PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MASAHARU UEDA	07/10/2017
TAKESHI YAMAMOTO	07/10/2017
TERUHISA MIYAZAKI	07/10/2017

RECEIVING PARTY DATA

Name:	NIPPON STEEL & SUMITOMO METAL CORPORATION	
Street Address:	6-1, MARUNOUCHI 2-CHOME, CHIYODA-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	100-8071	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15544686

CORRESPONDENCE DATA

Fax Number: (703)205-8050

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: (703) 205-8000

Email: mailroom@bskb.com, brian.olive@bskb.com BIRCH, STEWART, KOLASCH & BIRCH, LLP **Correspondent Name:** 8110 GATEHOUSE ROAD, SUITE 100E Address Line 1:

Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	1609-1103PUS1
NAME OF SUBMITTER:	BRIAN OLIVE
SIGNATURE:	/brian olive/
DATE SIGNED:	07/20/2017

Total Attachments: 3

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PATENT REEL: 043051 FRAME: 0014 504465242

FP150852450 05P-67619 US(D/A) 1/3

Attorney Docket No. 1609-1103PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP

P.O. Box 747 • Falls Church, Virginia 22040-0747 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050 • Email: mailroom@bskb.com

DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

United States Patent Rights, or United States Plus all Foreign Patent Rights

Title of Invention ⇒

RATI.

	MAIL		
	As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:		
Application not Attached ,	This declaration is directed to the application attached hereto. If the application is not attached hereto, if application is as identified by the attorney docket number as set forth above and/or the following:		
Enter Appin, No.	⇒ United States Application Number or PCT International Appln. No. PCT/JP2016/051890		
Binter Filling Date	⇒ filed onJanuary 22, 2016		
	The above-identified application was made or authorized to be made by me.		
	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.		
	I have reviewed and understand the contents of the above-identified application, including the claims.		
	I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 , Code of Federal Regulations § 1.56 .		
	WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.		
Insert Name of Assignee	⇒ WHEREAS, NIPPON STEEL & SUMITOMO METAL CORPORATION		
Insert Address of Assignee	⇒ of 6-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8071 Japan		
	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is 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 in the United States of America and		
Check Box if Appropriate	in any foreign countries.		
	NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.		

BSKB-DECASSIGN\(09-12)

PATENT REEL: 043051 FRAME: 0015

Application SN.: 15/544,686 filed on July 19, 2017
Attorney Docket No.: 1609-1103PUS1

FP150852V50 OSP-67679 USLDIAJ73

The undersigned agrees to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agrees to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

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

The undersigned hereby authorizes and requests the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has the full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

In witness whereof, executed by the undersigned on the date opposite the undersigned name.

LEGAL NAME OF INVENTOR

Inventor's Name ⇒ Inventor:	Masaharu UEDA	Date:	July 10, 2017
Inventor's Signature ⇒' Signature:	Masaharu Ueda		
An application data sheet (P) Use a separate form for each	CO/SB/14 or equivalent), including naming the e inventor; or check the box below and complete the	entire inventive entity, 1 he attached page(s) to li	nust accompany this form. st additional inventors.
Additional inventors are	being named on the 1 supplemental sheet(s) atta	ched hereto.	

BSKB-DECASSIGN\(09-12)

Application SN.: 15/544,686 filed on July 19, 2017
Attorney Docket No.: 1609-1103PUS1

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SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

	LEGAL IVAL	ME OF JOHN! HAVENTON, IF AIM!		•
Inventor's Name =	Inventor:	Takeshi YAMAMOTO	Date: _	July 10, 2017
Inventor's Signature 🕏	Signature:	Joseph James To		
,	LEGAL NA	ME OF JOINT INVENTOR, IF ANY		•
Inventor's Name	Inventor:	Teruhisa MIYAZAKI	Date: _	July 10, 2017
Inventor's Signature =	Signature: _	Tempira Miyazaki		
	LEGAL NA	ME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇒Inventor:		Date: _	
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RECORDED: 07/20/2017