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(54) Title: MANIFOLD AIR FLOW (MAF) AND MANIFOLD ABSOLUTE PRESSURE (MAP) RESIDUAL ELECTRONIC THROTTLE CONTROL (ETC) SECURITY

(57) Abstract: An engine fault diagnostic system includes a diagnostic module that generates a manifold absolute pressure (MAP) error signal and that generates a mass air flow (MAF) error signal. A security module generates an airflow fault when the MAP error signal exceeds a MAP threshold and the MAF error signal exceeds a MAF threshold.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/14077

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : G01M 15/00; G01L 3/26 US CL : 73/116 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 73/116 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P --- A	US 2005/0060084 A1 (DUDEK et al.) 17 March 2005(17.03.2005), see entire document.	1-5 and 9-11 ----- 6-8 and 12-14
☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.		
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 09 February 2006 (09.02.2006)		Date of mailing of the international search report 04 APR 2006
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Authorized officer <i>Marianne Seidel</i> Telephone No. (571) 272.1600

INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

EAST: engine and (manifold with pressure) and (mass with air with flow) or (air with flow) or (airflow), MAF and MAP fault error signal, TPS