504307670 04/05/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4354351

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YOSHIHIRO SERIZAWA	03/08/2017
AKIHIRO SAKAMOTO	03/08/2017
MASAHITO TASAKA	03/08/2017
NAOAKI SHIMADA	03/08/2017
RYUJI HAMADA	03/08/2017
HIDEKI MATSUDA	03/08/2017
NORIMASA YAMASAKI	03/08/2017

RECEIVING PARTY DATA

Name:	lame: 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:	15516853	

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: Spencer.Garth@bskb.com, mailroom@bskb.com
Correspondent Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP

Address Line 1: P.O. BOX 747

Address Line 4: FALLS CHURCH, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER:	1609-1002PUS1
NAME OF SUBMITTER:	SPENCER GARTH
SIGNATURE:	/spencer garth/
DATE SIGNED:	04/05/2017

PATENT REEL: 041859 FRAME: 0334

Total Attachments: 3

source=2017-04-05_AssgnAsFiled_1609-1002PUS1#page1.tif source=2017-04-05_AssgnAsFiled_1609-1002PUS1#page2.tif

source=2017-04-05_AssgnAsFiled_1609-1002PUS1#page3.tif

PATENT REEL: 041859 FRAME: 0335

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

COOLING APPARATUS AND COOLING METHOD FOR STEEL MATERIAL Title of Invention \Rightarrow

		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, the application is as identified by the attorney docket number as set forth above and/or the following:			
Enter Appln. No.	⇒	United States Application Number or PCT International Appln. No. PCT/JP2015/078240			
Enter Filing Date	⇒	filed on October 5, 2015			
		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	4	WHEREAS, NIPPON STEEL & SUMITOMO METAL CORPORATION			
Insert Address of Assignee	4	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.			

PATENTBSKB-DECASSIGN\(09-12)

REEL: 041859 FRAME: 0336

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 patent(s) or 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:	Yoshihiro SERIZAWA	Date: <u>March 8, 2017</u>
Inventor's Signature	⇒ Signature:	Goshihiro Serizana	•
An application Use a separate	data sheet (PTC form for each in	O/SB/14 or equivalent), including naming the ventor; or check the box below and complete t	entire inventive entity, must accompany this form. he attached page(s) to list additional inventors.
Additional	inventors are be	ing named on the 1 supplemental sheet(s) atta	ched hereto.

PATENT

BSKB-DECASSIGN\(09-12)

REEL: 041859 FRAME: 0337

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

LEGAL NAME OF JOINT INVENTOR, IF ANY · ⇒ Inventor: Akihiro SAKAMOTO Inventor's Signature ⇒ Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name Date: March 8, 2017 ⇔Inventor: Naoaki SHIMADA Shimada Inventor's Signature ⇒Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name ⇒Inventor: Ryuji HAMADA March 8, 2017 Inventor's Signature ⇒Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name ⇒Inventor: Hideki MATSUDA Date: March 8, 2017 Inventor's Signature ⇔Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY ⇒Inventor: Norimasa YAMASAKI Date: March 8, 2017 \Rightarrow Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name ⇔Inventor: Inventor's Signature

⇒Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name ⇒Inventor: Inventor's Signature ⇒Signature:

BSKB-DECASSIGN\(09-12)

PATENT REEL: 041859 FRAME: 0338

RECORDED: 04/05/2017