

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5682705

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JIAYIN PENG	07/29/2017
DANIEL DORAN	03/05/2018
KOSUKE NAKASHIMA	07/27/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Canon Information and Imaging Solutions, Inc.
<b>Street Address:</b>	One Canon Park
<b>City:</b>	Melville
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	11747
<b>Name:</b>	Canon U.S.A., Inc.
<b>Street Address:</b>	One Canon Park
<b>City:</b>	Melville
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	11747
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15497997
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(949)932-3560
<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>	
<b>Phone:</b>	9499323485
<b>Email:</b>	jvehige@cusa.canon.com
<b>Correspondent Name:</b>	CANON U.S.A. INC. INTELLECTUAL PROPERTY
<b>Address Line 1:</b>	15975 ALTON PARKWAY
<b>Address Line 4:</b>	IRVINE, CALIFORNIA 92618-3731
<b>ATTORNEY DOCKET NUMBER:</b>	2700-20201-NON-PROV
<b>NAME OF SUBMITTER:</b>	JOSEPH VEHIGE
<b>SIGNATURE:</b>	/Joseph Vehige/

<b>DATE SIGNED:</b>	08/22/2019
<b>Total Attachments: 3</b> source=2700-20201-Janice_Assign#page1.tif source=2700-20201-non-prov-ASSIGN-Duran#page1.tif source=Kasey_Assignment_signed#page1.tif	

## ASSIGNMENT

FOR VALUE RECEIVED, I

Jiayin Peng, residing at College Point, NY

hereby sell, assign, transfer, and convey unto

Canon Information and Imaging Solutions, Inc., a corporation of New York  
having a place of business at  
One Canon Park  
Melville, NY 11747

and

Canon U.S.A., Inc., a corporation of New York  
having a place of business at  
One Canon Park  
Melville, NY 11747

(hereinafter called the "Assignees"), their successors, assigns, and legal representatives, the entire right, title, and interest, for all countries, in and to certain inventions relating to

**APPARATUS, SYSTEM AND METHOD FOR CACHE MANAGEMENT**

and that is filed concurrently herewith or was filed on April 26, 2017 and appointed Serial No. 15/497997, and which claim priority to U.S. Provisional Application Serial No. 62/329735 which was filed on April 29, 2016, and in and to said provisional application, and all non-provisional applications for Letters Patent of the United States that claim the benefit thereof including divisions, renewals, and continuations thereof, and all Letters Patent of the United States which may be granted, thereon, and all reissues and extensions thereof, and all applications for Letters Patent or other grants of protection of proprietary rights including, but not limited to, inventor's certificate, utility model, utility certificate, patent of importation, registration of patent and industrial design registration which may be filed, and which may be granted, upon said inventions in any countries or regions foreign to the United States, and all reissues, renewals, and extensions thereof; and I hereby authorize and request the Commissioner for Patents and Trademarks of the United States, and all officials of countries or regions foreign to the United States having authority to do so, to issue all such Letters Patent or other grants of protection upon said inventions to the Assignees or to such nominees as the Assignees may designate.

AND I authorize and empower the Assignees or nominees to invoke and claim for any application for such Letters Patent or other grants of protection for said inventions filed by the Assignees or nominees, the benefit of the right of priority provided by the international Convention for the Protection of Industrial Property, as amended, or by a convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

AND I hereby consent that a copy of this assignment shall be deemed a full and formal equivalent of any assignment, consent to file, or like document which may be required in any country or region for any purpose and more particularly in proof of the right of the Assignees or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

AND I hereby covenant that I have the full right to convey the entire right, title, and interest herein assigned and that I have not executed and will not execute any agreement in conflict herewith.

AND I hereby covenant and agree that I will communicate to the Assignees or nominees all facts known to me pertaining to said inventions, and testify in all legal proceedings, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths and declarations, and in general perform all lawful acts necessary or proper to aid the Assignees or nominees in obtaining, maintaining, and enforcing all lawful patent or other grants of protection of said invention in any and all countries and regions.

AND I hereby authorize the attorneys of record for the Application or the attorneys' representative to fill in the application number and filing date in the spaces provided above.

Signature  
Jiayin Peng

Date

ASSIGNMENT

FOR VALUE RECEIVED, I

Daniel Duran, residing at Yonkers, NY

hereby sell, assign, transfer, and convey unto

Canon Information and Imaging Solutions, Inc., a corporation of New York  
having a place of business at  
One Canon Park  
Melville, NY 11747

and

Canon U.S.A., Inc., a corporation of New York  
having a place of business at  
One Canon Park  
Melville, NY 11747

(hereinafter called the "Assignees"), their successors, assigns, and legal representatives, the entire right, title, and interest, for all countries, in and to certain inventions relating to

