505788144 11/22/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5834972

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TSUNENORI NOMAGUCHI	10/15/2019
SHUNICHI MOTOMURA	10/15/2019
KENICHI NISHINAKA	10/15/2019
TOSHIHIDE AGEMURA	11/01/2019

RECEIVING PARTY DATA

Name:	: HITACHI HIGH-TECHNOLOGIES CORPORATION	
Street Address:	24-14, NISHI-SHIMBASHI 1-CHOME	
City:	MINATO-KU, TOKYO	
State/Country:	JAPAN	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16616097

CORRESPONDENCE DATA

Fax Number: (202)628-8844

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.

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Email: edocket@crowell.com, nbrown@crowell.com

Correspondent Name: CROWELL & MORING LLP

Address Line 1: P.O. BOX 14300

Address Line 4: WASHINGTON, D.C. 20044-4300

ATTORNEY DOCKET NUMBER:	109701.PC812US
NAME OF SUBMITTER:	MICHAEL H. JACOBS
SIGNATURE:	/Michael H. Jacobs/
DATE SIGNED:	11/22/2019

Total Attachments: 4

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PATENT 505788144 REEL: 051088 FRAME: 0949

ASSIGNMENT (譲渡証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by Hitachi High-Technologies Corporation, a corporation organized under the laws of Japan, located at 24-14, Nishi-Shimbashi 1-chome, Minato-ku, Tokyo, Japan, receipt of which is hereby acknowledged I do hereby sell and assign to said Hitachi High-Technologies Corporation, its successors and assigns, all my right, title and interest, in and for the United States of America, in and to

CHARGED PARTICLE BEAM DEVICE

Invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by said Hitachi High-Technologies Corporation, its successors, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to Issue said Letters Patent to said Hitachi High-Technologies Corporation.

Signed on the date(s) indicated aside signatures:

INVENTOR(S) (発明者フルネームサイン)		Date Signed (署名日)
1)	Tsunencri NOMAGUCHI Jaaneneri Lomaguchi	10 / 15 / 2019
2)	Shunichi MOTOMURA	
3)	Kenichi NISHINAKA	
4)	Toshihide AGEMURA	
5)		
6)		
7)		
8)		·
9)		
0)		

PATENT REEL: 051088 FRAME: 0950

ASSIGNMENT

(譲渡証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by Hitachi High-Technologies Corporation, a corporation organized under the laws of Japan, located at 24-14, Nishi-Shimbashi 1-chome, Minato-ku, Tokyo, Japan, receipt of which is hereby acknowledged I do hereby sell and assign to said Hitachi High-Technologies Corporation, its successors and assigns, all my right, title and interest, in and for the United States of America, in and to

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INVENTOR(S)

(発明者フルネームサイン)	(署名日)
Tsunenori NOMAGUCHI	<u></u>
Shunishi MOTOMURA GRANISHI MOCOMUNICA	10/15/2019
Kenichi NISHINAKA	
#	
Toshihide AGEMURA	The second secon
	, , , , , , , , , , , , , , , , , , ,
	Shunichi MOTOMURA Shunichi NISHINAKA Toshihide AGEMURA

PATENT REEL: 051088 FRAME: 0951

Date Signed

ASSIGNMENT

(譲渡証)

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IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by Hitachi High-Technologies Corporation, a corporation organized under the laws of Japan, located at 24-14, Nishi-Shimbashi 1-chome, Minato-ku, Tokyo, Japan, receipt of which is hereby acknowledged I do hereby sell and assign to said Hitachi High-Technologies Corporation, its successors and assigns, all my right, title and interest, in and for the United States of America, in and to

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Signed on the date(s) indicated aside signatures:

INVENTOR(S)

	(発明者フルネームサイン)	(署名日)
1)	Tsunenori NOMAGUCHI	
2)	Shunichi MOTOMURA	
3)	Kenichi NISHINAKA Kenichi Nishimaka	10/15/2019
4)	Toshihide AGEMURA	-
5)	:	
6)		
7)		
8)		
9)		
6)		

PATENT REEL: 051088 FRAME: 0952

Date Signed

ASSIGNMENT

(譲渡証)

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And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said Hitachi High-Technologies Corporation,

Signed on the date(s) indicated aside signatures:

.....

	INVENTOR(S) (発明者フルネームサイン)	υate Signed (署名日)
1)	Tsunenori NOMAGUCHI	
2)	Shunichi MOTOMURA	
3)	Kenichi NISHINAKA	
4)	Toshihide AGEMURA Toshihicle Azemura	11/1/2019
5)		
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PATENT REEL: 051088 FRAME: 0953

RECORDED: 11/22/2019