PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TONG LU	03/05/2018
CHRISTOPHER JAMES BROWN	03/07/2018
MICHAEL JAMES BROWNLOW	03/07/2018
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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15933474

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NAME OF SUBMITTER:	LAWRENCE S. DRASNER
SIGNATURE:	/Lawrence S. Drasner/
DATE SIGNED: 03/23/2018	
	This document serves as an Oath/Declaration (37 CFR 1.63).
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Total Attachments: 3

PATENT REEL: 045323 FRAME: 0930

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> PATENT REEL: 045323 FRAME: 0931

CON	IBINED DECLAR	RATION AND ASSIGNMENT U (ORIGINAL, DESIGN, NAT			R 1.76)
Title:	TFT COMPE	NSATION CIRCUIT FOR D	ISPLAY DEVICE USIN	IG REFERENCE	
	• •	I. DECLAI	RATION		,
As a be	elow named inver	tor or joint inventor, I hereby de	eclare that:		
This de	claration is direct	ed to:			
(a)	the attached	application, or			
(b)	United States filed on	application or PCT internation	al application number		
The ab	ove-identified app	lication was made or authorize	d by me.		
believ	e that I am the ori	ginal inventor or an original joir	nt inventor of a claimed in	vention in the appli	cation.
hereb	y state that I have	reviewed and understand the	contents of the above-ide	entified application.	
		e duty to disclose to the U.S. P entability as defined in 37 C.F.R		îce all information k	nown to
hereby	y acknowledge th v fine or imprisonr	at any willful false statement m nent of not more than five (5) y	nade in this declaration is ears, or both.	punishable under	18 USC
		PRIORITY	CLAIM		
applicat east or oreign at least	ion(s) for patent se country other t application(s) for one country othe	priority benefits under Title or inventor's certificate or of han the United States of Amer patent or inventor's certificate r than the United States of Amer the application(s) of which priority	any PCT international a ica listed below and hav or any PCT internationa erica filed by me on the s	pplication(s) design e also identified be I application(s) des	ating at low any ignating
c) <u>X</u>	no such appli	cation have been filed.			
d)	such applicati	ons have been filed as follows.			
		FOREIGN APPLICATION(S), ONTHS FOR DESIGN) PRIOR			
C	COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLA UNDER 35 USC	
				Yes Yes	No No

PATEN†9/01/2012 REEL: 045323 FRAME: 0932

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.

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	ECK FOR ANY OF THE FOLLOWING A PART OF THIS COMBINED DECL		
Signature for six	th and subsequent joint inventors and	l assignors; numb	er of pages added
Added page to ti	nis combined declaration and assignmert (CIP) application.	nent for divisional,	continuation, or
X This combined de	eclaration and assignment ends with t	his page.	

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