

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Noboru Iwata</td> <td>09/28/2012</td> </tr> <tr> <td>Teruhisa Kotani</td> <td>09/20/2012</td> </tr> <tr> <td>Tazuko Kitazawa</td> <td>09/28/2012</td> </tr> <tr> <td>Yoshiteru Murakami</td> <td>09/28/2012</td> </tr> </tbody> </table>	Name	Execution Date	Noboru Iwata	09/28/2012	Teruhisa Kotani	09/20/2012	Tazuko Kitazawa	09/28/2012	Yoshiteru Murakami	09/28/2012	
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RECEIVING PARTY DATA											
Name:	Sharp Kabushiki Kaisha										
Street Address:	22-22, Nagaike-cho, Abeno-ku										
City:	Osaka-shi, Osaka										
State/Country:	JAPAN										
Postal Code:	545-8522										
PROPERTY NUMBERS Total: 1											
Property Type	Number										
Application Number:	13639235										
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Total Attachments: 3 source=91518_70904_Assignment#page1.tif source=91518_70904_Assignment#page2.tif source=91518_70904_Assignment#page3.tif											

CH \$40.00 13639235

ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, made this ^{20th} ~~and 28th~~ day of September, 2012,
by Noboru IWATA, Teruhisa KOTANI, Tazuko KITAZAWA and Yoshiteru MURAKAMI,
respectively.

WHEREAS, Assignor(s) have invented certain new and useful
improvements in OPTICAL ELEMENT, AND ANTIREFLECTIVE STRUCTURE AND
PROCESS FOR PRODUCTION THEREOF set forth in a Patent application for Letters
Patent of the United States, filed herewith ; and

WHEREAS, SHARP KABUSHIKI KAISHA, a corporation organized under
and pursuant to the laws of Japan having its principal place of business at 22-22,
Nagaike-cho Abeno-ku Osaka-shi Osaka 545-8522 Japan (hereinafter referred to as
Assignee), is desirous of acquiring the entire right, title and interest in and to said
inventions and said Application for Letters Patent of the United States, and in and to
any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good
and sufficient consideration, the receipt of which is hereby acknowledged, Assignor(s)
have sold, assigned, transferred and set over, and by these presents do sell, assign,
transfer and set over, unto Assignee, its successors, legal representatives and assigns,
the entire right, title and interest in and to the above-mentioned inventions and
application for Letters Patent, and in and to any and all direct and indirect divisions,
continuations and continuations-in-part of said application, and any and all Letters
Patent in the United States and all foreign countries which may be granted therefor
and thereon, and reissues, reexaminations and extensions of said Letters Patent, and
all rights under the International Convention for the Protection of Industrial Property,
the same to be held and enjoyed by Assignee, for its own use and benefit and the use
and benefit of its successors, legal representatives and assigns, to the full end of the
term or terms for which Letters Patent may be granted and/or extended, as fully and
entirely as the same would have been held and enjoyed by Assignor(s), had this sale
and assignment not been made.

AND for the same consideration, Assignor(s) hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignor(s) are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignor(s) have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignor(s) hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignor(s) will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignor(s) hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignor(s) hereby grant the following individuals 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 and Trademark Office for recordation of this document:

EDWARDS WILDMAN PALMER LLP

All practitioners at Customer Number 21874

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date: September 28, 2012 Signature: Noboru Iwata
Noboru IWATA

Date: September 20, 2012 Signature: Teruhisa Kotani
Teruhisa KOTANI

Date: September 28, 2012 Signature: Tazuko Kitazawa
Tazuko KITAZAWA

Date: September 28, 2012 Signature: Yoshiteru Murakami
Yoshiteru MURAKAMI