

U.S. Department of Commerce  
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Document ID NO.: 103649315

## RECORDATION FORM COVER SHEET

Our Ref.: HWB-4578-62

**PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.	
<p>1. Name of conveying party(ies):</p> <p>1 Keiji TAKAHASHI 5</p> <p>2 Shingo JOHGAN 6</p> <p>3 Hisashi NAGATA 7</p> <p>4 8</p> <p>Additional name/s of conveying party/ies attached? <input type="checkbox"/></p> <p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Assignment <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date: <u>May 10, 2010</u></p>	<p>2. Name and address of receiving party(ies):</p> <p>1) Name: SHARP KABUSHIKI KAISHA Street Address: 22-22, Nagaik-cho, Abeno-ku City: Osaka-shi State/Country: Osaka Japan Zip: 545-8522</p> <p>2) Name Street Address: City: State/Country: Zip:</p> <p>Additional name/s &amp; address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>4. Application number(s) or patent number(s): <input type="checkbox"/> This assignment is being filed together with a new application.</p> <p>A. Patent Application No(s). (1) 12/774,983 (2) (3)</p> <p>B. Patent No(s). (1) (2) (3)</p> <p>Additional numbers attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>H. Warren Burnam, Jr.</u></p> <p>Internal Address: _____</p> <p>Street Address: <u>Nixon &amp; Vanderhye P.C.</u> <u>901 North Glebe Road</u> <u>11th Floor</u></p> <p>City: <u>Arlington</u> State: <u>VA</u> Zip: <u>22203</u></p>	<p>6. Total number of applications &amp; patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41) \$ <u>40.00</u></p> <p><input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account #14-1140</p> <p>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 <b>Account No. 14-1140.</b></p>
<b>DO NOT USE THIS SPACE</b>	
<p>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.</p> <p><u>H. Warren Burnam, Jr.</u> <u><i>H. Warren Burnam, Jr.</i></u> <u>September 12, 2012</u></p> <p>Name of Person Signing _____ Signature _____ Date _____ Reg. No. 29,366</p> <p>Total number of pages including <b>original</b> cover sheet, attachments, and document: [3]</p>	

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**

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9-12-12

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Additional name/s of conveying party/ies attached?

3. Nature of conveyance:  
 Assignment  Merger  
 Security Assignment  Change of Name  
 Other \_\_\_\_\_

Execution Date: May 10, 2010

Additional name/s & address/es attached?  Yes  No

4. Application number(s) or patent number(s):  This assignment is being filed together with a new application.

A. Patent Application No(s).  
(1) 12/774,983  
(2)  
(3)

B. Patent No(s).  
(1)  
(2)  
(3)

Additional numbers attached  Yes  No

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  
 Enclosed  
 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.

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H. Warren Burnam, Jr. September 12, 2012  
Name of Person Signing Signature Date  
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# ASSIGNMENT OF PATENT APPLICATION

(Inventors) Keiji TAKAHASHI  
Shingo JOHGAN  
Hisashi NAGATA

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

(Assignee) SHARP KABUSHIKI KAISHA  
(Address) of 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka, Japan 545-8522

(Other Countries) (hereinafter designated as the Assignee) the undersigned's entire right, title and interest in the invention, and all application(s) for patent and any Letters Patent which may be granted therefor, known as

(Title) COLOR FILTER SUBSTRATE, LOQUID CRYSTAL DISPLAY PANEL, LIQUID CRYSTAL DISPLAY DEVICE, AND PRODUCTION METHOD OF COLOR FILTER SUBSTRATE (Case No. 4578-62)

for which the undersigned has (have) executed on even date herewith an application for patent in the United States of America or, if not on even date, then has executed on or has already filed in

U.S. apln. Serial No. To be assigned, filed on

The undersigned acknowledges an obligation of assignment of this invention to said assignee at the time the invention was made.

The undersigned agree(s) to execute all papers and documents necessary in connection with the application or any interference which may be declared and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient and further to perform any act which may be necessary in connection with claims or provisions of the International Convention for 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 to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) 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.

The undersigned hereby grant(s) the firm of NIXON & VANDERHYE P.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 United States Patent Office for recordation of this document. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned signature(s).

1588945

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pp 523 US

4578-62

Date MAY. 10. 2010

Signature of inventor

*Keiji Takahashi*

Keiji TAKAHASHI

Date MAY. 10. 2010

Signature of inventor

*Shingo Johgan*

Shingo JOHGAN

Date MAY. 10. 2010

Signature of inventor

*Hisashi Nagata*

Hisashi NAGATA