PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4551984

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Makoto NINOMIYA	08/04/2017
Masayoshi OKAMOTO	08/04/2017
Katsu YOSHIDA	08/04/2017
Yoshiteru FUJIMOTO	08/07/2017

RECEIVING PARTY DATA

Name:	KAWASAKI JUKOGYO KABUSHIKI KAISHA
Street Address:	1-1, HIGASHIKAWASAKI-CHO 3-CHOME
Internal Address:	CHUO-KU
City:	KOBE-SHI, HYOGO
State/Country:	JAPAN
Postal Code:	650-8670

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15551297

CORRESPONDENCE DATA

Fax Number: (703)836-2787

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: 703-836-6400
Email: email@oliff.com
Correspondent Name: JAMES A. OLIFF
Address Line 1: OLIFF PLC

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER:	177772
NAME OF SUBMITTER:	KIMBERLY SCOTT
SIGNATURE:	/Kimberly C. Scott/ for James A. Oliff
DATE SIGNED:	08/16/2017
	•

Total Attachments: 2

PATENT REEL: 043302 FRAME: 0958 source=5150796_1#page1.tif source=5150796_1#page2.tif

> PATENT REEL: 043302 FRAME: 0959

ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

	insert	(1)	Makoto NINOMIYA	(2)	Masayoshi OKAMOTO
(1-8)	Legal Name(s)	(3)	Katsu YOSHIDA	(4)	Yoshiteru FUIIMOTO
	of Inventor(s)	(5)		(6)	
		(7)		(8)	
		the un	sideration of the sum of one dollar dersigned, the receipt and sufficient and hereby does assign, transfer	ncy of which are i	r good and valuable consideration paid to each of screby acknowledged, each undersigned agrees to
(9)	Insert Name of Assignee	(9) KAWASAKI JUROGYO KABUSHIKI KAISHA			
(16)	Insert Address of Assignee	(10)	1-1, Higashikawasaki-cho 3-ch	ome, Chuo-ku, P	Kobe-shi, Hyogo 650-8670, JAPAN
		the en invent contin	tire right, title and interest for the lition, and in all applications for pate	United States of A ent including any d reissue applicat	cirs, successors, assigns and legal representatives, unerica as defined in 35 U.S.C. §100, in the and all provisional, non-provisional, divisional, ion(s), and all Letters Patent, extensions, reissues invention known as
such as Title, Ca Number, or For-	Insert Identification such as Title, Case	(11)	VALVE DEVICE		
	Number, or Foreign Application Number	(Attor	ney Docket No. 177772), 1	filed on even date herewith or as
(12)	Alternative	(12)	U.S. Application Number		
	Identification for			••••	
	filed applications	filed			

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

(13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

I hereby acknowledge 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.

PATENT REEL: 043302 FRAME: 0960 In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s),

Date	<u>Aug 4, 2017</u>	Inventor Signature	<u> Makoto Ninoniya</u>	(SEAL
Date	Aug 4, 2017	Inventor Signature	Mwayoshi Ukamozo	_ (SEAL
Date	Aux. 4, 2017	Inventor Signature	<u>Kaxsu Joshida</u>	_ (SEAL
Date	Aux, 7,2017	Inventor Simotura	Yoshitera Fijimoto	FORAT