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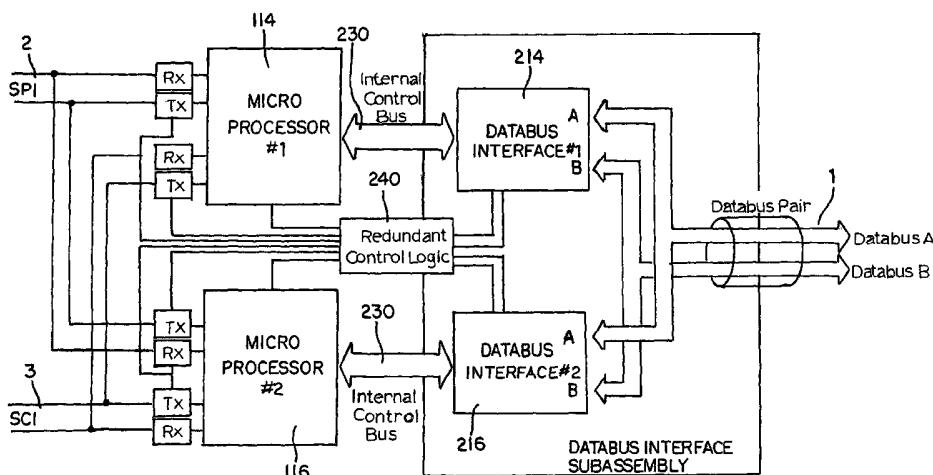
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(54) Title: ELECTRIC LOAD MANAGEMENT CENTER



(57) Abstract: An electrical power distribution system is disclosed that includes a gateway module (100) including logic (112) to interface to a vehicle management computer (VMC) (50) via a dual redundant standard data bus (1). The gateway module (100) has redundant microcontrollers (114, 116) operably connected to the VMC (50) for selectively controlling supply of electrical power to a plurality of separate electrical loads (120). A plurality of Load Management Modules (300) is provided. Each Load Management Module (300) includes a local microcontroller (310); power switching devices (320); and application specific integrated circuits ASICs (330) for interfacing the power switching devices (320) to the local microcontroller (310). Each ASIC (330) can be connected to a corresponding digital potentiometer (600) that is used to program an over current protection characteristic. Additionally, each ASIC (330) can include a voltage to frequency converter (381) that provides a true RMS current value to the local microcontroller (310).

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INTERNATIONAL SEARCH REPORT

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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) IPC 7 G05B G05D H04L G01R B60R		
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 practical, search terms used) EPO-Internal		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 055 547 A (VOITH TURBO KG) 29 November 2000 (2000-11-29) column 7, line 1-3,14,41-46; figure 2 column 8, line 13 column 9, line 51-57 column 10, line 7,15-18,50 column 13, line 28,46-49 column 17, line 19-23,38-43 column 2, line 19-24 column 8, line 13-16; figure 1	1
Y	column 6, line 41-51; figures 1,3,6B	2-4
Y	column 3, line 9; figure 2	5,6
Y	column 13, line 23-42; figure 2	7-10
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Kanelis, K

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