Number	Issue Date	Description/Title
T1-29	US	13/468,431	5/10/2012	8,674,939	3/18/2014	VOICE REMOTE CONTROL
T1-30	US	11/839,636	8/16/2007	8,471,823	6/25/2013	SYSTEMS AND METHODS FOR PROVIDING A USER INTERFACE
T1:30	US	13/924,964	6/24/2013			SYSTEMS AND METHODS FOR PROVIDING A USER INTERFACE
T2-12	US	11/278,843	4/6/2006	8,473,014	6/25/2013	PORTABLE COMMUNICATION DEVICE INCLUDING DISPLAY WITH IMAGE LIFTER
T2-12	WO	PCT/IB2006/0 02708	9/29/2006			PORTABLE COMMUNICATION DEVICE INCLUDING DISPLAY WITH IMAGE LIFTER
T2-24	US	12/432,145	4/29/2009	8,421,651	4/16/2013	MOBILE PHONE WITH IMPROVED KEYBOARD SCANNING AND COMPONENT REDUCTION AND METHOD
12-24	WO	PCT/IB2009/0 07298	10/29/2009			MOBILE PHONE WITH IMPROVED KEYBOARD SCANNING AND COMPONENT REDUCTION AND METHOD
T2-43	US	12/209,300	9/12/2008	8,676,869	3/18/2014	ADAPTIVE DISPLAY FOR ENHANCING AUDIO PLAYBACK

T2-48)P	2004-043589	2/19/2004	4137815	6/13/2008	POWER AMPLIFIER DEVICE AND PORTABLE COMMUNICATION TERMINAL DEVICE
T2-48	US	11/050,729	2/7/2005	7,224,221	5/29/2007	POWER AMPLIFICATION APPARATUS, AND MOBILE COMMUNICATION TERMINAL APPARATUS
T2-48	KR	10-2005- 0012809	2/16/2005	10- 1075820	10/17/201	APPARATUS FOR AMPLIFYING POWER AND A PORTABLE COMMUNICATION TERMINAL DEVICE
T2-48	CN	200510009312 .X	2/18/2005	ZL2005100 09312.X	3/11/2009	POWER AMPLIFICATION APPARATUS
T2-48	EP	5250943.7	2/18/2005			POWER AMPLIFICATION APPARATUS
T2-54	JP	2004-043588	2/19/2004	4137814	6/13/2008	SWITCH DEVICE, POWER AMPLIFIER DEVICE THEREWITH AND PORTABLE COMMUNICATION TERMINAL DEVICE
T2-54	US	11/056,266	2/14/2005	7,400,863	7/15/2008	SWITCH APPARATUS, SWITCHABLE POWER AMPLIFICATION APPARATUS, AND MOBILE COMMUNICATION TERMINAL APPARATUS USING THE SAME
T2-54	CN	200510069732 .7	2/18/2005	ZL2005100 69732.7	8/13/2008	Switch apparatus
T2-54	KR	10-2005- 0013561	2/18/2005	10- 1111538	1/26/2012	SWITCH APPARATUS, SWITCHABLE POWER AMPLIFICATION APPARATUS, AND MOBILE COMMUNICATION

						TERMINAL APPARATUS USINGTHE SAME
T2-54	EP	5250937.9	2/18/2005			Switch apparatus, switchable power amplification apparatus, and mobile communication terminal apparatus
T2-54	EP	10179190.3	2/18/2005			Switch apparatus, switchable power amplification apparatus, and mobile communication terminal apparatus
T2-55	JР	2002-192964	7/2/2002	4338364	7/10/2009	MOBILE INFORMATION COMMUNICATION TERMINAL, PROGRAM, AND RECORDING MEDIUM WITH THE PROGRAM RECORDED THEREON
T2-55	CN	2003801170.0	6/27/2003	ZL2003801 170.0	8/16/2006	PORTABLE INFORMATION TERMINAL, PROGRAM, AND RECORDING MEDIUM FOR RECORDING SAID PROGRAM
T2-55	EP	3736299,3	6/27/2003	EP1524821	9/16/2009	PORTABLE INFORMATION TERMINAL, PROGRAM, AND RECORDING MEDIUM HAVING THE PROGRAM RECORDED THEREIN
T2-55	DE	60329299,2	6/27/2003	EP1524821	9/16/2009	PORTABLE INFORMATION TERMINAL, PROGRAM, AND RECORDING MEDIUM HAVING THE PROGRAM RECORDED THEREIN
T2-55	US	10/487,351	6/27/2003	7,405,728	7/29/2008	PORTABLE INFORMATION TERMINAL, PROGRAM, AND RECORDING MEDIUM FOR RECORDING SAID PROGRAM
T2-55	WO	PCT/JP2003/0	6/27/2003			PORTABLE INFORMATION TERMINAL, PROGRAM, AND

