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## 12/14/2012

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

103652740 Attorney Docket No. 155848 Please record the attached original document or copy thereof. Name of conveying parties: 2. A. Name and address of receiving party: MINEBEA CO., LTD. [1] Takaaki OCHIAI [2] Shuumei SHIRAYANAGI 4106-73 OAZA MIYOTA, MIYOTA-MACHI, KITASAKU-GUN, NAGANO 389-0293 JAPAN Additional name of conveying party attached? ☐ Yes Nature of conveyance: Additional name & address attached? Yes No Assignment Merger Change of Name Security Agreement Execution Date: October 31, 2012 This document is being filed together with a new application. Patent Application No. 1370 9346 Patent No. Additional numbers attached? Yes No Title of Application: VARIABLE RELUCTANCE RESOLVER This Assignment is submitted for a dual purpose: (1) recording in the assignment database; and (2) for use in the above-identified application as the oath or declaration pursuant to 37 CFR 1.63(c). Name and address of party to whom correspondence Total number of applications and patents involved: 1 concerning document should be mailed: Please charge Deposit Account No. 15-0461 the total Name: William P. Berridge fee (37 CFR 3.41) in the amount of \$40.00. Credit any overpayment or charge any underpayment to Address: OLIFF & BERRIDGE, PLC P.O. Box 320850 deposit account number 15-0461. Alexandria, VA 22320-4850 00000007 150461 12/14/2012 HTON11 Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy in a true copy of the original document Date: December 10, 2012 William P. Berridge, Registration No. 30,024 Alan Y. Liu, Registration No. 69,116

Total number of pages including cover sheet, attachments, and document: 3\_

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**PATENT** REEL: 029570 FRAME: 0303

## 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)	Takaaki OCHIAI	(2)	Shuumei SHIRAYANAGI			
(1-8)	Legal Name(s)	(3)		(4)				
	of Inventor(s)	(5)		(6)				
		(7)		(8)				
		In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to						
(9)	Insert Name of Assignce	(9)	(9) Minebea Co., Ltd.					
(10)	Insert Address of Assignee	(10)	0) 4106-73 Oaza Miyota, Miyota-machi, Kitasaku-gun, Nagano 389-0293 JAPAN					
		(hereinafter designated as the Assignce) and Assignce's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as						
(11)	Insert Identification such as Title, Case Number, or Foreign Application Number	(11)						
		(Atto	rney Docket No. 155848					
(12)	Alternative Identification for	(12)	(12) U.S. Application Number					
	filed applications	filed	December 10, 2012					

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 which may be declared concerning any application or patents for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

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 & BERRIDGE, 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.

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

Date	October	31,2012	Inventor Signature	takaaki Ochiai	(SEAL)
			Takaski OCHIAI		
Date	October	31,2012	Inventor Signature	Shunmei Shirayanagi	(SEAL)
				Shuumei SHIRAYANAGI	
neither,	This assignment sho then it should be sign	ould preferably be sign ned before at least two	ned before: (a) a Notary Pub witnesses who also sign ht	dic if within the U.S.A. (b) a U.S. Consul if outs	ide the U.S.A. If
Date	October	31,2012	Witness	Kunt	
				Koji UTAKA	
<b>.</b>	October	31,2012	Witness	Sider thing	
Date	October	31,2012	11 11000	Yutaka ICHINOI	

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**RECORDED: 12/12/2012**