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Atty. Docket No.: 83993-000078/US

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Alexandra, VA 22514	22-2010			
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10 tr	3595374	l Trademar	·	
		or copy ther		
1. Name of conveying party(ies):	2. Name and	address of rec	eiving party(ies)	
Makoto Yokoyama	Name: SI	Name: SHARP KABUSHIKI KAISHA Street Address: 22-22 Nagaike-cho Abeno-ku		
Shige Furuta	Street Add			
Yuhichiroh Murakami	ĺ		vagaine-eno Abeno-ku	
Yasushi Sasaki	City: Osa	ka-shi	State: Osaka	
Additional name(s) of conveying party(ies) attached? VES NO	Country:	JAPAN	Postal Code: 545-8522	
3. Nature of conveyance:				
Assignment Merger Security Agree	ement Additional	name(s) & addi	ress(es) attached? TYES NO	
Change of Name Other:				
Execution Date: April 1, 2010; April 1, 2010; 1, 2010; April 1, 2010	April			
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: April 1, 2010; April 1, 2010; April 1, 2010				
A. Patent Application No(s).	B. Patent No.	.(s).		
		. 57		
5. Name and address of party to whom correspondence	hbers attached? YES		/patents involved: One (1)	
concerning document should be mailed:	<u> </u>			
Name: HARNESS, DICKEY & PIERCE, P.L.C.	1	7. Total fee (37 C.F.R. § 3.41): \$40.00 ☐ Enclosed		
Street Address: P.O. BOX 8910	\ -	1. 1. 1		
City: RESTON State: VA ZIP: 20195	if no fee	_	ed to deposit account,	
Country: USA	8. Deposit ac	count number:	08-0750	
,			cate copy of this page by deposit account)	
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9. Statement and signature.				
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Donald J. Daley, Reg. No. 34,313 Name of Person Signing/Reg. No. Signature April 19, 2010 Date				
Total number of pages including cover sheet, attachments, and document: 3				

DJD/jlc

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PATENT REEL: 024276 FRAME: 0516

ASSIGNMENT

12/734218 Attv. Docket No.

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

SHIFT REGISTER

for whic patent	h Assi	gnor is	about to make or has made United States or International application for
((a)		executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
((b)		executed on,; or
((c)	\boxtimes	filed on August 26, 2008, and assigned Serial No or PCT International Application No. PCT/JP2008/65176; and

WHEREAS, SHARP KABUSHIKI KAISHA, with address at, 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522, JAPAN, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor agrees to, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the invention as described in the aforesaid application and all United States Letters Patent which may be granted therefore, and all divisions, continuations, reissues, reexaminations and extensions thereof, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Makoto Yokoyama	
[Inventor] Makoto YOKOYAMA	Witness
April 1, 2010	
Dated	Witness
Sligo Luty [Inventor] Shige FURUTA	
[Inventor] Shige FURUTA	Witness
April 1,2010	
Dated	Witness
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[Inventor] Yuhichiroh MURAKAMI	Witness
April 1, 20/0	
Dated	Witness
Yersushi Lersuki	
[Inventor] Yasushi SASAKI	Witness
April 1, 2010	
Dated	Witness