PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7321385

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HIROAKI KUSANO	03/10/2022
JUNICHIRO IRI	03/10/2022
YUSUKE HASHIMOTO	03/10/2022

RECEIVING PARTY DATA

Name:	Canon Kabushiki Kaisha
Street Address:	30-2, Shimomaruko 3-Chome, Ohta-ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	146-8501

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17708711

CORRESPONDENCE DATA

Fax Number: (949)932-3577

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: +81-3-5732-8698 Email: prj-epas@mail.canon

CANON KABUSHIKI KAISHA **Correspondent Name:**

Address Line 1: 30-2, SHIMOMARUKO 3-CHOME, OHTA-KU

Address Line 4: TOKYO, JAPAN 146-8501

ATTORNEY DOCKET NUMBER: 10205690US01	
NAME OF SUBMITTER:	KOZUE TANO
SIGNATURE:	/Kozue Tano/
DATE SIGNED:	05/10/2022

Total Attachments: 6

source=10205690US01A#page1.tif source=10205690US01A#page2.tif source=10205690US01A#page3.tif source=10205690US01A#page4.tif

> **PATENT** REEL: 059876 FRAME: 0564

507274464

source=10205690US01A#page5.tif source=10205690US01A#page6.tif

> PATENT REEL: 059876 FRAME: 0565

ASSIGNMENT

For valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/WE

Hiroaki Kusano	Junichiro Iri
Yusuke Hashimoto	
hereby assign, transfer, and convey unto	CANON KABUSHIKI KAISHA
a corporation of Japan	
having a place of business at 30-2, SI	nimomaruko 3-chome, Ohta-ku, Tokyo, Japan

its successors, assigns and legal representatives (hereinafter called the "Assignee"), any right, title, and interest, for all countries, that I/we have in and to certain inventions relating to

ELEMENT SUBSTRATE, LIQUID DISCHARGE HEAD, AND MANUFACTURING METHOD OF SAME

and described in an application for Letters Patent of the United States filed on 2022/03/30 (filing date) and assigned U.S. Application No. 17/708,711 (U.S. application number), and in and to said U.S. application, and all divisions, renewals, continuations, and continuations-in-part 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 including the right to claim priority to said U.S. application, and I/we confirm that we hereby authorize 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 Assignee or to such nominees as it may designate.

AND I/we authorize and empower said Assignee or nominees to invoke and claim for any application for such Letters Patent or other grants of protection for said inventions filed by it or them, 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/us.

AND I/we 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 said Assignee 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/we hereby covenant that I/we have not executed and will not execute any agreement in conflict herewith.

AND I/we hereby covenant and agree that I/we will communicate to said Assignee or nominees all facts known to me/us 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 said Assignee or nominees in obtaining, maintaining, and enforcing ail lawful patent or other grants of protection of said inventions in any and all countries and regions.

AND, if the application number and filing date of the above-referenced U.S. patent application are not known at the time this Assignment is executed by me/us, I/we hereby authorize and request said Assignee and/or its attorney to insert in the above-designated spaces the U.S. application number and filing date of said U.S. patent application when known.

Hiroaki Kusano Date: March 10, 2022

Hiroaki Kusano

10205690US01

ASSIGNMENT

For valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/WE

Hiroaki Kusano	Junichiro Iri
Yusuke Hashimoto	

hereby assign, transfer, and convey unto	CANON KABUSHIKI KAISHA
a corporation of Japan	
having a place of business at 30-2, Si	himomaruko 3-chome, Ohta-ku, Tokyo, Japan

its successors, assigns and legal representatives (hereinafter called the "Assignee"), any right, title, and interest, for all countries, that I/we have in and to certain inventions relating to

ELEMENT SUBSTRATE, LIQUID DISCHARGE HEAD, AND MANUFACTURING METHOD OF SAME

and described in an application for Letters Patent of the United States flied on 2022/03/30 (filing date) and assigned U.S. Application No. 17/708,711 (U.S. application number), and in and to said U.S. application, and all divisions, renewals, continuations, and continuations-in-part 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 including the right to claim priority to said U.S. application, and I/we confirm that we hereby authorize 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 Assignee or to such nominees as it may designate.

AND I/we authorize and empower said Assignce or nominees to invoke and claim for any application for such Letters Patent or other grants of protection for said inventions filed by it or them, 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/us.

AND I/we 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 said Assignee 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/we hereby covenant that I/we have not executed and will not execute any agreement in conflict herewith.

AND I/we hereby covenant and agree that I/we will communicate to said Assignee or nominees all facts known to me/us 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 said Assignee or nominees in obtaining, maintaining, and enforcing all lawful patent or other grants of protection of said inventions in any and all countries and regions.

AND, if the application number and filing date of the above-referenced U.S. patent application are not known at the time this Assignment is executed by me/us, I/we hereby authorize and request said Assignee and/or its attorney to insert in the above-designated spaces the U.S. application number and filing date of said U.S. patent application when known.

By: Junichiro Iri Date: March 10, 2022

Junichiro Iri

Page 2 of 2

10205690US01

ASSIGNMENT

For valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/WE

Hiroaki Kusano	Junichiro Iri
Yusuke Hashimoto	
hereby assign, transfer, and convey unto	ČANON KABUSHIKI KAISHA
a corporation of Japan	
having a place of business at 30-2, SI	nimomaruko 3-chome, Ohta-ku, Tokyo, Japan

its successors, assigns and legal representatives (hereinafter called the "Assignee"), any right, title, and interest, for all countries, that I/we have in and to certain inventions relating to

ELEMENT SUBSTRATE, LIQUID DISCHARGE HEAD, AND MANUFACTURING METHOD OF SAME

and described in an application for Letters Patent of the United States filed on 2022/03/30 (filing date) and assigned U.S. Application No. 17/708,711 (U.S. application number), and in and to said U.S. application, and all divisions, renewals, continuations, and continuations-in-part 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 including the right to claim priority to said U.S. application, and I/we confirm that we hereby authorize 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 Assignee or to such nominees as it may designate.

AND I/we authorize and empower said Assignee or nominees to invoke and claim for any application for such Letters Patent or other grants of protection for said inventions filed by it or them, 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/us.

AND I/we 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 said Assignee 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/we hereby covenant that I/we have not executed and will not execute any agreement in conflict herewith.

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

AND, if the application number and filing date of the above-referenced U.S. patent application are not known at the time this Assignment is executed by me/us, I/we hereby authorize and request said Assignee and/or its attorney to insert in the above-designated spaces the U.S. application number and filing date of said U.S. patent application when known.

Yusuke Hashimoto

By: Hardelike Washimalo Date: March 10, 202

Page 2 of 2