# Electronic Version v1.1

Stylesheet Version v1.1

| SUBMISSION TYPE:  |   | NEW ASSIGNMENT   |                |  |
|---|---|--|----------------|--|
| NATURE OF CONVEYANCE:   |   | ASSIGNMENT   | ASSIGNMENT     |  |
| CONVEYING PARTY [   | ΟΑΤΑ  |  |                |  |
|   |   | Name   | Execution Date |  |
| Nathan SMITH  |   |  | 06/03/2005     |  |
| Paul A. GASS  |   |  | 06/03/2005     |  |
| Jonathan P. BRAMBLI   | <br>E   | 06/16/2005   |                |  |
| Martin D. TILLIN  |   | 06/16/2005   |                |  |
| Bronje M. MUSGRAVE  | Ξ   |  | 06/16/2005     |  |
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| Oity.   |   |  |                |  |
| State/Country:  | JAPAN   |  |                |  |
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| State/Country:  | JAPAN<br>545-8522<br>S Total: 1   | Numbe  |                |  |
| State/Country:<br>Postal Code:<br>PROPERTY NUMBER:  | JAPAN<br>545-8522<br>S Total: 1<br>pe   | Numbe  |                |  |
| State/Country:<br>Postal Code:<br>PROPERTY NUMBER:<br>Property Ty<br>Application Number:<br>CORRESPONDENCE  | JAPAN<br>545-8522<br>S Total: 1<br>pe   | 11072563   | 2r             |  |
| State/Country:<br>Postal Code:<br>PROPERTY NUMBER:<br>Property Ty<br>Application Number:<br>CORRESPONDENCE<br>Fax Number:   | JAPAN<br>545-8522<br>S Total: 1<br>pe<br>DATA<br>(216)621   | 11072563   |                |  |
| State/Country:<br>Postal Code:<br>PROPERTY NUMBER:<br>Property Ty<br>Application Number:<br>CORRESPONDENCE<br>Fax Number:<br><i>Correspondence will be</i>  | JAPAN<br>545-8522<br>S Total: 1<br>pe<br>DATA<br>(216)621   | 11072563<br>1-6165<br>Mail when the fax attempt is unsuccessfu   |                |  |
| State/Country:<br>Postal Code:<br>PROPERTY NUMBER:<br>Property Ty<br>Application Number:<br>CORRESPONDENCE<br>Fax Number:<br><i>Correspondence will be</i><br>Phone:  | JAPAN<br>545-8522<br>S Total: 1<br>pe<br>DATA<br>(216)621<br>e sent via US<br>2166211                                       | 11072563<br>1-6165<br>Mail when the fax attempt is unsuccessfu   |                |  |
| State/Country:<br>Postal Code:<br>PROPERTY NUMBER:<br>Property Ty<br>Application Number:<br>CORRESPONDENCE<br>Fax Number:<br><i>Correspondence will be</i><br>Phone:<br>Email:<br>Correspondent Name:                                       | JAPAN<br>545-8522<br>S Total: 1<br>pe<br>DATA<br>(216)621<br>e sent via US<br>2166211<br>msaralin<br>Mark D S               | 11072563<br>1-6165<br><i>Mail when the fax attempt is unsuccessfu</i><br>1113<br>Io@rennerotto.com<br>Saralino   |                |  |
| State/Country:<br>Postal Code:<br>PROPERTY NUMBER:<br>Property Ty<br>Application Number:<br>CORRESPONDENCE<br>Fax Number:<br><i>Correspondence will be</i><br>Phone:<br>Email:<br>Correspondent Name:<br>Address Line 1:                    | JAPAN<br>545-8522<br>S Total: 1<br>pe<br>DATA<br>(216)621<br>e sent via US<br>2166211<br>msaralin<br>Mark D S<br>Renner,    | 11072563<br>I-6165<br><i>Mail when the fax attempt is unsuccessfu</i><br>1113<br>Io@rennerotto.com<br>Saralino<br>Otto, Boisselle & Sklar, LLP                                 |                |  |
| State/Country:<br>Postal Code:<br>PROPERTY NUMBER:<br>Property Ty<br>Application Number:<br>CORRESPONDENCE<br>Fax Number:<br><i>Correspondence will be</i><br>Phone:<br>Email:<br>Correspondent Name:<br>Address Line 1:<br>Address Line 2: | JAPAN<br>545-8522<br>S Total: 1<br>pe<br>(216)621<br>e sent via US<br>2166211<br>msaralin<br>Mark D S<br>Renner,<br>1621 Eu | 11072563<br>I-6165<br><i>Mail when the fax attempt is unsuccessfu</i><br>113<br>Io@rennerotto.com<br>Saralino<br>Otto, Boisselle & Sklar, LLP<br>clid Avenue, Nineteenth Floor |                |  |
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# ASSIGNMENT

WHEREAS, the ASSIGNOR(S), being the following named inventor(s):

Nathan SMITH 6 Rose Hill Oxford OX4 4HS United Kingdom

Paul A. GASS 16 Ash Grove, Headington Oxford OX3 9JL United Kingdom Martin D. TILLIN 11 Summer Fields, Abingdon, Oxfordshire, OX14 2PG United Kingdom

Bronje M. MUSGRAVE 3 Manor Cottages, Church Street Sutton Courtenay Oxfordshire, OX14 4NW United Kingdom

Jonathan P. BRAMBLE 10 Birchwood Close, Southwell, Notthinghamshire NG25 0DE United Kingdom

are inventor(s) of and owner(s) of rights to a certain invention entitled:

## For: CONTROL OF LIQUID CRYSTAL ALIGNMENT IN AN OPTICAL DEVICE

for which application for Letters Patent of the United States was executed on the date indicated below, and

WHEREAS, the ASSIGNEE:

SHARP KABUSHIKI KAISHA 22-22, Nagaikecho, Abeno-ku, Osaka-shi Osaka 545-8522 Japan

is desirous of acquiring the entire interest in, to and under said invention and the United States Letters Patent to be obtained therefor.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum corresponding to One Dollar (\$1.00), and for other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE the full and exclusive right, title and interest to said invention and all Letters Patent of the United States to be obtained therefor on said application or any continuation, division, renewal, substitute or reissue thereof for the full term or terms for which the same may be granted.

PATENT REEL: 016269 FRAME: 0641

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement, charge or other encumbrance has been or will be entered into which would conflict with this assignment and sale.

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNOR(S) and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or his legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

Signed:

Nathan SMITH

Paul A. GASS

| Jona  | tł | nan | P. BRAMBLE |  |
|-------|----|-----|------------|--|
| r     |    | -   | . Prite    |  |
| Marti | n  | D.  | TILLIN     |  |

**Bronje M. MUSGRAVE** 

Date:

03 June 200 3/6/05

16/6/5

PATENT REEL: 016269 FRAME: 0642

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement, charge or other encumbrance has been or will be entered into which would conflict with this assignment and sale.

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNOR(S) and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or his legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

Date:

Signed:

Nathan SMITH

Paul A. GASS

Jonathan P. BRAMBLE

Martin D. TILLIN

B. Muggrave

Bronje M. MUSGRAVE

03 June 2005 3/6/05

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement, charge or other encumbrance has been or will be entered into which would conflict with this assignment and sale.

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNOR(S) and will testify and so the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or his legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

Date:

Signed:

Nathan SMITH

Paul A. GA

Jonathan P. BRAMBLE

Martin D. TILLIN

Bronje M. MUSGRAVE

<u>03 June 2005</u> <u>3/6/05</u> 16/6/05

> PATENT REEL: 016269 FRAME: 0644

**RECORDED: 07/15/2005**