## 502100043 10/19/2012

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## CONVEYING PARTY DATA

Name	Execution Date
Hiroshi TACHIKI	09/21/2012
Shohtaroh OKAMOTO	09/21/2012

# RECEIVING PARTY DATA

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#### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13655070

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ATTORNEY DOCKET NUMBER:	KOMOP0202US		
NAME OF SUBMITTER:	Mark D. Saralino		
	This document serves as an Oath/Declaration (37 CFR 1.63).		

## Total Attachments: 3

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> PATENT REEL: 029155 FRAME: 0793

OF \$40.00 13655070

COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 USC §119			
JAPAN	2011-232413	24 October, 2011	X	Yes Yes	***************************************	No
				Yes		No

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09/01/2012

#### 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 to:

#### ASSIGNEE:

SHARP KABUSHIKI KAISHA 22-22, Nagaike-cho Abeno-ku, Osaka-shi Osaka, Japan 545-8522 U.S. Application No. 13/655,070 Filing Date: 18 October 2012

#### Including:

any and all related patent application(s) in the United States, including continuations, continuations-in-part, divisionals, conversions, renewals, substitutes, reissues, reexaminations, extensions, non-provisional applications, 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.

09/01/2012

Full Name of Sole or First Inventor and Assignor: Hiroshi TACHIKI					
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Inventor's signature;			·	Date:	
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09/01/2012

X This combined declaration and assignment ends with this page.