

APR 11 2007
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U.S. Department of Commerce
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08-28-2007

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Our Ref.: -3693-74



8-2007

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| To the Director of the U.S. Patent and Tra | | 103440051 | original documents or copy thereof. |
| 1. Name of conveying party(ies): 1 Kazuhide TOMIYASU 2 Yutaka TAKAFUJI 3 Masao MORIGUCHI Additional name/s of conveying party/ies attached? <input type="checkbox"/> 3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Assignment <input type="checkbox"/> Change of Name <input type="checkbox"/> Other Execution Date: (1) July 30, 2007, (2) July 30, 2007, (3) July 31, 2007 | | 2. Name and address of receiving party(ies): 1) Name: Sharp Kabushiki Kaisha Street Address: 22-22, Nagaike-cho, Abeno-ku, Osaka-shi City: Osaka State/Country: Japan Zip: 545-8522 2) Name Street Address: City: State: Zip: Additional name/s & address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| 4. Application number(s) or patent number(s): <input checked="" type="checkbox"/> This assignment is being filed together with a new application. A. Patent Application No(s). (1) To be assigned (2) (3) Additional numbers attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | B. Patent No(s). (1) (2) (3) 11884709 | |
| 5. Name and address of party to whom correspondence concerning document should be mailed: Name: H. Warren Burnam, Jr. Internal Address: Street Address: Nixon & Vanderhye P.C. 901 North Glebe Road 11th Floor City: Arlington State: VA Zip: 22203 | | 6. Total number of applications & patents involved: 1 7. Total fee (37 CFR 3.41) \$ 40.00 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account #14-1140 8. The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our Account No. 14-1140. | |
| DO NOT USE THIS SPACE | | | |
| 9. Statements 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. H. Warren Burnam, Jr. August 20, 2007 Name of Person Signing Signature Date Reg. No. 29,366 Total number of pages including original cover sheet, attachments, and document: [3] | | | |

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

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PATENT
REEL: 019764 FRAME: 0503

Attorney Docket No. _____

ASSIGNMENT

WHEREAS, Kazuhide TOMIYASU, Yutaka TAKAFUJI, and Masao MORIGUCHI (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF, AND LIQUID CRYSTAL DISPLAY DEVICE for which the undersigned has (have):

- (a) filed an application for Letters Patent of the United States of America on _____ having Serial No. _____; or
- (b) executed an application for Letters Patent of the United States of America on the date(s) indicated below; and

WHEREAS, Sharp Kabushiki Kaisha of 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522, Japan its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee the full and exclusive right to the said invention in the United States of America and its territories and for all foreign countries, dependencies and possessions and the entire right, title and interest in and to the application and any and all Letters Patent(s) which may be granted therefor in the United States of America and its territories, dependencies and possessions, and in and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or any continuation, division or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims under 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 the Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks 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 Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

This Assignment has been executed by the undersigned on the date(s) indicated.

Date: July 30, 2007, Kazuhide TOMIYASU
Kazuhide TOMIYASU

Date: July 30, 2007, Yutaka TAKAFUJI
Yutaka TAKAFUJI

Date: July 31, 2007, Masao MORIGUCHI
Masao MORIGUCHI

Date: _____, _____

Date: _____, _____

Date: _____, _____

Date: _____, _____

Date: _____, _____