506616814 04/19/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT6663621

Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DAISUKE NIKKUNI	04/05/2021
TOSHIYUKI SHIRAISHI	04/16/2021
YUTAKA SADANO	04/05/2021
MASAFUMI MIYAZAKI	04/05/2021

RECEIVING PARTY DATA

Name:	NIPPON STEEL 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:	17286660

CORRESPONDENCE DATA

Fax Number: (866)864-3947

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: 9738281284

Email: mwpat@myerswolin.com **Correspondent Name:** MYERS WOLIN, LLC

Address Line 1: 100 S. JEFFERSON ROAD, SUITE 202 Address Line 4: WHIPPANY, NEW JERSEY 07981-1009

ATTORNEY DOCKET NUMBER:	NPSS 11086
NAME OF SUBMITTER:	BRIAN S. MYERS
SIGNATURE:	/Brian S. Myers/
DATE SIGNED:	04/19/2021
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 5

506616814

source=npss_11086_20210419_Oath_Assign_exec_w_substitute_5#page1.tif

PATENT REEL: 055959 FRAME: 0932 source=npss_11086_20210419_Oath_Assign_exec_w_substitute_5#page2.tif source=npss_11086_20210419_Oath_Assign_exec_w_substitute_5#page3.tif source=npss_11086_20210419_Oath_Assign_exec_w_substitute_5#page4.tif source=npss_11086_20210419_Oath_Assign_exec_w_substitute_5#page5.tif

> PATENT REEL: 055959 FRAME: 0933

Attorney Docket: NPSS 11086

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATIONS

As a below named inventor (designated as "the undersigned"), I hereby declare that:

This declaration is directed to the application attached hereto and entitled "SLAB MANUFACTURING METHOD AND CONTROL DEVICE

If the application is not attached hereto, the application is as identified by the attorney docket number as set forth above.

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, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Address all correspondence to CUSTOMER NUMBER 61650.

ASSIGNMENT

WHEREAS, NIPPON STEEL CORPORATION, having an address at 6-1, Marunouchi 2-chome, Chiyodaku, Tokyo 100-8071 Japan (hereinafter "ASSIGNEE"), is desirous of acquiring the entire right, title and interest in, to and under the above identified application and invention, and to any Letters Patent(s) that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventor's certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

The undersigned authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

FP190204US0 OSQ-00640 D/A 2 / 2

Customer Number 61650

Attorney Docket: NPSS 11086

The undersigned covenants and agrees that he has full right to convey the entire interest herein assigned, and has not executed, and will not execute, any agreement in conflict herewith.

The undersigned further covenants and agrees that he will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

The undersigned hereby grants the law firm of Myers Wolin, LLC 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 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.

Full name of first inventor: <u>Daisuke NIKKUNI</u>	
Inventor's Signature: 新國 大介	Date: April 5, 2021
Residence: Tokyo, Japan	·
Post Office Address: c/o NIPPON STEEL CORPORATION	ON, 6-1, Marunouchi 2-chome, Chiyoda-ku,
Tokyo 100-8071 Japan	·
Full name of second inventor: Toshiyuki SHIRAISHI	
Inventor's Signature:	Date: Architecture Parks
Residence: <u>Tokyo, Japan</u>	
Post Office Address: c/o NIPPON STEEL CORPORATION	ON, 6-1, Marunouchi 2-chome, Chiyoda-ku,
Tokyo 100-8071 Japan	
Full name of third inventor: Yutaka SADANO	·
Inventor's Signature: <u>Jutoka Sadano</u>	Date: April 5, 2021
Residence: Tokyo, Japan	
Post Office Address: c/o NIPPON STEEL CORPORATION	ON, 6-1, Marunouchi 2-chome, Chiyoda-ku,
Tokyo 100-8071 Japan	
Full name of fourth inventor: <u>Masafumi MIYAZAKI</u>	
Inventor's Signature: Masafini Migazoli	Date:April 5, 2021
Residence: Tokyo, Japan	
Post Office Address: c/o NIPPON STEEL CORPORATION	ON, 6-1, Marunouchi 2-chome, Chiyoda-ku,
Tokyo 100-8071 Japan	

Doc code: Oath

Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	SLAB MANUFACTURING METHOD AND CONTROL DEVICE				
This stateme	ent is directed to:				
The att	ached application,				
OR					
United States application or PCT international application number PCT/JP2019/041319 October 21, 2019					
LEGAL NA	ME of inventor to whom this sul	bstitute statement appli	ies:		
	Name (first and middle (if any)) and F				
Toshiyι	ıki SHIRAISHI				
Residence (except for a deceased or legally incapa	acitated inventor):			
City Mailing Addro	as (avast for a decembed or levelly income		Cour	ntry	
Manny Audio	ss (except for a deceased or legally incapa	icitated inventory:			
City	No.	State		Zip	Country
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.					
The above-identified application was made or authorized to be made by me.					
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.					
Relationshi	p to the inventor to whom this substitu	ite statement applies:			to angelia et an araba an
Le	egal Representative (for deceased or le	egally incapacitated inventor	r only	y),	eri Til ere ettikeren sa
As	ssignee,				
Pe	erson to whom the inventor is under ar	n obligation to assign,			
Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or				CFR 1.46 is required), or	
Jo	int Inventor.	e a c			

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/AIA02 (07-13)

Approved for use through 01/31/2014. OMB 0551-032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:			
Inventor is deceased,			
inventor is under legal incapacity,			
Inventor cannot be found or reached after diligent effort, or			
Inventor has refused to execute the oath or declaration under 37 CFR 1.63.			
If there are joint inventors, please check the appropriate box below:			
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.			
OR .			
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).			
WARNING:			
Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioner/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.			
PERSON EXECUTING THIS SUBSTITUTE STATEMENT:			
_{Name:} Manabu ETO	April 16, 2021 Date (Optional):		
Signature: March St			
APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:			
If the applicant is a juristic entity, list the applicant name and the title of the signer: NIPPON STEEL CORPORATION			
Applicant Name:			
Title of Person Executing This Substitute Statement: Executive Counsellor, General Manager, Head of Intellectual Property Div.			
The signer, whose title is supplied above, is authorized to act on behalf of the applicant. Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equival	ent):		
Tokyo State Country Japan	1 12 (2.878)		
Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or e 6-1, Marunouchi 2-chome, Chiyoda-ku	quivalent)		
City Tokyo State Zip 100-8071	Country		
Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.	cannot be found or reached		

[Page 2 of 2]

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PATENT REEL: 055959 FRAME: 0938

RECORDED: 04/19/2021