

PATENT ASSIGNMENT

Electronic Version v1.1

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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>Sapna A. Shroff</td> <td>02/16/2012</td> </tr> <tr> <td>Kathrin Berkner</td> <td>02/16/2012</td> </tr> <tr> <td>Lingfei Meng</td> <td>02/16/2012</td> </tr> </tbody> </table>		Name	Execution Date	Sapna A. Shroff	02/16/2012	Kathrin Berkner	02/16/2012	Lingfei Meng	02/16/2012		
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<table border="1"> <tr> <td>Name:</td> <td>Ricoh Co., Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>3-6, Nakamagome 1-Chome, Ohta-ku</td> </tr> <tr> <td>City:</td> <td>Tokyo</td> </tr> <tr> <td>State/Country:</td> <td>JAPAN</td> </tr> <tr> <td>Postal Code:</td> <td>143-8555</td> </tr> </table>		Name:	Ricoh Co., Ltd.	Street Address:	3-6, Nakamagome 1-Chome, Ohta-ku	City:	Tokyo	State/Country:	JAPAN	Postal Code:	143-8555
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
<p>Fax Number: (650)938-5200</p> <p>Phone: 6503357823</p> <p>Email: rhancock@fenwick.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Fenwick & West LLP</p> <p>Address Line 1: 801 California St</p> <p>Address Line 2: ATTN Michael W. Farn</p> <p>Address Line 4: Mountain View, CALIFORNIA 94041</p>											
ATTORNEY DOCKET NUMBER:	20412-19822										
NAME OF SUBMITTER:	Michael W. Farn, Reg. No. 41015										
<p>Total Attachments: 3</p> <p>source=19822_US_Assignment#page1.tif</p> <p>source=19822_US_Assignment#page2.tif</p> <p>source=19822_US_Assignment#page3.tif</p>											

CH \$40.00 13398813

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to **Ricoh Co., Ltd.**, a corporation of **Japan** having a place of business at 3-6, Nakamagome 1-Chome, Ohta-ku, Tokyo, Japan 143-8555 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional application filed under 35 U.S.C. § 111(b), non-provisional application filed under 35 U.S.C. § 111(a), international application filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase application filed under 35 U.S.C. § 371 ("APPLICATION"):

- Application No. 13/398,813, entitled "**Design and Optimization of Plenoptic Imaging Systems**," filed on February 16, 2012.

2. The entire worldwide right, title, and interest in and to:
(a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that 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.

Title: Design and Optimization of Plenoptic Imaging Systems
Filed: February 16, 2012
Application No.: 13/398,813

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Name and Signature

Sapna A. Shroff
Sapna A. Shroff

Date of Signature

02/16/2012

State of _____ }
County of _____ } ss.

On _____ before me, _____, Notary Public,
personally appeared Sapna A. Shroff, who proved to me on the basis of satisfactory evidence to be
the person whose name is subscribed to the within instrument and acknowledged to me that he/she
executed the same in his/her authorized capacity, and that by his/her signature on the instrument the
person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the
foregoing is true and correct.

WITNESS my hand and official seal.

Notary

Name and Signature

Kathrin Berkner
Kathrin Berkner

Date of Signature

02/16/2012

State of _____ }
County of _____ } ss.

On _____ before me, _____, Notary Public,
personally appeared Kathrin Berkner, who proved to me on the basis of satisfactory evidence to be
the person whose name is subscribed to the within instrument and acknowledged to me that he/she
executed the same in his/her authorized capacity, and that by his/her signature on the instrument the
person, or the entity upon behalf of which the person acted, executed the instrument.

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Title: Design and Optimization of Plenoptic Imaging Systems
Filed: February 16, 2012
Application No.: 13/398,813

Name and Signature

Lingfei Meng
Lingfei Meng

Date of Signature

02/16/2012

State of _____

}
}ss.

County of _____

On _____ before me, _____, Notary Public,
personally appeared Lingfei Meng, who proved to me on the basis of satisfactory evidence to be the
person whose name is subscribed to the within instrument and acknowledged to me that he/she
executed the same in his/her authorized capacity, and that by his/her signature on the instrument the
person, or the entity upon behalf of which the person acted, executed the instrument.

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