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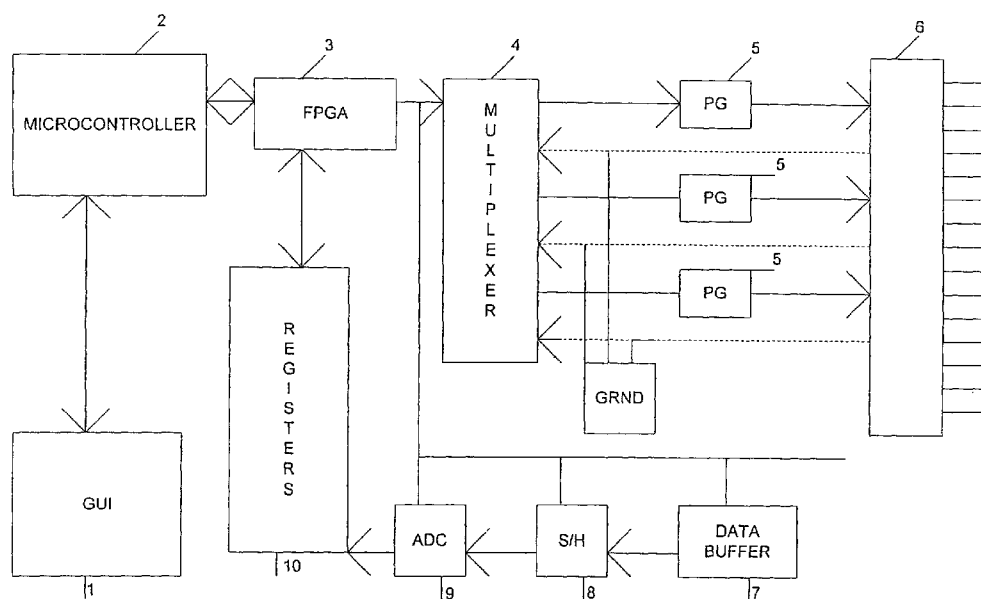
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(54) Title: FAULT DETECTION SYSTEM AND METHOD



(57) Abstract: A non-intrusive, fully automated, variable Cable and impedance-based, multiplexed cable testing system is described that uses Time Domain Reflectometry techniques. The system can process more than one cable type, with varying characteristics, at any one time during which it confirms and processes both the characteristics of the cable type under test and any discontinuities encountered during its operational life due to the impedance variations defined and processed. Furthermore, the system provides an extensive range of Real-Time Diagnostic and Prognostic data together with accurate location and interpretation of any said data and or discontinuity including, but not limited to, the additional mapping of impedance variations along the length of the cable.



WO 02/101401 A1



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