U.S. PTO 12/583807 08/26/2009

Form PTO-1595 (Rev. 03-09) OMB No. 0651-0027 (exp. 03/31/2009)

09-03-2009



RECORDATION FORM COVER PATENTS ONLY 103572855

L	
To the Director of the U.S. Patent and Trademark Office: Please	e record the attached documents or the new address(es) below.
Name of conveying party(ies):	2. Name and address of receiving party(ies)
Yasutaka Hirayama (08/06/2009), Makio Gotoh (08/06/2009), and Takafumi Hosogi (08/06/2009)	Name: Sharp Kabushiki Kaisha
Additional name(s) of conveying party(ies) attached?	Internal Address: Street Address:
3. Nature of conveyance/Execution Date(s):	22-22, Nagalke-cho Abeno-ku, Osaka-shi
Execution Date(s): in parentheses after inventor name	Osaka Osaka-stii
x Assignment Merger Change of Name	545-8522 JAPAN
Security Agreement Joint Research Agreement	City:
Government Interest Assignment	State:
Executive Order 9424, Confirmatory License	Country: Zip:
Other	Additional name(s) & address(es) Yes X No attached?
4. Application or patent number(s): A. Patent Application No.(s) This application 1 2 5 8 3 8 6 7	This document is being filed together with a new application. B. Patent No.(s)
Additional numbers attached	? Yes X No
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: David G. Conlin EDWARDS ANGELL PALMER & DODGE LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address: Atty. Dkt.: 84730(70904) Street Address: P.O. Box 55874	Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)
City: Boston	8. Payment Information
State: MA Zip: 02205	
Phone Number: (617) 517-5515	
Fax Number: (888) 325-9129	Deposit Account Number04-1105
Email Address: DConlin@eapdlaw.com	Authorized User Name David G. Conlin
9. Signature: Calletine Lori	89/82/2009 DBYRNEAU g000008 2 2830 \$85 125838
Signature	01 EC:8021 40.00 DA
Catherine J. Toppin - 63,984 Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:
Name of Person Signing	

ASSIGNMENT

And for the above consideration I/We agree promptly upon request of the Assignee, its successors or assigns, to execute and deliver without further compensation any power of attorney, assignment, application, whether original, divisional, continuation or reissue, or other papers which may be necessary or desirable fully to secure to the Assignee, its successors and assigns, the inventions and any of them described in said application and all patent rights therein, in the United States and in any country foreign thereto.

The undersigned agree(s) to furnish all pertinent facts and documents relating to said application, said invention and said patent(s) as may be known and accessible to the undersigned, and will testify as to the same in any interference or litigation related thereto, and will promptly execute and deliver to Assignee any and all papers, instruments or affidavits necessary or desirable to apply for, obtain, maintain or enforce said application or said patent(s) in connection with any interference which may be declared, and any litigation concerning this application or any continuation, division or reissue thereof or Patent(s) or reissue patent(s) issued thereon, and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference or litigation.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

PATENT REEL: 023183 FRAME: 0419 The undersigned hereby authorize(s) and request(s) the Commissioner for Patents to issue any and all Letters Patents of the United States of America resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that the undersigned has (have) the full right to convey the entire interest herein assigned, and that the undersigned has (have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants Edwards Angell Palmer & Dodge LLP of P.O. Box 55874, Boston, MA 02205, U.S.A. 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.

I, Yasutaka HIRAYAMA, hereunto set my hand and seal this <u>b</u> day of August, 2009.	
	Yasutaka Hirayuma
I, Makio GOTOH, hereunto set my hand and seal this August, 2009.	3_6_day of
_	Makio Gotoh
I, <u>Takafumi HOSOGI</u> , hereunto set my hand and seal this <u>6</u> day of <u>August</u> , 2009.	
	21.

RECORDED: 08/26/2009

PATENT REEL: 023183 FRAME: 0420