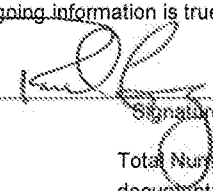


PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4108145

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	SHOZO SAKURA	10/19/2016
	SHINICHIROH SATOH	10/19/2016
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:	15299788
CORRESPONDENCE DATA		
Fax Number:	(212)391-0525	
<i>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.</i>		
Phone:	2122780400	
Email:	pteng@cooperdunham.com	
Correspondent Name:	PAUL TENG	
Address Line 1:	COOPER & DUNHAM LLP	
Address Line 2:	30 ROCKEFELLER PLAZA, 20TH FLOOR	
Address Line 4:	NEW YORK, NEW YORK 10112	
ATTORNEY DOCKET NUMBER:	2271/89081	
NAME OF SUBMITTER:	PAUL TENG	
SIGNATURE:	/PAUL TENG/	
DATE SIGNED:	10/21/2016	
Total Attachments: 3		
source=89081--AssignmentRecordation#page1.tif		
source=89081--AssignmentRecordation#page2.tif		
source=89081--AssignmentRecordation#page3.tif		

FORM PTO-1595 (Substitute) (Rev. 8-96)	RECORDATION FORM COVER SHEET PATENTS ONLY	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies): Shozo SAKURA; Shinichiroh SATOH Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Name: RICOH COMPANY, LTD. Internal Address: _____ Street Address: 3-6, Nakamagome 1-chome, Ohta-ku City/State/Zip: Tokyo, 143-8555, JAPAN Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Nature of Conveyance: <input type="checkbox"/> Security Assignment <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date(s): October 19, 2016; October 19, 2016;		
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date(s) of the application is (are): _____		
A. Patent Application No.(s) 15/299,788	B. Patent No.(s) _____	
Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Paul Teng Internal Address: _____ Street Address: COOPER & DUNHAM LLP 30 Rockefeller Plaza, 20th Floor City/State/Zip: New York, New York 10112	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR §3.41): \$ 0.00 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: 03-3125	
DO NOT USE THIS SPACE		
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> Paul Teng, Reg. No. 40,837 Name of Person Signing </div> <div style="width: 30%; text-align: center;">  Signature </div> <div style="width: 30%; text-align: right;"> 2016 OCT. 21 Date </div> </div> <div style="text-align: right; margin-top: 10px;"> Total Number of pages including cover sheet, attachments and document: 3 </div>		
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		

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

APPARATUS FOR FABRICATING THREE-DIMENSIONAL OBJECT

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
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.

Shozo Sakura [L.S.]
SHOZO SAKURA

Date: October 19, 2016

Witness: _____ [signature]
_____ [print name]
_____ [address]

Shinichiroh Satoh [L.S.]
SHINICHIROH SATOH

Date: October 19, 2016

Witness: _____ [signature]
_____ [print name]
_____ [address]
