PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mai AOYAMA	12/05/2017
Minoru TANAKA	12/13/2017
Yoshitsugu SUZUKI	12/13/2017
Yoshiyasu KAWASAKI	12/13/2017
Hideyuki TAKAHASHI	12/07/2017

RECEIVING PARTY DATA

Name: Jfe Steel Corporation	
Street Address: 2-3, Uchisaiwai-cho 2-chome, Chiyoda-ku	
City: Tokyo	
State/Country:	Japan
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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15779157

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	180884
NAME OF SUBMITTER:	PAMELA BALLARD
SIGNATURE:	/Pamela Ballard/
DATE SIGNED:	05/25/2018

Total Attachments: 2

PATENT REEL: 045901 FRAME: 0410 source=5782454_1#page1.tif source=5782454_1#page2.tif

> PATENT REEL: 045901 FRAME: 0411

ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

	insert	(1)	Mai AUYAMA	(2)	Minoru TANAKA
(1-8)	Legal Name(s)	(3)	Yoshitsugu SUZUKI	(4)	Yoshiyasu KAWASAKI
	of Inventor(s)	(5)	Hideyuki TAKAHASHI	(6)	
		the un	sideration of the sum of one dollar (\$1.0)	0) and othe which are	er good and valuable consideration paid to each of hereby acknowledged, each undersigned agrees to
(9)	Insert Name of Assignce	(9) IFE STEEL CORPORATION			
(10)	lusert Address of Assignce	(10))) 2-3, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100-0011 Japan		
Insert Identification such as Tiffe, Case Number, or Foreign Application Number	inventi contini sud res	on, and in all applications for patent inclustion, international, substitute and reissumment on certificates that may be granted through the manufacturing his METHOD FOR METHOD FOR MANUFACTURING HIS METHOD FOR METHOD F	uding any se applicat ted on the IGH-STRE OT-ROLL	ENGTH HOT-DIP GALVANIZED STEEL SHEET, ED STEEL PLATE FOR HIGH-STRENGTH	
		(11)		TH HOT-C STEEL S 2016/00483	29)
		(Attor)	ney Docket No.),	filed on even date herewith or as
(12)	Alternative	(12)	U.S. Application Number		
	Identification for		itional Application,No.		
	filed applications	filed			

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.

 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with
- claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignce, as Assignce of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF FLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

I hereby acknowledge 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.

> PATENT REEL: 045901 FRAME: 0412

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

Date	December 5, 2017	Inventor Signature	Mai AOYAMA	(SEAL)			
			Mai AOYAMA				
Date	December 13, 2217	Inventor Signature	Minor Janaka	(SEAL)			
Date	December 13, 2017	Inventor Signature	Minoru TANAKA LIGHTUGG LIV Ja LIV Yarshitsugu SUZUKI	(SEAL)			
Date	December 13, 2017	Inventor Signature	Yoshiyasu Kawasafri Yoshiyasu KAWASAKI	(SEAL)			
Date	Pecember 7, 2017	Inventor Signature	74dryuhi Vakakashi Hideyuki TAKAHASHI	(SEAL)			
This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. I seither, then it should be signed before at least two witnesses who also sign here:							
Date		Witness					
Date		Witness					