



*D. J.*

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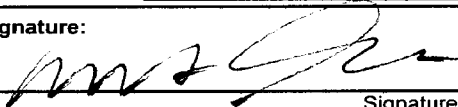


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To the Director of the U.S. Patent and Trademark Office

new address(es) below.

8.31.07

<b>1. Name of conveying party(ies):</b> Hibiki Tatsuno  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>2. Name and address of receiving party(ies)</b> Name: <u>Ricoh Company, Ltd.</u> Internal Address: _____ Street Address: <u>3-6, Nakamagome 1-chome</u> <u>Ohta-ku</u> <u>Tokyo</u> <u>143-8555</u> <u>JAPAN</u> City: _____ State: _____ Country: _____ Zip: _____ Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>3. Nature of conveyance/Execution Date(s):</b> Execution Date(s): <u>July 31, 2007</u> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____			
<b>4. Application or patent number(s):</b> A. Patent Application No.(s) <u>11/808,700</u>  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> This document is being filed together with a new application. B. Patent No.(s)  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>5. Name and address to whom correspondence concerning document should be mailed:</b> Name: <u>Mark J. Thronson</u> <u>DICKSTEIN SHAPIRO LLP</u> Internal Address: <u>Atty. Dkt.: C8391.0009/P009</u> Street Address: <u>1825 Eye Street, NW</u>  City: <u>Washington</u> State: <u>DC</u> Zip: <u>20006-5403</u> Phone Number: <u>(202) 420-4742</u> Fax Number: <u>(202) 420-2201</u> Email Address: <u>ThronsonM@dicksteinshapiro.com</u>		<b>6. Total number of applications and patents involved:</b> <span style="border: 1px solid black; padding: 2px;">1</span>  <b>7. Total fee (37 CFR 1.21(h) &amp; 3.41)</b> \$ <u>40.00</u> <input checked="" type="checkbox"/> Authorized to be charged by credit card <input type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)	
		<b>8. Payment Information</b> a. Credit Card Last 4 Numbers <u>1002</u> Expiration Date <u>01/11</u> b. Deposit Account Number _____ Authorized User Name _____	
<b>9. Signature:</b>  _____ Signature <span style="float: right;">Date <u>August 22, 2007</u></span> _____ Name of Person Signing <span style="float: right;">Total number of pages including cover sheet, attachments, and documents: <span style="border: 1px solid black; padding: 2px;">3</span></span>			

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PATENT  
REEL: 019808 FRAME: 0160

## ASSIGNMENT

**THIS ASSIGNMENT**, by Hibiki TATSUNO (hereinafter referred to as "Assignors"), residing at Kawasaki-shi, Kanagawa, Japan, respectively;

**WHEREAS**, Assignors have invented certain new and useful improvements in ILLUMINATION APPARATUS, LIGHT MODULATION APPARATUS, DISPLAY APPARATUS, PROJECTION-TYPE DISPLAY APPARATUS AND REAR-PROJECTION TELEVISION, set forth in a patent application for Letters Patent of the United States, executed concurrently herewith; and

**WHEREAS**, RICOH COMPANY, LTD., (hereinafter referred to as "Assignee"), having offices at 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan, 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 therefor and thereon.

**NOW, THEREFORE**, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors 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 Assignors, had this sale and Assignment not been made.

**AND** for the same consideration, Assignors 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, Assignors 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 Assignors 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, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors 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 Assignors hereby request the Director of the United States Patent and Trademark Office 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 Assignors 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: All practitioners associated with Customer Number 24998 (Dickstein Shapiro LLP).

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

July 31, 2007  
Date

Hibiki Tatsuno  
Hibiki TATSUNO

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Date

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\_\_\_\_\_  
Date

\_\_\_\_\_

July 31, 2007  
Date

Magane Aoki  
Witness

July 31, 2007  
Date

Hisashi Inada  
Witness