

PATENT ASSIGNMENT

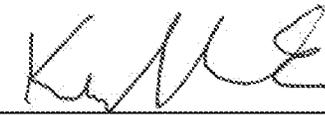
Electronic Version v1.1
 Stylesheet Version v1.1

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>Kevin von Essen</td> <td>05/02/2012</td> </tr> <tr> <td>John A. Higginson</td> <td>05/02/2012</td> </tr> <tr> <td>Paul A. Hoisington</td> <td>05/01/2012</td> </tr> <tr> <td>Don S. Minami</td> <td>05/04/2012</td> </tr> </tbody> </table>		Name	Execution Date	Kevin von Essen	05/02/2012	John A. Higginson	05/02/2012	Paul A. Hoisington	05/01/2012	Don S. Minami	05/04/2012
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Paul A. Hoisington	05/01/2012										
Don S. Minami	05/04/2012										
RECEIVING PARTY DATA											
Name:	FUJIFILM Corporation										
Street Address:	26-30, Nishiazabu 2-chome, Minato-ku										
City:	Tokyo										
State/Country:	JAPAN										
Postal Code:	106-8620										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13463353</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13463353						
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CORRESPONDENCE DATA											
Fax Number:	8777697945										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone:	617-542-5070										
Email:	apsi@fr.com										
Correspondent Name:	Mary J. Zynda, Fish & Richardson P.C.										
Address Line 1:	P.O. Box 1022										
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ATTORNEY DOCKET NUMBER:	22167-0091001										
NAME OF SUBMITTER:	David J. Goren										
Total Attachments: 2 source=22167_0091001_Assignment#page1.tif source=22167_0091001_Assignment#page2.tif											

CH \$40.00 13463353

ASSIGNMENT

For valuable consideration, we, KEVIN VON ESSEN of 5074 Trenary Way, San Jose, CA 95118, JOHN A. HIGGINSON of 2826 Forbes Avenue, Santa Clara, CA 95051, PAUL A. HOISINGTON of 1 Mink Drive, Hanover, NH 03755, and DON S. MINAMI of 17182 Zena Avenue, Monte Sereno, CA 95030, hereby assign to: FUJIFILM Corporation, a corporation of Japan having a place of business at: 26-30, Nishiazabu 2-chome, Minato-ku, Tokyo 106-8620, Japan; and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled SYSTEMS AND METHODS FOR DELIVERING AND RECIRCULATING FLUIDS, filed 05/03/2012, and assigned U.S. Serial Number 13/463,353, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, any divisionals, continuations, substitutions, and reissues of said application, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Date: 5/2/12 
KEVIN VON ESSEN

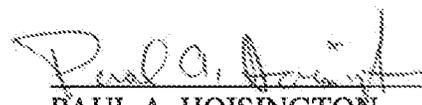
Witnessed by:

Name: Julie Nguyen Date: 5/2/12

Date: 5/10/2012 
JOHN A. HIGGINSON

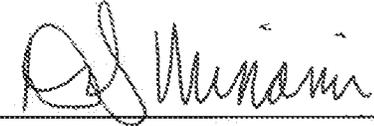
Witnessed by:

Name: Julie Nguyen Date: 5/2/12

Date: May 1, 2012 
PAUL A. HOISINGTON

Witnessed by:

Name: Kary Lattaye Date: 5/1/12

Date: 4 MAY 12 
DON S. MINAMI

Witnessed by:

Name: Julie Nguyen Date: 5/4/12

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