12-17-2004 R FORM **PTO-1595**

U.S. Department of Commerce

(Rev. 6-93)		Patent and Trademark Office
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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.		
Name of conveying party(ies)/Execution Dates: Kevin M. McLaughlin and Joseph D. Miller	Name and address of re Name: TRW Automoti	eceiving party(ies):
Execution Date(s): December 2, 2004 Additional name(s) of conveying party(ies) attached Yes	Internal Address:	Z000
3. Nature of conveyance: ☐ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Government Interest Assignment ☐ Executive Order 9424, Confirmatory License ☐ Other:	Street Address: 12001 City: <u>Livonia</u> State: Additional name(s) and add	
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is <u>December 2, 2004</u> A Patent Application No.(s): B. Patent No.(s): Additional numbers attached? ☐ Yes ☒ No		
Name and address to whom correspondence	6. Total number of application	ns and patents involved: 1
concerning document should be mailed: Name: Barry L. Tummino Internal Address: Tarolli, Sundheim, Covell, & Tummino L.L.P. Street Address: 526 Superior Avenue, Suite 1111 City: Cleveland State: OH Zip: 44114-14 Phone Number: (216) 621-2234 Fax Number: (216) 621-4072 Email Address: www.tarolli.com	Authorized to be a Authorized to be a Authorized to be a None required (game) 8. Payment Information a. Credit Card: Last 4 N Expiration	eck for the amount indicated above. charged to deposit account. charged by credit card overnment interest not affecting title)
	b. Deposit Account No.: (Attach duplicate copy of this	20-0090 (charge for insufficient fees only) page if paying by deposit account)
9. Signature: Barry L. Tummino Name of Person Signing Reg. No. 29 709 Signature: Signature:	John Tummis	Decemby 8, 2004

Mail Documents to be recorded with required cover sheet Information to:
11007520 Commissioner of Patents & Trademarks, Box Assignments
Washington D.C. 20231

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

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PATENT

REEL: 016071 FRAME: 0282

ASSIGNMENT

WHEREAS, we, Kevin M. McLaughlin and Joseph D. Miller, of Troy, County of Oakland, and State of Michigan; and of Farmington Hills, County of Oakland, and State of Michigan, respectively, have made new and useful improvements in METHOD AND APPARATUS FOR DETERMINING FAULTS IN AN ELECTRIC ASSIST STEERING SYSTEM:

WHEREAS, TRW Automotive U.S. LLC, a limited liability company duly organized and existing under the laws of the State of Delaware, having a place of business at Livonia, County of Wayne and State of Michigan, is desirous of acquiring the entire right, title and interest in and to the said improvements and all patents therefor to be obtained in the United States of America and countries foreign to the United States;

NOW THEREFORE, BE IT KNOWN that for valuable considerations to us paid, the receipt whereof is hereby acknowledged, we, the said Kevin M. McLaughlin and Joseph D. Miller, do hereby assign, sell and set over unto the said TRW Automotive U.S. LLC, its successors or assigns, the entire right, title and interest in and to the said improvements and any and all inventions pertaining thereto, the application for United States patent executed by us respectively day of <u>Docember</u> 2004, and the <u>2nd</u> day of December 2004, all patents therefor in the United States of America and elsewhere, and the right to apply for patents therefor in all countries foreign to the United States and to claim for such applications the priority of United States applications, and we hereby request the Commissioner of Patents of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents, to issue such patents to the said TRW Automotive U.S. LLC, its successors or assigns; and we further agree to execute such other applications and other instruments and do all other acts as may be deemed necessary by the said TRW Automotive U.S. LLC, its successors or assigns in order to fully secure, protect and preserve its rights to the said improvements and to obtain patents therefor in the United States of America and all countries foreign to the United States, all without further consideration but at the expense of the said TRW Automotive U.S. LLC, its successors or assigns.

Signed at TRW Federal Credit Union and State of Michigan This Macomb and day of December, 2004. Kevin M. McLaughlin

COUNTY OF MACOM b)

On this 2Nd day o

CATHERINE MODERNMOTT Notary Poblic, Maconili Cocary, M. My Commission Expires Dec. 18, 2005

day of December, 2004. On this

Personally appeared before me Kevin M. McLaughlin to me known to be the person named in and who executed the above instrument, and acknowledged to me that he executed the same for the uses and the purposes therein mentioned.

PATENT REEL: 016071 FRAME: 0283

Signed at TRW Fed County of Macon B This	day of December , 200,01
	Joseph D. Miller
STATE OF Michigan COUNTY OF Macomb On this Personally appeared before me Joseph	CATHERINE MCDERMOTT Notary Public, Mesomis County, MI My Commission Expires Dec. 28, 2009
reisonally appeared before the Joseph	day of December, 2004. D. Miller to me known to be the person named in and who knowledged to me that he executed the same for the uses

and the purposes therein mentioned.

RECORDED: 12/08/2004

PATENT REEL: 016071 FRAME: 0284