	Attorney Docket No. DKT 03175A (BWI-00098)
Form PTO-1595 RECORDATION FOR (Rev. t0/02) OMB No. 0651-0027 (exp. 6/30/2005) PATENT Tab settings ⇒ ⇒ ⇒ ▼ ▼ ▼	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
	Please record the attached original documents or copy thereof.
 Name of conveying party(ies): Kenneth W. Morgan; Thomas J. Hemak; Aaron Wolfson; Thomas A. Horn; Gregory S. Lewis Howard Saxon 	2. Name and address of receiving party(ies) Name: BorgWarner Inc. Internal Address:
Additional name(s) of conveying party(ies) attached? Yes 🖌 No	
3. Nature of conveyance: ✓ Assignment ✓ Assignment ✓ Security Agreement Other	Suite 100
 February 1, 2005; 2. February 1, 2005; February 7, 2005; 4. February 1, 2005; Execution Date: <u>5. February 1, 2005; 6. February 15, 2005</u> 	City: <u>Auburn Hills</u> State: <u>M</u> Zip: 48326 Additional name(s) & address(es) attached? Yes 🖌 No
4. Application number(s) or patent number(s):	
If this document is being filed together with a new appli A. Patent Application No.(s) <u>10/989,616</u>	cation, the execution date of the application is: B. Patent No.(s)
Additional numbers at	ached? 🔄 Yes 🔽 No
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
Name: Patent Docket Administrator - BorgWarner Inc.	7. Total fee (37 CFR 3.41)\$40.00
Internal Address:	Enclosed
	Authorized to be charged to deposit account
Street Address:Powertrain Technical Center 3800 Automation Avenue - Suite 100	8. Deposit account number: 501612
City: Auburn Hills State: MI Zip: 48326	
	THIS SPACE
9. Signature.	
Philip R. Warn	February 16, 2005
Name of Person Signing	Signature Date
Total number of pages including cove	sheet, attachments, and documents:
Mail documents to be recorded with Commissioner of Patenis & T Washington,	rademarks, Box Assignments

PATENT REEL: 015723 FRAME: 0303

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Attorney Docket No. DKT 03175A (BWI-00098)

ASSIGNMENT BY JOINT INVENTORS

WHEREAS, the undersigned, hereinafter referred to as Assignors, have invented certain new and useful improvements in

PULSE WIDTH MODULATED SOLENOID

for which Assignors have made United States application for patent, under Serial No. 10/989,616, filed November 16, 2004, and

WHEREAS, BorgWarner Inc., a Delaware corporation, having a place of business at 3800 Automation Avenue - Suite 100, Auburn Hills, MI 48326, hereinafter referred to as Assignee, is desirous of acquiring an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt whereof is hereby acknowledged, Assignors by these presents do sell, assign and transfer unto Assignee, its successors in interest, the full and exclusive right in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States and the Paris Convention, to the said invention as described in the aforesaid application, said application for patent and all Letters Patent therefore to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof, as fully and entirely as the same would have been held by Assignors had this assignment and sale not been made; and Assignors hereby covenant and agree to execute all instruments or documents required or requested for the making and prosecution of applications for patent in the United States and in all foreign countries, for litigation regarding, or for the purpose of protecting title to the said invention, the United States application for patent, or Letters Patent therefor for the benefit of Assignee without further or other compensation than that above set forth; and Assignors hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent to Assignee.

Name: Kenneth W. Morgan (First Joint Kiventor) /

State of/	MICH IGAN)
County of	CAKLAND)ss.)

PATRICIA M. OXLEY NOTARY PUBLIC, STATE OF MI COUNTY OF GENESEE MY COMMISSION EXPIRES Mar 25, 2011 ACTING IN COUNTY OF OCLACO

On this 1^{5} day of 5cented, 2005, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that he executed the same of his own free will for the purpose therein set forth.

	Hatricia m. Oyley	
(seal)	Notary Public, Ockland County, State of Michigan	
	My Commission Expires: 3-35-11	
	Page 1 of کر ۲ PATENT REEL: 015723 FRAME: 03	304

ASSIGNMENT BY JOINT INVENTORS

	Arouar J. Newsk	
	Name: Thomas J. Hemak	
	(Second Joint Inventor)	
State of <u>Michigan</u>) ss	PATRICIA M. OXLEY NOTARY PUBLIC, STATE OF MI S. COUNTY OF GENESEE	
County of <u>OalGanci</u>)	MY COMMISSION EXPIRES Mar 25, 2011 ACTING IN COUNTY OF $\bigcirc \exists k \mid a \land b$	
foregoing individual, who executed the	<u>دمد من ,</u> 2005, before me personally appe e foregoing instrument and who acknowledge ree will for the purpose therein set forth.	eared the ed to me
	Hatricia m. Oxley	
(seal)	Notary Public,	<u></u>
	My Commission Expires: $3-35-11$	
	an Ullth	
	Name: Aaron Wolfson (Third Joint Inventor)	
State of Michigan) ss	PATRICIA M. OXLEY NOTARY PUBLIC, STATE OF MI	
County of Oalcland) so		
On this zet day of <u>Freever</u> , 2005, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that he executed the same of his own free will for the purpose therein set forth.		
-	Actricia m. Deley	
	Notary Public,	<u> </u>
(seal)	October County, State of Michigan	
	My Commission Expires: <u>う-ラう-()</u>	
*.	Page 2 of 🗞 🕌 PATENT	

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ASSIGNMENT BY JOINT INVENTORS

	Thomas I they
	Name: Thomas A. Norn
	(Fourth Joint Inventor)
State of Michigan) ss	PATRICIA M. OXLEY NOTARY PUBLIC, STATE OF M
County of <u>Macombe</u>)	NY COMMISSION EXPIRES AND 20, 171
On this 1^{5T} day of Februar foregoing individual, who executed the that he executed the same of his own fr	Joregoing instrument and who acknowledged to me
: *	Satricia m. Oiley
(seal)	Notary Public, 0 <u>Dakland</u> County, State of <u>Michigan</u>
	My Commission Expires: 3-35-11
•	
	:
	Auguel Suing
C	Name Gregory S. Lewis (Fifth Joint Inventor)
State of Michigan)	PATRICIA M, OXLEY
County of Oakland) ss.	NOTARY PUBLIC, STATE OF MI COUNTY OF GENESEE MY COMMISSION EXPIRES Mar 25, 2011 ACTING IN COUNTY OF COS COOL
On this 13^{\pm} day of Febru foregoing individual, who executed the that he executed the same of his own to	<u>pair </u> , 2005, before me personally appeared the foregoing instrument and who acknowledged to me
	Actricia M Olly
(sea!)	Notary Public, Oakland County, State of Michigan
	My Commission Expires: <u>3-əちヽ((</u>)
	Page 3 of 및 식 PATENT ~~~~~ REEL: 015723 FRAME: 0306

Name: Howard Saxon (Sixth Joint Inventor)

State of _ hia<u>an</u> SS. County of \supset and

On this $\underline{D^{m}}$ day of $\underline{+ebnac}$, 2005, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that he executed the same of his own free will for the purpose therein set forth.

(seal)

ata 2.4 cPublic Notary County, State of niga G 0¢ My Commission Expires: -25

PATRICIA M. OXLEY NOTARY PUBLIC, STATE OF MI COUNTY OF GENESEE MY COMMISSION EXPIRES Mar 25, 2011 ACTING IN COUNTY OF OLL CO

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RECORDED: 02/16/2005