506751279 07/06/2021

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KOICHI ISHIGURO	01/12/2021
SHUN SHINOHARA	01/12/2021
KOHEI FUNAHARA	01/12/2021
TOMIO ODAKURA	01/28/2021
YOSHINORI OYAMA	02/18/2021
TAKAYUKI IKARIYAMA	06/15/2021
YOSHIAKI KOBAYASHI	02/18/2021

RECEIVING PARTY DATA

Name:	HITACHI POWER SOLUTIONS CO., LTD.
Street Address:	2-2, SAIWAI-CHO 3-CHOME
City:	HITACHI-SHI, IBARAKI
State/Country:	JAPAN

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17273610

CORRESPONDENCE DATA

Fax Number: (202)624-8844

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

CROWELL & MORING LLP Correspondent Name:

P.O. BOX 14300 Address Line 1:

Address Line 4: WASHINGTON, D.C. 20011-4300

ATTORNEY DOCKET NUMBER:	110289.PE334US
NAME OF SUBMITTER:	MICHAEL H. JACOBS
SIGNATURE:	/Michael H. Jacobs/
DATE SIGNED:	07/06/2021

Total Attachments: 3

PATENT REEL: 056763 FRAME: 0227

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> PATENT REEL: 056763 FRAME: 0228

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 Power Solutions Co., Ltd., a corporation organized under the laws of Japan, located at 2-2, Saiwai-cho 3-chome, Hitachi-shi, Ibaraki, Japan, receipt of which is hereby acknowledged I do hereby sell and assign to said Hitachi Power Solutions Co., Ltd., its successors and assigns, all my right, title and interest, in and for the United States of America, in and to

FRICTION STIR WELDING APPARATUS

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 Power Solutions Co., Ltd., 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 Power Solutions Co., Ltd.,

Signed on the date(s) indicated aside signatures:

INVENTORIES

		(発明者フルネームサイン)	(署名日)
1)	Koichi ISHIGURO	Koichi ISHIGURO	January 12,2021
2)	Shun SHINOHARA	Shun SHINOHARA	January 15, 2021
3)	Kohei FUNAHARA	Kohei FuNAHARA	January 12,2021
4)	Tomio ODAKURA	Tomio Odakura	Jonuary 28, 202
5)	Yoshinori OYAMA		
6)	Takayuki IKARIYAMA		
7)	Yoshiaki KOBAYASHI		
8)			
9)			
10)			

PATENT REEL: 056763 FRAME: 0229

Data Signad

ASSIGNMENT

(譲渡証)

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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 Power Solutions Co., Ltd.,

Signed on the date(s) indicated aside signatures:

	(発明者フルネームサイン)	Date Signed (署名日)
Kolchi ISHIGURO		
Shun SHINOHARA		
Kohei FUNAHARA		
Tomio ODAKURA		
Yoshinori OYAMA	Yoshimoni Oyama	February 18,20
Takayuki IKARIYAMA	Takayuki Ikariyama	June 15, 2021
Yoshiaki KOBAYASHI		

PATENT REEL: 056763 FRAME: 0230

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 Power Solutions Co., Ltd., a corporation organized under the laws of Japan, located at 2-2, Saiwai-cho 3-chome, Hitachi-shi, Ibaraki, Japan, receipt of which is hereby acknowledged I do hereby sell and assign to said Hitachi Power Solutions Co., Ltd., 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)		Date Signed (署名日)	
1)	Koichi ISHIGURO		
2)	Shun SHINOHARA		
3)	Kohei FUNAHARA		
4)	Tomio ODAKURA	<u></u>	
5)	Yoshinori OYAMA		
6)	Takayuki IKARIYAMA		
7)	Yoshiaki KOBAYASHI	202, 02, 18	
8)			
9)			
10)			

PATENT REEL: 056763 FRAME: 0231

RECORDED: 07/06/2021