505726676 10/17/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5773488

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DOUKEI NAGAYASU	04/23/2019
HITOSHI NISHIMURA	04/23/2019
JINGBO WANG	04/23/2019
MAKOTO RYUDO	04/23/2019
MASATOSHI NISHIO	04/23/2019
HIDEAKI YAMAGUCHI	05/08/2019
YOSHIAKI TAKENAKA	04/23/2019
KIYOTAKA EIZUMI	04/23/2019
RYO ISHIKAWA	04/23/2019

RECEIVING PARTY DATA

Name: PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO., LTD.	
Street Address: 1-61, SHIROMI 2-CHOME, CHUO-KU, OSAKA-SHI	
City:	OSAKA
State/Country:	JAPAN
Postal Code:	540-6207

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16408681	

CORRESPONDENCE DATA

Fax Number:

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.

Email: epas.pkp@ml.jp.panasonic.com

Correspondent Name: PASONA KNOWLEDGE PARTNER INC.

Address Line 1: 8F OBP PANASONIC TOWER

Address Line 2: 1-61, SHIROMI 2-CHOME, CHUO-KU

Address Line 4: OSAKA, JAPAN 540-6208

ATTORNEY DOCKET NUMBER: P1002578US01

NAME OF SUBMITTER: ASAMI KATO

PATENT 505726676 REEL: 050740 FRAME: 0451

SIGNATURE:	/Asami KATO/
DATE SIGNED:	10/17/2019
Total Attachments: 3	

source=Assignment 16408681(P1002578US01 PPCUS)#page1.tif source=Assignment 16408681(P1002578US01 PPCUS)#page2.tif source=Assignment 16408681(P1002578US01 PPCUS)#page3.tif

PATENT REEL: 050740 FRAME: 0452

Panasonic Ref*: P1002578US01	Assignment Form (Oct. 2014) Application Serial No. 16/40868/
Japan Firm Name: PIPM Direct	Japan Firm Ref:
US Firm Name*:	US Firm Ref:
(* must be filled)	

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of Invention:		
LASER PROCESSING DEVICE AND LASER	PROCESSING MET	HOD
1. For use when signing Declaration prior to filing	g U.S. patent application (check or	nly one box below)
(a) for which an application for U.S. patent has been executed	by the undersigned concur	rently herewith, or
(b)□ for which an application for U.S. patent has been executed	on the following date(s):	, or
(if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank; if the	he Declaration was signed before this Assig	nment, enter the date(s) on which you signed the Declaration)
(c)□ for which an International Application has been filed as:	PCT Application No.	and
(for the PCT-US national entry, check only (c) and enter PCT application number in the right)	· · · · · · · · · · · · · · · · · · ·	
2. For use when signing Declarat	tion after filing U.S. patent applicat	ion
(d)□ for which an application for U.S. patent has been filed on:	Application Filing Date	and,

WHEREAS, Panaspnic Intellectual Property Management Co., Ltd. of 1-61, Shiromi 2-chome, Chuo-ku, Osaka-shi, Osaka 540-6207

<u>Japan</u>

its/their heirs, successors, legal representatives and assigns (hereinafter designated as "Assignee(s)") is/are desirous of acquiring the entire right, title, and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and intended to be legally bound hereby, the undersigned, by these presents, does sell, assign and transfer unto said Assignee(s) the entire and exclusive right, title and interest in and to; (i) said invention in the United States of America, its territories, dependencies and possessions (hereinafter designated as the United States) and in all countries foreign to the United States; and (ii) this patent application and any and all related patent application(s) disclosing said invention, including provisionals, non-provisionals, conversions, divisions, continuations, continuations-in-part and reissues thereof in the United States and all countries foreign to the United States (hereinafter designated as "Related Applications"), along with all rights of priority created by this patent application under any treaty relating thereto; and (iii) any and all Letters Patent(s), including all renewals, extensions, reissues and reexamination certificates which may be granted therefore, and all rights to sue for past and future infringement thereunder, in the United States and in all countries foreign to the United States for the full term or terms thereof.

The undersigned agree(s) to execute all papers necessary in connection with this application and any and all Related Applications thereof, all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements, all papers necessary in connection with any interference which may be declared concerning this application or any and all Related Applications thereof and to cooperate with the Assignee(s) in every way possible in obtaining and producing evidence and proceeding with such interference, and for any and all litigations regarding, or for the purpose of protecting the right, title and interest in and to said invention, this application and any and all Related Applications or Letters Patent(s) therefore, and to testify in any legal proceeding relating thereto and in support thereof, for the benefit of Assignee(s), and also to execute separate assignments in connection with such applications as the Assignee(s) may deem necessary or expedient.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States and any foreign patent(s) to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by the undersigned if this Assignment had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents, and officials of all foreign countries, whose duty is to issue patents, to issue any and all Letters Patent(s) resulting from said application or any and all Related Applications thereof to said Assignee(s) and hereby covenants that the undersigned has (have) full right to convey the entire interest herein assigned, and that the undersigned has (have) not executed, and will not execute, any assignment, sale, agreement or encumbrances in conflict herewith.

The undersigned hereby does sell, assign and transfer unto said Assignee(s) the full and exclusive authority for revoking power of attorney(s)

The undersigned hereby does sell, assign and transfer unto said Assignee(s) the full and exclusive authority for revoking power of attorney(s executed by the undersigned in connection with this application and for appointing a new power of attorney in place thereof.

The undersigned hereby grant(s) the Assignee(s) and the appointed U.S. patent attorneys and agents the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent Office for recordation of this document

The undersigned hereby agree(s) that the above obligations shall apply to the undersigned both individually and collectively.

