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Attorney Docket No. <u>156655</u>		
Please record the attached original document or copy thereof.		
1. A. Name of conveying party(ies): 1) Yasumasa HIRAI 2) Kiyoshi UWAI B. Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. A. Name and address of receiving party(ies): JFE STEEL CORPORATION 2-3, UCHISAIWAI-CHO 2-CHOME CHIYODA-KU, TOKYO 100-0011 JAPAN B. Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. A. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ B. Execution Date: <u>1) April 2, 2013;</u> <u>2) April 2, 2013</u>		
4. <input type="checkbox"/> This document is being filed together with a new application. <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> A. Patent Application No.(s) <u>13/821,729</u> </div> <div style="width: 45%;"> B. Patent No.(s) _____ </div> </div> <p style="text-align: center;">Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>C. Title of Application: <u>BEARING STEEL BEING EXCELLENT BOTH IN POST SPHEROIDIZING-ANNEALING WORKABILITY AND IN POST QUENCHING-TEMPERING HYDROGEN FATIGUE RESISTANCE PROPERTY</u></p> <p>D. <input type="checkbox"/> This Assignment is submitted for a dual purpose: (1) recording in the assignment database; and (2) for use in the above-identified application as the oath or declaration pursuant to 37 CFR 1.63(e).</p>		
5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>James A. Oliff</u> Address: <u>OLIFF & BERRIDGE, PLC</u> <u>P.O. Box 320850</u> <u>Alexandria, VA 22320-4850</u>	6. Total number of applications and patents involved: <u>1</u> 7. Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of <u>\$40.00</u> . 8. Credit any overpayment or charge any underpayment to deposit account number 15-0461.	
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="width: 60%;">  _____ James A. Oliff, Registration No. 27,075 David W. Anderson, Registration No. 63,517 </div> <div style="width: 35%; text-align: right;"> Date: <u>April 3, 2013</u> </div> </div> <p style="text-align: center;">Total number of pages including cover sheet, attachments, and document: <u>2</u></p>		

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ASSIGNMENT

	Insert	(1)	<u>Yasumasa HIRAI</u>	(2)	<u>Kiyoshi UWAI</u>
(1-8)	Legal Name(s)	(3)	<u></u>	(4)	<u></u>
	of Inventor(s)	(5)	<u></u>	(6)	<u></u>
		(7)	<u></u>	(8)	<u></u>

In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to

(9)	Insert Name of Assignee	(9)	<u>JFE STEEL CORPORATION</u>
(10)	Insert Address of Assignee	(10)	<u>2-3, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100-0011, Japan</u>

(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as

(11)	Insert Identification such as Title, Case Number, or Foreign Application Number	(11)	<u>BEARING STEEL BEING EXCELLENT BOTH IN POST SPHEROIDIZING-ANNEALING WORKABILITY AND IN POST QUENCHING-TEMPERING HYDROGEN FATIGUE RESISTANCE PROPERTY</u>
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(Attorney Docket No. 156655), filed on even date herewith or as

(12)	Alternative Identification for filed applications	(12)	<u>U.S. Application Number</u>
			<u>filed</u>

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 Assignee, as Assignee 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 & BERRIDGE, PLC 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.

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

Date	<u>April 2, 2013</u>	Inventor Signature	<u>Yasumasa HIRAI</u>	(SEAL)
Date	<u>April 2, 2013</u>	Inventor Signature	<u>Kiyoshi Uwai</u>	(SEAL)
Date	<u></u>	Inventor Signature	<u></u>	(SEAL)
Date	<u></u>	Inventor Signature	<u></u>	(SEAL)
Date	<u></u>	Inventor Signature	<u></u>	(SEAL)
Date	<u></u>	Inventor Signature	<u></u>	(SEAL)
Date	<u></u>	Inventor Signature	<u></u>	(SEAL)
Date	<u></u>	Inventor Signature	<u></u>	(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. If neither, then it should be signed before at least two witnesses who also sign here:

PATENT

RECORDED: 04/03/2013

REEL: 030147 FRAME: 0866