

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

| SUBMISSION TYPE:   | NEW ASSIGNMENT                            |                |                      |            |              |            |                  |            |                    |            |  |
|--|---|----------------|----------------------|------------|--------------|------------|------------------|------------|--------------------|------------|--|
| NATURE OF CONVEYANCE:  | ASSIGNMENT                                |                |                      |            |              |            |                  |            |                    |            |  |
| CONVEYING PARTY DATA   |   |                |                      |            |              |            |                  |            |                    |            |  |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>YOSHITSUGU TATSUZAWA</td> <td>09/12/2013</td> </tr> <tr> <td>HIDEKI FUJII</td> <td>09/12/2013</td> </tr> <tr> <td>TOMONORI KUNIEDA</td> <td>09/12/2013</td> </tr> <tr> <td>KAZUHIRO TAKAHASHI</td> <td>09/12/2013</td> </tr> </tbody> </table> | Name                                      | Execution Date | YOSHITSUGU TATSUZAWA | 09/12/2013 | HIDEKI FUJII | 09/12/2013 | TOMONORI KUNIEDA | 09/12/2013 | KAZUHIRO TAKAHASHI | 09/12/2013 |  |
| Name   | Execution Date                            |                |                      |            |              |            |                  |            |                    |            |  |
| YOSHITSUGU TATSUZAWA   | 09/12/2013                                |                |                      |            |              |            |                  |            |                    |            |  |
| HIDEKI FUJII   | 09/12/2013                                |                |                      |            |              |            |                  |            |                    |            |  |
| TOMONORI KUNIEDA   | 09/12/2013                                |                |                      |            |              |            |                  |            |                    |            |  |
| KAZUHIRO TAKAHASHI   | 09/12/2013                                |                |                      |            |              |            |                  |            |                    |            |  |
| 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:  | 14009837                                  |                |                      |            |              |            |                  |            |                    |            |  |
| CORRESPONDENCE DATA  |   |                |                      |            |              |            |                  |            |                    |            |  |
| Fax Number:  | (212)425-5288                             |                |                      |            |              |            |                  |            |                    |            |  |
| <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>   |   |                |                      |            |              |            |                  |            |                    |            |  |
| Phone:   | 212-425-7200                              |                |                      |            |              |            |                  |            |                    |            |  |
| Email:   | ccole@kenyon.com                          |                |                      |            |              |            |                  |            |                    |            |  |
| Correspondent Name:  | KENYON & KENYON LLP                       |                |                      |            |              |            |                  |            |                    |            |  |
| Address Line 1:  | ONE BROADWAY                              |                |                      |            |              |            |                  |            |                    |            |  |
| Address Line 4:  | NEW YORK, NEW YORK 10004                  |                |                      |            |              |            |                  |            |                    |            |  |
| ATTORNEY DOCKET NUMBER:  | 52433/1131                                |                |                      |            |              |            |                  |            |                    |            |  |
| NAME OF SUBMITTER:   | JOSEPH DI LAURO                           |                |                      |            |              |            |                  |            |                    |            |  |
| Signature:   | /Joseph Di Lauro/                         |                |                      |            |              |            |                  |            |                    |            |  |
| Date:  | 10/04/2013                                |                |                      |            |              |            |                  |            |                    |            |  |
| Total Attachments: 1<br>source=52433-1131-Assignment#page1.tif   |   |                |                      |            |              |            |                  |            |                    |            |  |

OP \$40.00 14009837

# U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter "ASSIGNOR") by

NIPPON STEEL & SUMITOMO METAL CORPORATION

(Insert  
ASSIGNEE's  
Name(s)  
Address(es))

6-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8071, Japan

(hereinafter "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

(Title of  
Invention)

Titanium Slab for Hot Rolling Use and Method of Production of Same

relating to International Patent Application PCT/JP 2012 / 060620 and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(Insert date  
of execution  
of application,  
if not  
concurrent)

(a) executed on \_\_\_\_\_;

(b) filed on \_\_\_\_\_.

Serial No. \_\_\_\_\_ / \_\_\_\_\_;


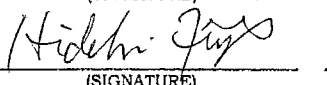
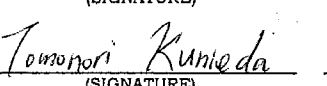
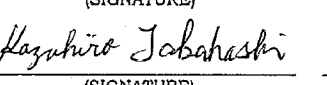
Assignee's attorney is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

(Signatures)

|    |  |                                     |                              |
|----|--|-------------------------------------|------------------------------|
| 1) | <br>(SIGNATURE) | Yoshitsugu Tatsuzawa<br>(TYPE NAME) | September 12, 2013<br>(DATE) |
| 2) | <br>(SIGNATURE) | Hideki Fujii<br>(TYPE NAME)         | September 12, 2013<br>(DATE) |
| 3) | <br>(SIGNATURE) | Tomonori Kunieda<br>(TYPE NAME)     | September 12, 2013<br>(DATE) |
| 4) | <br>(SIGNATURE) | Kazuhiro Takahashi<br>(TYPE NAME)   | September 12, 2013<br>(DATE) |
| 5) | _____<br>(SIGNATURE)   | _____<br>(TYPE NAME)                | _____<br>(DATE)              |
| 6) | _____<br>(SIGNATURE)   | _____<br>(TYPE NAME)                | _____<br>(DATE)              |
| 7) | _____<br>(SIGNATURE)   | _____<br>(TYPE NAME)                | _____<br>(DATE)              |
| 8) | _____<br>(SIGNATURE)   | _____<br>(TYPE NAME)                | _____<br>(DATE)              |

PATENT

RECORDED: 10/04/2013

REEL: 031346 FRAME: 0279