APPARATUS, SYSTEM AND METHOD FOR CACHE MANAGEMENT

and that is filed concurrently herewith or was filed on April 26, 2017 and appointed Serial No. 15/492997, and which claim priority to U.S. Provisional Application Serial No. 62/329735 which was filed on April 29, 2016, and in and to said provisional application, and all non-provisional applications for Letters Patent of the United States that claim the benefit thereof including divisions, renewals, and continuations thereof, and all Letters Patent of the United States which may be granted, thereon, and all reissues and extensions thereof, and all applications for Letters Patent or other grants of protection of proprietary rights including, but not limited to, inventor's certificate, utility model, utility certificate, patent of importation, registration of patent and industrial design registration which may be filed, and which may be granted, upon said inventions in any countries or regions foreign to the United States, and all reissues, renewals, and extensions thereof, and I hereby authorize and request the Commissioner for Patents and Trademarks of the United States, and all officials of countries or regions foreign to the United States having authority in this respect, to issue all such Letters Patent or other grants of protection upon said inventions to the Assignees or to such nominees as the Assignees may designate.


AND I authorize and empower the Assignees or nominees to invoke and claim for any application for such Letters Patent or other grants of protection for said inventions filed by the Assignees or nominees, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by a convention which may hereafter be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

AND I hereby consent that a copy of this assignment shall be deemed a full and formal equivalent of any assignment, consent to file, or like document which may be required in any country or region for any purpose and more particularly in proof of the right of the Assignees or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may hereafter be substituted for it.

AND I hereby covenant that I have the full right to convey the entire right, title, and interest herein assigned and that I have not executed and will not execute any agreement in conflict herewith.

AND I hereby covenant and agree that I will communicate to the Assignees or nominees all facts known to me pertaining to said inventions, and testify in all legal proceedings, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths and declarations, and in general perform all lawful acts necessary or proper to aid the Assignees or nominees in obtaining, maintaining, and enforcing all lawful patent or other grants of protection of said invention in any and all countries and regions.

AND I hereby authorize the attorneys of record for the Application or the attorneys' representative to fill in the application number and filing date in the spaces provided above.

  
Signature  
Daniel Duran

  
Date

ASSIGNMENT

FOR VALUE RECEIVED, I

Kosuke Nakashima, residing at Kawasaki, Japan

hereby sell, assign, transfer, and convey unto

Canon Information and Imaging Solutions, Inc., a corporation of New York  
having a place of business at  
One Canon Park  
Melville, NY 11747

and

Canon U.S.A., Inc., a corporation of New York  
having a place of business at  
One Canon Park  
Melville, NY 11747

(hereinafter called the "Assignees"), their successors, assigns, and legal representatives, the entire right, title, and interest, for all countries, in and to certain inventions relating to

APPARATUS, SYSTEM AND METHOD FOR CACHE MANAGEMENT

and that is filed concurrently herewith or was filed on April 26, 2017 and appointed Serial No. 15/497997, and which claim priority to U.S. Provisional Application Serial No. 62/129735 which was filed on April 29, 2016, and in and to said provisional application, and all non-provisional applications for Letters Patent of the United States that claim the benefit thereof including divisions, renewals, and continuations thereof, and all Letters Patent of the United States which may be granted, thereon, and all reissues and extensions thereof, and all applications for Letters Patent or other grants of protection of proprietary rights including, but not limited to, inventor's certificate, utility model, utility certificate, patent of importation, registration of patent and industrial design registration which may be filed, and which may be granted, upon said inventions in any countries or regions foreign to the United States, and all reissues, renewals, and extensions thereof; and I hereby authorize and request the Commissioner for Patents and Trademarks of the United States, and all officials of countries or regions foreign to the United States having authority to do so, to issue all such Letters Patent or other grants of protection upon said inventions to the Assignees or to such nominees as the Assignees may designate.

AND I authorize and empower the Assignees or nominees to invoke and claim for any application for such Letters Patent or other grants of protection for said inventions filed by the Assignees or nominees, the benefit of the right of priority provided by the international Convention for the Protection of Industrial Property, as amended, or by a convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

AND I hereby consent that a copy of this assignment shall be deemed a full and formal equivalent of any assignment, consent to file, or like document which may be required in any country or region for any purpose and more particularly in proof of the right of the Assignees or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

AND I hereby covenant that I have the full right to convey the entire right, title, and interest herein assigned and that I have not executed and will not execute any agreement in conflict herewith.

AND I hereby covenant and agree that I will communicate to the Assignees or nominees all facts known to me pertaining to said inventions, and testify in all legal proceedings, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths and declarations, and in general perform all lawful acts necessary or proper to aid the Assignees or nominees in obtaining, maintaining, and enforcing all lawful patent or other grants of protection of said invention in any and all countries and regions.

AND I hereby authorize the attorneys of record for the Application or the attorneys' representative to fill in the application number and filing date in the spaces provided above.

K. Nakashima  
Signature  
Kosuke Nakashima

7/27/2017  
Date