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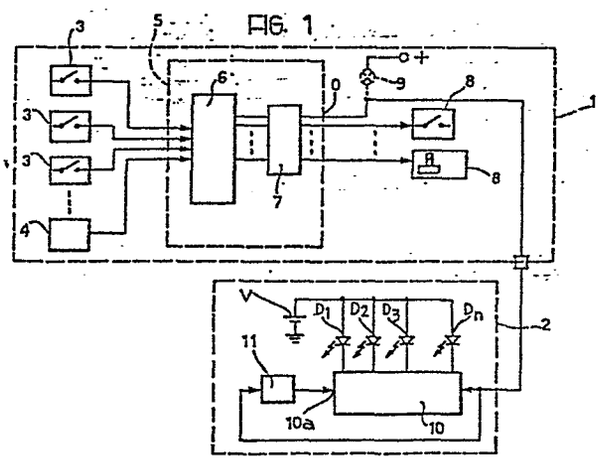
(54) **Diagnostic device for a system for controlling the stopping and restarting of an internal combustion engine for motor vehicles.**

(57) The device allows the monitoring and diagnosis of the functioning of a system comprising a plurality of electrical sensors (3, 4) which produce two-level signals indicative of the condition of members which control the running of the engine and/or of respective monitored parameters or ranges, and an electronic monitoring and control unit (5) with a microprocessor (6), connected at input to the sensors (3, 4) and at output to actuators (8) for causing the engine to stop and restart. The diagnostic device also includes interogation means (6) for carrying out a succession of sequential cyclical scans of the outputs of at least some of the sensors (3, 4), and for generating, at each scan, a serial signal (A) comprising a plurality of two-level signal portions, each indicative of the level of signal produced at the output of a respective sensor (3, 4). A signalling device (2) is electrically connectible to the interrogation means (6) to convert the portions of the serial signal (A) into corresponding perceptible signals and permit the functioning of the stop-start device to the monitored and diagnosed.

FIG. 1



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EUROPEAN SEARCH REPORT

0145674

Application number

EP 84 83 0277

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	AUTOMOTIVE ENGINEERING, vol. 91, no. 8, August 1983, pages 35-38, Society of Automotive Engineers Inc., Dallas, Texas, US; P. HOFBAUER et al.: "'Glider automatic' prevents unnecessary engine operation" * Figure 1 *	1-3,6	B 60 Q 9/00 F 02 D 17/04 F 02 B 77/08 F 02 D 28/00
Y	GB-A-1 427 133 (SMITHS INDUSTRIES LTD.) * Figures 1-3,11,12; page 3, lines 17-119 *	1-3,6	
A		5	
A	US-A-4 274 144 (P.M. MEYER et al.) * Figure 1; column 3, lines 35-40 *	1	TECHNICAL FIELDS SEARCHED (Int. Cl.4) B 60 Q F 02 D
A	US-A-4 156 232 (D.A. BLASS) * Abstract *	1,2,4	
A	US-A-4 234 866 (M. KURODA)		
A	US-A-4 447 801 (Y. MASUDA)		

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	25-04-1986	THIBO F.

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	EP-A-0 081 807 (R. BOSCH GmbH)		
A	DE-A-3 226 330 (TOYOTA JIDOSHA K.K.)		
A	DE-A-2 803 145 (R. BOSCH GmbH)		
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)

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