505787165 11/22/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5833993

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TORU HOSHI	10/07/2019
TOYOTAKA YOSHIDA	10/07/2019
TAKAO YOKOYAMA	10/07/2019
BIPIN GUPTA	10/07/2019

RECEIVING PARTY DATA

Name:	MITSUBISHI HEAVY INDUSTRIES ENGINE & TURBOCHARGER, LTD.			
Street Address:	3000, TANA, CHUO-KU			
City:	SAGAMIHARA-SHI, KANAGAWA			
State/Country:	JAPAN			
Postal Code:	252-5293			

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16615588

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

Email: mailroom@bskb.com, Tuyet.A.Nguyen@bskb.com BIRCH, STEWART, KOLASCH & BIRCH, LLP **Correspondent Name:** Address Line 1: 8110 GATEHOUSE ROAD, SUITE 100E

Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	4898-0422PUS1
NAME OF SUBMITTER:	TUYET ANH NGUYEN
SIGNATURE:	/TUYET ANH NGUYEN/
DATE SIGNED:	11/21/2019

Total Attachments: 3

source=2019-11-21_DecAssign-As-Filed_4898-0422PUS1-#page1.tif source=2019-11-21 DecAssign-As-Filed 4898-0422PUS1-#page2.tif source=2019-11-21 DecAssign-As-Filed 4898-0422PUS1-#page3.tif

PATENT REEL: 051084 FRAME: 0524 505787165

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Filed on November 21, 2019

Attorney Docket No.: 4898-0422PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

United States Patent Rights, or United States Plus all Foreign Patent Rights

Tible of Invention TURBINE FOR TURBOCHARGER, AND TURBOCHARGER

	As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:
	This declaration is directed to the application attached hereto.
pplication not utached	^ω 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:
inter Applic, No.	→ United States Application Number or PCT International Appln. No. PCT/JF2017/029080
nter Filing Date	[↑] filed on August 10, 2017
	The above-identified application was made or authorized to be made by me.
	I helieve that I am the original inventor or an original joint inventor of a claimed invention in the

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 ENGINE & TURBOCHARGER, LTD.

Insert Address of Assignee

of 3000, Tana, Chuo-ku, Sagamihara-shi, Kanagawa 252-5293, 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)

SN: 16/615,588

Filed on November 21, 2019

Attorney Docket No.: 4898-0422PUS1

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:	Toru HOSHI		Date:	October 7,2019
Investor's Signature:	Toru	Hoshi		
An application data sheet (F) Use a separate form for each	:O/SB/14 or equival inventor; or check the	ent), including naming the entire inventi- e box below and complete the attached p	ve entity, age(s) to	must accompany this form. list additional inventors.
	eing named on the	1_supplemental sheet(s) attached heret	:o.	

. BSKB-DECASSIGN-SIMGLE (09-12)

SN: 16/615,588

Filed on November 21, 2019

Attorney Docket No.: 4898-0422PUS1

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S)
Supplemental Sheet Page 1 of 1

		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	5	Inventor:	Toyotaka YOSHIDA	Date: _	October 7,2019
Inventor's Signature	\$:	Signature:	Toyatopa Jachida		
		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	>	Inventor:	Takao YOKOYAMA	Date:	October 7, 2019
Inventor's Signature	Ş	Signature:	Takoa Zikozama		·
		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	Þ	Inventor:	Bipin GUPTA	Date:	O-tober 7,2019
Inventor's Signature	\$	Signature:	Nipinlyupta		· · ·

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PATENT REEL: 051084 FRAME: 0527

RECORDED: 11/22/2019