PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4010979

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
DAISUKE KATAGIRI	08/08/2016	
TAKASHI MORI	08/08/2016	

RECEIVING PARTY DATA

Name:	RICOH COMPANY, LTD.
Street Address:	3-6, NAKAMAGOME 1-CHOME, OHTA-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	143-8555

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15238798

CORRESPONDENCE DATA

Fax Number: (212)391-0525

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 2122780400

Email: pteng@cooperdunham.com

Correspondent Name: PAUL TENG

Address Line 1: 30 ROCKEFELLER PLAZA

Address Line 4: NEW YORK, NEW YORK 10112

ATTORNEY DOCKET NUMBER:	2271/88871
NAME OF SUBMITTER:	PAUL TENG
SIGNATURE:	/PAUL TENG/
DATE SIGNED:	08/17/2016

Total Attachments: 3

source=88871--AssignmentRecordationRequest#page1.tif source=88871--AssignmentRecordationRequest#page2.tif source=88871--AssignmentRecordationRequest#page3.tif

PATENT 503964324 REEL: 039466 FRAME: 0810

Docket No.: 2271/88871

FORM PTO-1595 (Substitute) RECORDATION FORM COVER SHEET U.S. DEPARTMENT OF COMMER				
PATENTS ONLY				
To the Honorable Commissioner of Patents and Trademarks. Please r	Patent and Trademark Office			
Name of conveying party(ies):	Name and address of receiving party(ies):			
Deignly VATACIDI.				
Daisuke KATAGIRI; Takashi MORI	Name: RICOH COMPANY, LTD.			
	Internal Address:			
Additional name(s) of conveying party(ies) attached?	Street Address: 3-6, Nakamagome 1-chome,			
Yes No				
	Ohta-ku			
3. Nature of Conveyance:	City/State/Zip: Tokyo, 143-8555, JAPAN			
Security Assignment Change of Name Other				
Execution Date(s): August 8, 2016; August 8, 2016;				
	Additional name(s) & address(es) attached? Yes No			
4. Application number(s) or patent number(s): If this document is being	g filed together with a new application, the execution date(s) of the			
application is (are):				
A. Patent Application No.(s) 15/238798	B. Patent No.(s)			
13/230770				
Additional numbers atta	ached? Yes No			
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1			
	7. Total fee (37 CFR §3.41): \$ 0.00			
Name: Paul Teng	7. Total fee (37 GFK 93.41)			
Internal Address:	Enclosed			
Street Address: COOPER & DUNHAM LLP	Authorized to be charged to deposit account			
30 Rockefeller Plaza, 20th Floor				
City/State/Zip: New York, New York 10112	8. Deposit account number:			
THEW TOTK, NEW TOTK 10112	03-3125			
DO NOT US	SE THIS SPACE			
9. Statement and signature.	E THO OF AGE			
	nation is true and correct and any attached copy is a true copy of the			
original document.				
Paul Teng, Reg. No. 40,837	2016 AUGUST 17			
Name of Person Signing	Signatule Date			
	Total Number of pages including cover sheet, attachments and document: 3			
OMB No. 0651-0011 (exp. 4/94)				
Mail documents to be recorded with required cover sheet information to: Mail Stop Assignment Recordation Services				
Director of the United States Patent and Trademark Office				
P.O. Box 1450 Alexandria VA 22313-1450				

Application No. 15/238798 filed August 17, 2016 Dkt. 2271/88871

ASSIGNMENT

In consideration of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, I/we, the undersigned,

Hereby sell, assign and transfer to RICOH COMPANY, LTD., a corporation of Japan, having a place of business at 3-6, Nakamagome 1-Chome, Ohta-ku, Tokyo 143-8555, Japan, its successors, assigns and legal representatives, the entire right, title and interest for all countries, in and to any and all inventions which are disclosed and claimed, and as possessed by the undersigned, any and all inventions which are disclosed but not claimed, in the application for United States Patent, which was executed by the undersigned concurrently herewith and is entitled

CHANNEL SUBSTRATE, METHOD OF PRODUCING CHANNEL SUBSTRATE, LIQUID DISCHARGE HEAD, INK CARTRIDGE, AND LIQUID DISCHARGE APPARATUS

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for U.S. Letters Patent or other related property rights in any and all foreign countries which have been or shall be filed on any of said inventions disclosed in said application; and in and to all original and reissued patents or related foreign documents which have been or shall be issued on said inventions;

Authorize and request the Commissioner of Patents of the United States to issue to said Assignee, the corporation above named, its successors, assigns and legal representatives, in accordance with this assignment, any and all United States Letters Patent on said inventions or any of them disclosed in said application;

Agree that said Assignee may apply for and receive foreign Letters Patent or rights of any other kind for said inventions, or any of them; and may claim, in applications for said foreign Letters Patent or other rights, the priority of the aforesaid United States patent application under the provisions of the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention or under any other available international agreement; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned or the undersigned's executors or administrators will, for the United States and all foreign countries, execute all divisional, continuing, substitute, renewal, reissue, and all

PATENT REEL: 039466 FRAME: 0812

Dkt.

Page 2

other patent applications or other documents on any and all said inventions; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives, all facts known and documents available to the undersigned relating to said inventions and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said inventions and for vesting title to said inventions and all applications for patents or related foreign rights and all patents on said inventions, in said Assignee, its successors, assigns and legal representatives; and

COVENANT with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

		Dalsuke Katagiri	
Date: August 8, 2016	_	DAISUKE KATAGIRI	
Witness:	[signature] [print name] [address] 		
Date: August 8,2016	_	Tabashi Mari TAKASHI MORI	[L.S.]
Witness:	[signature] _ [print name] _ [address]		

PATENT REEL: 039466 FRAME: 0813

RECORDED: 08/17/2016