The undersigned hereby agree(s) that this Assignment shall be construed in accordance with the law of the appropriate jurisdiction within the United States.

IN WITNESS WHEREOF, executed by the undersigned on the date(s) following the undersigned name(s) and signature(s).

Box2	(Each Inventor, please Sign and Date be		3
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Doukei NAGAYASU	Varhe Majayan	Month, Date, Year April 23, 2019
(2)	Hitoshi NISHIMURA		Month, Date, Year
(3)	Jingbo WANG		Month, Date, Year
(4)	Makoto RYUDO		Month, Date, Year

	Application Serial No. 16/40868
Panasonic Ref*: P1002578US01	Application Serial No. (6/40868/
Japan Firm Name: PIPM Direct	Japan Firm Ref:
US Firm Name*:	US Firm Ref:
(* must be filled)	

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of Invention: LASER PROCESSING DEVICE AND LASER	PROCESSING METHOL)
1. For use when signing Declaration prior to filin	ng U.S. patent application (check only one l	box below)
(a)∎ for which an application for U.S. patent has been executed	by the undersigned concurrently	herewith, or
(b) for which an application for U.S. patent has been executed	on the following date(s):	, or
(if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank; if	the Declaration was signed before this Assignment, ent	er the date(s) on which you signed the Declaration)
(c) for which an International Application has been filed as: (for the PCT-US national entry, check only (c) and enter PCT application number in the right)	PCT Application No.	and
2. For use when signing Declara	tion after filing U.S. patent application	
(d)□ for which an application for U.S. patent has been filed on:	Application Filing Date	and,
WHEREAS, Panasonic Intellectual Property Management Japan	Co., Ltd. of 1-61, Shiromi 2-chome, C	

its/their heirs, successors, legal representatives and assigns (hereinafter designated as "Assignee(s)") is/are desirous of acquiring the entire right, title, and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and intended to be legally bound hereby, the undersigned, by these presents, does sell, assign and transfer unto said Assignee(s) the entire and exclusive right, title and interest in and to; (i) said invention in the United States of America, its territories, dependencies and possessions (hereinafter designated as the United States) and in all countries foreign to the United States; and (ii) this patent application and any and all related patent application(s) disclosing said invention, including provisionals, non-provisionals, conversions, divisions, continuations, continuations-in-part and reissues thereof in the United States and all countries foreign to the United States (hereinafter designated as "Related Applications"), along with all rights of priority created by this patent application under any treaty relating thereto; and (iii) any and all Letters Patent(s), including all renewals, extensions, reissues and reexamination certificates which may be granted therefore, and all rights to sue for past and future infringement thereunder, in the United States and in all countries foreign to the United States for the full term or terms thereof.

The undersigned agree(s) to execute all papers necessary in connection with this application and any and all Related Applications thereof, all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements, all papers necessary in connection with any interference which may be declared concerning this application or any and all Related Applications thereof and to cooperate with the Assignee(s) in every way possible in obtaining and producing evidence and proceeding with such interference, and for any and all litigations regarding, or for the purpose of protecting the right, title and interest in and to said invention, this application and any and all Related Applications or Letters Patent(s) therefore, and to testify in any legal proceeding relating thereto and in support thereof, for the benefit of Assignee(s), and also to execute separate assignments in connection with such applications as the Assignee(s) may deem necessary or expedient.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States and any foreign patent(s) to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by the undersigned if this Assignment had not been made.

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IN MITNESS WHEREOF, executed by the undersigned on the date(s) following the undersigned name(s) and signature(s)

Box2	(Each Inventor, please Sign and Date below)			
	(e) First Name, Last Name	(f) Signature	(g) Date signed	
(1)	Doukei NAGAYASU		Month, Date, Year	
(2)	Hitoshi NISHIMURA	Hitaghi Nistimas	Month, Date, Year API'. 23, 2019	
(3)	Jingbo WANG	tings wang	Month, Date, Year April 23, 2019	
(4)	Makoto RYUDO	Makoto Ryndo	Month, Date, Year April. 23, 2019	

■Check if additional paper(s) is/are attached. Total of 2 pages are submitted.

PATENT REEL: 050740 FRAME: 0454

ASSIGNMENT (Cont.)

16/40868/

Additional Inventors:

	onal Inventors: Continued)		
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(5)	Masatoshi NISHIO	Masatosh Nishio	Month, Date, Year Aph 23, 2019
(6)	Hideaki YAMAGUCHI	Hidoaki TAMAGUCHI	Month, Date, Year May 8. 2019.
(7)	Yoshiaki TAKENAKA	Yoshiaki Takenaka	Month, Date, Year April 23. 2019
(8)	Kiyotaka EIZUMI	Kiyotaka Eizumi	Month, Date, Year April. 23. 2019
(9)	Ryo ISHIKAWA	Ryo ISHIKAWA	Month, Date, Year April 23, 2019
(10)			Month, Date, Year
(11)			Month, Date, Year
(12)			Month, Date, Year
(13)			Month, Date, Year
(14)			Month, Date, Year
(15)			Month, Date, Year
(16)			Month, Date, Year
(17)			Month, Date, Year
(18)			Month, Date, Year
(19)			Month, Date, Year
(20)			Month, Date, Year
(21)			Month, Date, Year
(22)			Month, Date, Year

 \Box Check if additional paper(s) is/are attached. Total of $\underline{2}$ pages are submitted.

PATENT REEL: 050740 FRAME: 0455

RECORDED: 10/17/2019