503486342 09/18/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3532967

SUBMISSION TYPE:			NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT			
CONVEYING PARTY DA	ТА				
			Name		Execution Date
TETSUYA YAGAMI					06/17/2015
TOSHIYA TERAMAE					07/17/2015
ETSUO FUJITA					06/12/2015
SHINYA NAGAO					07/03/2015
REMI MUKOUSE					06/11/2015
NAOYUKI IWASA					06/11/2015
TSUYOSHI FUKUI					07/03/2015
CHUYA AOKI					06/19/2015
RECEIVING PARTY DAT					
Name:	HITACHI METALS, LTD.				
Street Address:	2-1, SHIBAURA 1-CHOME				
	MINATO-KU				
Internal Address:					
City:	ΤΟΚΥ	C			
City: State/Country:		1 C			
City:	ΤΟΚΥ	1 C			
City: State/Country:	TOKY(JAPAN 10586 ⁻	D 1 14			
City: State/Country: Postal Code:	TOKY(JAPAN 10586 ⁻	D 1 14	Number		
City: State/Country: Postal Code: PROPERTY NUMBERS	TOKY(JAPAN 10586 ⁻	D 1 14	Number		
City: State/Country: Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D/ Fax Number: Correspondence will be	TOKYC JAPAN 10586 ⁻ Total: 1 ATA) 14 14778 (919) 0 the o	Number 8021 854-1401 e-mail address first; if that is unsu		
City: State/Country: Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p	TOKYC JAPAN 10586 ⁻ Total: 1 ATA) 14 14778 (919) o the o d; if th	Number 8021 854-1401 e-mail address first; if that is unsu		
City: State/Country: Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D/ Fax Number: Correspondence will be	TOKYC JAPAN 10586 ⁻ Total: 1 ATA) 14 (919) o the o d; if th 919-8	Number 8021 854-1401 e-mail address first; if that is unsu hat is unsuccessful, it will be sent 354-1400		
City: State/Country: Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone:	TOKYC JAPAN 10586 ⁻ Total: 1 ATA) 14 14 (919) o the o d; if th 919-8 bmed	Number 8021 854-1401 e-mail address first; if that is unsu		
City: State/Country: Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	TOKYC JAPAN 10586 ⁻ Total: 1 ATA) 14 (919) o the o d; if th 919-8 bmed MYEI PO B	Number 8021 854-1401 e-mail address first; if that is unsu hat is unsuccessful, it will be sent 354-1400 dlin@myersbigel.com RS BIGEL SIBLEY & SAJOVEC 30X 37428		
City: State/Country: Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name:	TOKYC JAPAN 10586 ⁻ Total: 1 ATA) 14 (919) o the o d; if th 919-8 bmed MYEI PO B	Number 8021 854-1401 e-mail address first; if that is unsu hat is unsuccessful, it will be sent 354-1400 dlin@myersbigel.com RS BIGEL SIBLEY & SAJOVEC		
City: State/Country: Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	TOKYC JAPAN 10586 ⁻ Total: 1	0 14 14 14778 (919) o the o d; if th 919-8 bmed MYEI PO B RALE	Number 8021 854-1401 e-mail address first; if that is unsu hat is unsuccessful, it will be sent 354-1400 dlin@myersbigel.com RS BIGEL SIBLEY & SAJOVEC 30X 37428		

SIGNATURE:	/bettyloumedlin/
DATE SIGNED:	09/18/2015
Total Attachments: 10	
source=5576296Assn#page1.tif	
source=5576296Assn#page2.tif	
source=5576296Assn#page3.tif	
source=5576296Assn#page4.tif	
source=5576296Assn#page5.tif	
source=5576296Assn#page6.tif	
source=5576296Assn#page7.tif	
source=5576296Assn#page8.tif	
source=5576296Assn#page9.tif	
source=5576296Assn#page10.tif	

