504601417 10/19/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4648129

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
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DIEGO GALLARDO	10/03/2017
BIREGEYA JEAN DE DIEU MUGIRANEZA	10/08/2017
YASUHIRO SUGITA	10/10/2017

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PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15782964	

CORRESPONDENCE DATA

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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.

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NAME OF SUBMITTER:	LAWRENCE S. DRASNER
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DATE SIGNED:	10/19/2017

Total Attachments: 5

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PATENT 504601417 REEL: 043902 FRAME: 0465

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> PATENT REEL: 043902 FRAME: 0466

COMBINED DECLARATION AND ASSIGNMENT USING APPLICATION DATA SHEET (37 CFR 1.76) (ORIGINAL, DESIGN, NATIONAL STAGE OF PCT)					
Title:	Capacitive	touch sensing with con	ductivity type deter	mination	
		I. DECLA	RATION		
As a bel	ow named inve	ntor or joint inventor, I hereby de	eclare that:		
This dec	laration is direc	ted to:			
(a) <u>X</u>	the attached	application, or			
(b)	United State filed on	s application or PCT internation	al application number _	15/782,964	
The abo	ve-identified ap	plication was made or authorize	d by me.		
I believe	that I am the or	riginal inventor or an original joir	nt inventor of a claimed in	nvention in the applica	ation.
I hereby	state that I have	e reviewed and understand the	contents of the above-ide	entified application.	
		ne duty to disclose to the U.S. P entability as defined in 37 C.F.R		fice all information kn	own to
		nat any willful false statement m ment of not more than five (5) y		s punishable under 1	3 USC
		PRIORITY	CLAIM		
for paten other tha for paten other tha	t or inventor's on the United State or inventor's or i	iority benefits under Title 35, Un certificate or of any PCT interna ates of America listed below and certificate or any PCT internation ates of America filed by me on the which priority is claimed.	tional application(s) designation have also identified belo onal application(s) desig	gnating at least one c w any foreign applica nating at least one c	country tion(s) country
(c) <u>X</u>	_ no such appl	ication have been filed.			
(d)	_ such applicat	tions have been filed as follows.			
		T FOREIGN APPLICATION(S), MONTHS FOR DESIGN) PRIOR			
Co	DUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIM UNDER 35 USC	
				Yes	No

1

PATENT⁹/01/2012

Yes

II. ASSIGNMENT

As a below named assignor, for good and valuable consideration acknowledged and received I hereby sell and assign my entire worldwide right, title and interest in the application and the invention(s), so far as concerns the United States and the Territories and Possessions thereof and all foreign countries to:

ASSIGNEE:

SHARP KABUSHIKI KAISHA 1 Takumi-cho, Sakai-ku, Sakai City Osaka, Japan 590-8522

Including:

any and all related patent application(s) in the United States or a country foreign thereto, including continuations, continuations-in-part, divisionals, conversions, renewals, substitutes, reissues, reexaminations, extensions, non-provisional applications, convention, International (e.g., Patent Cooperation Treaty (PCT)) and other applications based in whole or in part upon the invention(s) or upon the application(s);

any and all Letters Patent, renewals, reissues, reexamination certificates and extensions of Letters Patent granted for the invention(s) or upon the application(s); and

every priority right that is or may be predicated upon or arise from the invention(s), the application(s) and the Letters Patent.

I additionally authorize the Assignee to file patent applications in my or the Assignee's name for Letters Patent in any country (by international convention, treaty or otherwise), to be held and enjoyed by the Assignee, its successors and assigns, to the full end of the term or terms for which Letters Patent respectively may be granted, reissued, reexamined or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this Assignment and transfer not been made.

I hereby covenant that I have the full right to convey the entire interests herein assigned, and that I have not executed and will not execute any agreement in conflict herewith and that such assigned rights are not encumbered by any grant, license or other right previously given.

I agree that each time a request is made, and without undue delay, I will execute and deliver all such papers as may be necessary or desirable to perfect the title in and to the invention(s), the application(s) and the Letters Patent, to the Assignee, its successors or assigns.

I agree, without undue delay, to undertake all reasonable acts to assure that said invention(s), patent application(s) and Letters Patent shall be held and enjoyed by the Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly: to execute and deliver to the Assignee all lawful documents including petitions, specifications, oaths, declarations, powers of attorney, assignments, invention disclaimers and lawful affidavits in form and substance which may be requested by the Assignee; to furnish the Assignee with all facts relating to said invention(s) or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said invention(s); and to testify in any proceedings relating to said invention(s), patent application(s) and Letters Patent.

I authorize the patent attorney of record and/or having power of attorney in the U.S. patent application identified above to insert the serial number and filing date information for the patent application in the appropriate spaces in this document when that information becomes available.

Anna adams alma adams	S. As A. A.	Note.	1 100 1 m 1:00
nventor's signature:	S. Magain	Date:	09/10/17 Band Outed Calena
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	xth and subsequent joint inventors	and assignors; numb	er of pages added
Signature for si	, ,		
Added page to	this combined declaration and essi- part (CIP) application.	gnment for divisional	, continuation, or

Full Name of Sole o	r First Inventor and Assignor: Sean MAGUI	RE	
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Full Name of Sole o	r Second Inventor and Assignor: Diego GA	LLARDO	
Inventor's signature	<u> </u>	Date:	3 OCT 2017
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Inventor's signature:		Date:	
Post Office Address:	c/o SHARP KABUSHIKI KAISHA,1 Takumi-	cho, Saka	-ku,
	Sakai City, Osaka 590-8522, Japan		
	ECK FOR ANY OF THE FOLLOWING ADDE A PART OF THIS COMBINED DECLARATIO		
Signature for size	kth and subsequent joint inventors and assign	ors; numb	er of pages added
	this combined declaration and assignment for part (CIP) application.	divisional,	continuation, or
X This combined d	eclaration and assignment ends with this page	} ,	

Full Name of Sole or	First Inventor and Assignor: Sean MAGU	IIRE	
Inventor's signature:		Date:	
Post Office Address:	c/o Sharp Laboratories of Europe Ltd, Edm Oxford, OX4 4GB, United Kingdom	und Halley	Road, Oxford Science Park,
Full Name of Sole or	Second Inventor and Assignor: Diego G	ALLARDO	,,
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Full Name of Sole or	Third Inventor and Assignor: Biregeya Jea	an de Dieu I	MUGIRANEZA
Inventor's signature:	lugirme zo by zeondelsien.	Date:	20/7/10/06.
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	Sakai City, Osaka 590-8522, Japan		
Full Name of Sole or	Fourth Inventor and Assignor: Yasuhiro	SUGITA	· · · · · · · · · · · · · · · · · · ·
Inventor's signature:	Yasuhiro Sugita	Date:	2017/10/10
Post Office Address:			
	Sakai City, Osaka 590-8522, Japan		
	ECK FOR ANY OF THE FOLLOWING ADD		
FORM	A PART OF THIS COMBINED DECLARAT	ION AND A	SSIGNMENT
Signature for size	xth and subsequent joint inventors and assig	nors; numb	er of pages added
	this combined declaration and assignment fo part (CIP) application.	or divisional,	continuation, or
X This combined d	leclaration and assignment ends with this pa	ae.	

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