## 502890571 07/14/2014

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2937168

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
SHUNTARO IMAI	06/25/2014
YASUO MARUKI	06/25/2014
NORIMASA YAMASAKI	06/25/2014
YUKIHIRO MATSUOKA	06/25/2014
SATOSHI SENOO	06/25/2014
MASANOBU HAYAMA	06/26/2014

#### **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	
Name:	NIPPON STEEL & SUMIKIN ENGINEERING CO., LTD.	
Street Address:	Address: OSAKI CENTER BUILDING, 5-1, OSAKI 1-CHOME, SHINAGAWA-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	141-8604	
Name:	NS PLANT DESIGNING CORPORATION	
Street Address:	46-59, OAZA NAKABARU TOBATA-KU	
City:	KITAKYUSHU-SHI, FUKUOKA	
State/Country:	JAPAN	
Postal Code:	804-0002	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	14371961	

#### **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 **PATENT** 

- 502890571 REEL: 033306 FRAME: 0724 -

Email: mailroom@bskb.com, anh-vu.dao@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:	6314-0124PUS1
NAME OF SUBMITTER:	ANH-VU DAO
SIGNATURE:	/anh-vu dao/
DATE SIGNED:	07/14/2014

## **Total Attachments: 8**

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PATENT REEL: 033306 FRAME: 0725

## 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

Title of Invention 

⇔ CASTING PRODUCT REDUCTION APPARATUS

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

This declaration is directed to the application attached hereto.

Application not Attached

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/JP2013/050592

Enter Filing Date ⇒ filed on January 15, 2013

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 Assignce ⇒ WHEREAS, NIPPON STEEL & SUMITOMO METAL CORPORATION

Insert Address of Assignee

⇔ 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.

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	entor: Shuntaro IMAI	Date: June 25, 2014				
Inventor's Signature ⇔ Sig	nature: Shuntaro IMAI					
An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use a separate form for each inventor; or check the box below and complete the attached page(s) to list additional inventors.						
Additional invent	ors are being named on the $\underline{1}$ supplemental sheet(s	) attached hereto.				

BSKB-DECASSIGN-SINGLE (09-12)

# SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

## ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

	LEGAL WAVE OF JOHAT HAVENTON, IF AMI	
Inventor's Name	Dinventor: Yasuo MARUKI	Date: June 25, 2014
Inventor's Signature	Signature: <u>Yasuo Maraki</u>	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
	BEOTE WANTE OF JOHAT RAVERATOR, IF MAY	
Inventor's Name	* Inventor: Norimasa YAMASAKI	Date: _June 25, 2014
Inventor's Signature	* Signature: Normasa Yamasaki	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	*Inventor:	Date:
Inventor's Signature		
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor:	Date:
Inventor's Signature		
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	<sup>th</sup> Inventor:	Date:
Inventor's Signature	Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	<sup>t3</sup> Inventor:	Date:
Inventor's Signature		
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor;	Date:
Inventor's Signature		
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	of Inventor:	Date:
Inventor's Signature	⇔Signature:	

BSKB-DECASSIGN\(09-12)

PATENT REEL: 033306 FRAME: 0728

#### 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

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

This declaration is directed to the application attached hereto.

Application not

⇒ 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/JP2013/050592

Enter Filing Date 

⇒ filed on January 15, 2013

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.

Insect Name of Assignee ⇒ WHEREAS, NIPPON STEEL & SUMIKIN ENGINEERING CO., LTD.

Insert Address of Assignee

🖈 of Osaki Center Building, 5-1, Osaki 1-chome, Shinagawa-ku, Tokyo 141-8604, 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.

BSKB-DECASSIGN(09-12)

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.

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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.

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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 N	AME OF INVENTOR		
Inventor's Name	Yukihiro MATSUOKA	Date:	June 25, 2014
Inventor's Signature Signature;	Yukihiro MATSUOKA		S. Alla Paris, constitution and an artist of the state of

An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use a separate form for each inventor; or check the box below and complete the attached page(s) to list additional inventors.

Additional inventors are being named on the 1 supplemental sheet(s) attached hereto.

Page 2

BSKB-DECASSIGN-SINGLE (09-12)

# SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	◆ Inventor: Satoshi SENOO	Date: June, 25. 2014
Inventor's Signature	⇒ Signature Satoshi SENOO	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒ Inventor:	Date;
Inventor's Signature	→ Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇔Inventor:	Date:
Inventor's Signature	⇒Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor:	Date:
Inventor's Signature	⇔Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor:	Date:
Inventor's Signature	⇒Signature:	
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Inventor's Name	⇔Inventor:	Date:
inventor's Signature	⇔Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
nventor's Name	⇔Inventor:	Date:
nventor's Signature	⇔Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
nventor's Name	⇔Inventor:	Date:
nventor's Signature	⇒Signature:	

BSKB-DECASSIGN\(09-12)

PATENT REEL: 033306 FRAME: 0731

## 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

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WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.

Insert Name of Assignee ⇒ WHEREAS, NS PLANT DESIGNING CORPORATION

Insert Address of Assignee

🗢 of 46-59, Oaza Nakabaru Tobata-ku, Kitakyushu-shi, Fukuoka 804-0002, 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.

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Page 1 of 2

BSKB-SUPPL-SIGANTURES(09-12)

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

LEGAL N	AME OF INVENTOR		
Inventor's Name   ⇒ Inventor:	Masanobu HAYAMA	Date: _	26 Juane, 2014
Inventor's Signature ⇒ Signature:	Masanobu Hayama		
	/ $O/SB/14$ or equivalent), including naming the entire inven	tive entity, 1	must accompany this form.

Page 2 of 2

**PATENT** REEL: 033306 FRAME: 0733

RECORDED: 07/14/2014