ASSIGNMENT

, i i

THIS ASSIGNMENT, made by us, Tetsuya Yagami, a citizen of Japan, having a mailing address of c/o Yokohama Research Laboratory, HITACHI, LTD., 292 Yoshida-cho, Totsuka-ku, Yokohama-shi, Kanagawa 2440817 Japan; Toshiya Teramae, a citizen of Japan, having a mailing address of c/o Yokohama Research Laboratory, HITACHI, LTD., 292 Yoshidacho, Totsuka-ku, Yokohama-shi, Kanagawa 2440817 Japan; Etsuo Fujita, a citizen of Japan, having a mailing address of c/o Yasugi Works, HITACHI METALS, LTD., 2107-2 Yasugi-cho, Yasugi-shi, Shimane 6928601 Japan; Shinya Nagao, having a mailing address of c/o Yasugi Works, HITACHI METALS, LTD., 2107-2 Yasugi-cho, Yasugi-shi, Shimane 6928601 Japan ; Remi Mukouse, having a mailing address of c/o Yokohama Research Laboratory, HITACHI, LTD., 292 Yoshida-cho, Totsuka-ku, Yokohama-shi, Kanagawa 2440817 Japan; Naoyuki Iwasa, having a mailing address of c/o Yasugi Works, HITACHI METALS, LTD., 2107-2 Yasugi-cho, Yasugi-shi, Shimane 6928601 Japan; Tsuyoshi Fukui, having a mailing address of c/o Yasugi Works, HITACHI METALS, LTD., 2107-2 Yasugi-cho, Yasugi-shi, Shimane 6928601 Japan; and Chuya Aoki, having a mailing address of c/o Metallurgical Research Laboratory, HITACHI METALS, LTD., Yasugi-cho, Yasugi-shi, Shimane 6928601 Japan; and WITNESSETH: That,

WHEREAS, HITACHI METALS, LTD., a Japanese organization, having a principal place of business at 2-1, Shibaura 1-chome, Minato-ku, Tokyo 1058614 Japan, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by

Page 1 of 10

these presents do hereby sell, assign, transfer and convey unto said assignee, its successors and assigns, the entire right, title, and interest in and to the said invention and application(s), and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues or other forms of protection thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted along with any term extensions thereon or therefor, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, we possess full title to the invention and applications above-mentioned, and that we have the unencumbered right and authority to make this assignment.

We further covenant and agree to promptly communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns, and other legal representatives; and we hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without further compensation, but at the expense of said assignee or its representatives.

Page 2 of 10

IN WITI	NESS WHE	REOF, I have	hereunto set	my hand and seal on this	17day of
June	, 2015.	<u>о</u> -	a ·		
		Tetsurga	Yagami	(SEAL)	
		Tetsuya Ya	gami		

Witnessed by:

Makoto Akai Date: 17 June 2015

IN WITI	NESS WHE	REOF, I have hereunto set n	ny hand and seal on th	uis <u>17</u> day of
July	_, 2015.			
/		Joshija Jeramal	(SEAL)	
		Toshiya Teramae		
Witnessed by:				

Eiji Sakamoto Date: 17/7/2015

Page 4 of 10

IN WITNESS WHE	REOF, I have hereunto set r	ny hand and seal on this 12 day of
<u>June</u> , 2015.	Gan Friter	(SEAL)
	Etsuo Fujita	

Witnessed by:

<u>Shigeki Matuushita</u> Date: Jun. 12. 2015

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 3 day of 3u/y, 2015.

Shinya hagao (SEAL) Shinya Nagao

Witnessed by:

Shahei Sasaki Date: July, 3, 2015

Page 6 of 10

.

IN WITNESS WH	EREOF, I have her	eunto set my hand	and seal on this	: day of
<u>June</u> , 2015.		,		
_	Remi	Mukouse.	(SEAL)	
_	Remi Mukous	e		

Witnessed by:

Eiji Sakamoto

Date: 11, 6, 2015

Page 7 of 10

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this <u>11</u> day of <u>J une</u>, 2015. <u>Manyuki Janaba</u> (SEAL) Naoyuki Iwasa

Witnessed by:

Hirork Mitsunaga Date: June 11 2015

Page 8 of 10

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 3 day of

July , 2015. <u>Isuyoshi Fukui</u> (SEAL) Tsuyoshi Fukui

Witnessed by:

Hisashi Mitanhaga Date: July. 3. 2015

Page 9 of 10

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this <u>19</u> day of <u>June</u>, 2015.

<u>Chyya Ooki</u> (SEAL) Chuya Aoki

Witnessed by:

Shinidhi Kobayashi Date: 19 day of June 2015

Page 10 of 10

PATENT REEL: 036601 FRAME: 0792

RECORDED: 09/18/2015