		08238		1		
	4	602.33				RECORDING MEDIUM FOR RECORDING SAID PROGRAM THEREIN
T2-55	FR	3736299.3	6/27/2003			PORTABLE INFORMATION TERMINAL, PROGRAM, AND RECORDING MEDIUM HAVING THE PROGRAM RECORDED THEREIN
T2-55	GB	3736299.3	6/27/2003			PORTABLE INFORMATION TERMINAL, PROGRAM, AND RECORDING MEDIUM HAVING THE PROGRAM RECORDED THEREIN
T2-55	KR	10-2004- 7003094	3/2/2004			PORTABLE INFORMATION TERMINAL, PROGRAM, AND RECORDING MEDIUM HAVING THE PROGRAM RECORDED THEREIN
T2-58	JP	2004-379430	12/28/2004	4360496	8/21/2009	DISPLAY METHOD, PORTABLE TERMINAL EQUIPMENT AND DISPLAY FROGRAM
T2-58	EP	5258063.6	12/23/2005	EP1677182	4/23/2014	DISPLAY METHOD, PORTABLE TERMINAL EQUIPMENT AND DISPLAY PROGRAM
T2-58	DE	602005043357	12/23/2005	EP1677182	7/5/2006	DISPLAY METHOD, PORTABLE TERMINAL EQUIPMENT AND DISPLAY PROCRAM
T2-58	NL	5258063.6	12/23/2005	EP1677182	7/5/2006	DISPLAY METHOD, PORTABLE TERMINAL EQUIPMENT AND DISPLAY PROGRAM
T2-58	US	11/318,669	12/27/2005	7,587,683	9/8/2009	DISPLAY METHOD, PORTABLE TERMINAL

						DEVICE, AND DISPLAY PROGRAM
T2-58	CN	200510121641 .3	12/28/2005	ZL2005101 21641.3	7/23/2008	Display method and portable terminal device
T2-58	JP	2004-379442	12/28/2004			DISPLAY METHOD, PORTABLE TERMINAL EQUIPMENT AND DISPLAY PROGRAM
T2-58	JP	2004-379436	12/28/2004			DISPLAY METHOD, PORTABLE TERMINAL EQUIPMENT AND DISPLAY PROGRAM
T2-58	KR	10-2005- 0130440	12/27/2005			DISPLAY METHOD, PORTABLE TERMINAL DEVICE, AND COMPUTER READABLE RECORDING MEDIUM HAVING DISPLAY PROGRAM
T2-62	JP	2004-087202	3/24/2004	415540 5	7/18/2008	PORTABLE ELECTRONIC APPARATUS, AND PORTABLE TELEPHONE DEVICE
T2-62	US	11/086,155	3/22/2005	7,778,672	8/17/2010	PORTABLE ELECTRONIC DEVICE AND CARRIER TELEPHONE EQUIPMENT
T2-62	KR	10-2005- 0023943	3/23/2005	10- 1118861	2/14/2012	PORTABLE ELECTRONIC DEVICE
T2-62	CN	200510059124 ,8	3/24/2005	ZL2005100 59124.8	3/5/2008	Portable electronic device and carrier telephone equipment
T2-62	EP	5251489	3/11/2005			PORTABLE ELECTRONIC DEVICE
T2-74	US	12/582,899	10/21/2009	8,283,887	10/9/2012	PORTABLE DEVICE
T2-74	JP	2008-291443	11/13/2008			PORTABLE DEVICE
T2-74	EP	9174537.2	10/29/2009			PORTABLE DEVICE

T2-74	CN	200910222072 .X	11/13/2009			PORTABLE DEVICE
T2-78	US	12/964,514	5/14/2010	8,496,390	7/30/2013	COVER UNIT AND MOBILE TERMINAL INCLUDING THE SAME
T2-79	US	11/835,729	8/8/2007	8,515,504	8/20/2013	PORTABLE TERMINAL WITH ROTATING DISPLAY
T2-50	US	12/815,765	6/15/2010	8,526,190	9/3/2013	MOBILE TERMINAL APPARATUS, METHOD OF DISPOSING FLEXIBLE BOARD, METHOD OF CORRECTING CLOSING MANIPULATION, AND METHOD OF PREVENTING DAMAGE TO FLEXIBLE BOARD
T2-81	US	12/695,224	1/28/2010	8,537,217	9/17/2013	IMAGE PHOTOGRAPHING APPARATUS, METHOD OF CONTROLLING IMAGE PHOTOGRAPHING APPARATUS AND CONTROL PROGRAM
T2-82	US	13/105,538	9/7/2010	8,706,954	4/22/2014	MEMORY MANAGEMENT APPARATUS AND MEMORY MANAGEMENT METHOD
T2-83	US	13/178,674	7/8/2011	8,879,273	11/4/2014	MOBILE TERMINAL AND CASING CONNECTING STRUCTURE
T2-84	JР	2005-039705	2/16/2005	4233531	12/19/200 8	INFORMATION PROCESSING APPARATUS, METHOD THEREOF AND PROGRAM
T2-84	US	11/354,680	2/15/2006	7,965,976	6/21/2011	INFORMATION PROCESSING APPARATUS AND METHOD AND COMPUTER PROGRAM

Ġ