### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3034186

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
TAKAO YOKOYAMA	09/22/2014
KATSUYUKI OSAKO	09/22/2014
ISAO TOMITA	09/22/2014
YASUAKI JINNAI	09/22/2014
MASAKI TOJO	09/22/2014
SATOMI NAGAE	09/22/2014

#### **RECEIVING PARTY DATA**

Name:	MITSUBISHI HEAVY INDUSTRIES, LTD.
Street Address:	16-5, KONAN 2-CHOME, MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	1088215

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

Property Type	Number		
Application Number:	14381237		

#### **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: 7032058000

Email: mailroom@bskb.com, brian.mukuria@bskb.com BIRCH, STEWART, KOLASH & BIRCH, LLP **Correspondent Name:** 

P.O. BOX 747 Address Line 1:

Address Line 4: FALLS CHURCH, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER:	4898-0229PUS1
NAME OF SUBMITTER:	BRIAN MUKURIA
SIGNATURE:	/brian.mukuria/
DATE SIGNED:	09/23/2014

**Total Attachments: 9** 

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### 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

Litle of Invention	=	VARIABLE GEOMETRY TURBOCHARGER
		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	d	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.	4	United States Application Number or PCT International Appln. No. 14/381,237
Enter Filing Date	ď	filed on August 27, 2014
		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 Assignee	¢	WHEREAS, MITSUBISHI HEAVY INDUSTRIES, LTD.
insert Address of Assignee	4	of 16-5, Konan 2-chome Minato-ku, Tokyo 1088215, Japan,
Ü		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.

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   → Inventor:	Takao YOKOYAMA	Date: Sept 22, 2014					
Inventor's Signature ⇒ Signature:	Takao Zokoyama						
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.							
$igwedge$ Additional inventors 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 <u>1</u> of <u>1</u>

Date: Sept 22, 2014
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Date:

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### 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  $\Rightarrow VARIARIE CEOMETRY THEROCHARCER$ 

		VARIABLE GEOMETRY TORBOCHARGER
		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. 14/381,237
Enter Filing Date	æþ	filed on August 27, 2014
		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 Assignee	⇔	WHEREAS, MITSUBISHI HEAVY INDUSTRIES, LTD.
insert Address of Assignee	⇔	of 16-5, Konan 2-chome Minato-ku, Tokyo 1088215, Japan,
Ü		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.

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.

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LEGAL IV	ANIE OF INVENTOR							
Inventor's Name	Takao YOKOYAMA	Date:	Sept	22,	2014			
Inventor's Signature ⇒ Signature:	Takw Zokoyama							
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 b	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 NAME OF JOINT INVENTOR, IF ANY

Inventor's Name	⇒ Inventor:	<u>Katsuyuki OSAKO</u>	Date:			
Inventor's Signature	⇒ Signature:					
Inventor's Name	LEGAL N.  ⇒ Inventor:	AME OF JOINT INVENTOR, IF ANY Isao TOMITA	Date:	Sept	22,	2014
Inventor's Signature	⇒ Signature:	Isao-Tomita				
	LEGAL N.	AME OF JOINT INVENTOR, IF ANY		×		
Inventor's Name	⇔Inventor:	Yasuaki JINNAI	Date:			
Inventor's Signature	⇒Signature:					
	LEGAL N	AME OF JOINT INVENTOR, IF ANY				
Inventor's Name	⇒Inventor:	Masaki TOJO	Date:		<u></u>	····
Inventor's Signature	⇔Signature:					
	LEGAL N	AME OF JOINT INVENTOR, IF ANY				
Inventor's Name	⇔Inventor:	Satomi NAGAE	Date:			
Inventor's Signature	⇔Signature:					
	LEGAL N	AME OF JOINT INVENTOR, IF ANY				
Inventor's Name	⇔Inventor:		Date:			
Inventor's Signature	⇔Signature:					
	LEGAL N	AME OF JOINT INVENTOR, IF ANY				
Inventor's Name	⇒Inventor:		Date:			
Inventor's Signature	⇔Signature:			\		
	LEGAL N	AME OF JOINT INVENTOR, IF ANY				
Inventor's Name	⇔Inventor:		Date:			
Inventor's Signature	⇔Signature:					

BSKB-DECASSIGN\(09-12)

### 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 Inventio

Title of Invention	⇒ VARIA	ABLE GEOMETRY TURBOCHARGER
	As a bo	elow named inventor (hereinafter designated as the undersigned), I hereby declare that:
	This de	eclaration is directed to the application attached hereto.
Application not Attached		application is not attached hereto, the application is as identified by the attorney docket number as the above and/or the following:
Enter Appln. No.	⇔ United	States Application Number or PCT International Appln. No. 14/381,237
Enter Filing Date	⇔ filed o	n August 27, 2014
	The ab	ove-identified application was made or authorized to be made by me.
	I belie applica	ve that I am the original inventor or an original joint inventor of a claimed invention in the ation.
	Lhave	reviewed and understand the contents of the above-identified application, including the claims.
		owledge the duty to disclose information which is material to patentability as defined in Title 37, of Federal Regulations § 1.56.
		EAS, the undersigned has invented certain new and useful improvements described in the ation identified.
Insert Name of Assignee	⇒ WHER	EAS, MITSUBISHI HEAVY INDUSTRIES, LTD.
Insert Address of Assignee	⇒ of 16-5	, Konan 2-chome Minato-ku, Tokyo 1088215, Japan,
Ü	of acqu	s, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous tiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) ay be granted therefor in the United States of America and
Check Box if Appropriate	⇔ 🔲 in	any foreign countries.
	the un transfe Americ and all depend any an	THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, dersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and r unto said Assignee the full and exclusive right to the said invention in the United States of ea, its territories, dependencies and possessions and the entire right, title and interest in and to any Letters Patent(s) which may be granted therefor in the United States of America, its territories, lencies and possessions, and if the box above is designated, in any and all foreign countries; and to d all divisions, reissues, continuations, conversions and extensions thereof for the full term or or which the same may be granted.

BSKB-DECASSIGN(09-12)

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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 NAME OF INVENTOR

DDG/1D10	and of his care				
Inventor's Name    □ Inventor:	Takao YOKOYAMA	Date:	Sept	22,	2014
Inventor's Signature ⇒ Signature:	Takao Zokoyama				
	O/SB/14 or equivalent), including naming the entire invent nventor; or check the box below and complete the attached				
Additional inventors are b	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 NAME OF JOINT INVENTOR, IF ANY

Inventor's Name	Inventor: Katsuyuki OSAKO	Date:
Inventor's Signature ⇔	Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name 🛚 🕏	Inventor: Isao TOMITA	Date:
Inventor's Signature ನ	Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	Inventor: Yasuaki JINNAI	Date: Sept 22, 2014
Inventor's Signature	Signature: Jasuahi Juur	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	<sup>⇔</sup> Inventor: Masaki TOJO	Date:
Inventor's Signature	⇒Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	Satomi NAGAE	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:
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	LEGAL NAME OF JOINT INVENTOR, IF ANY	
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