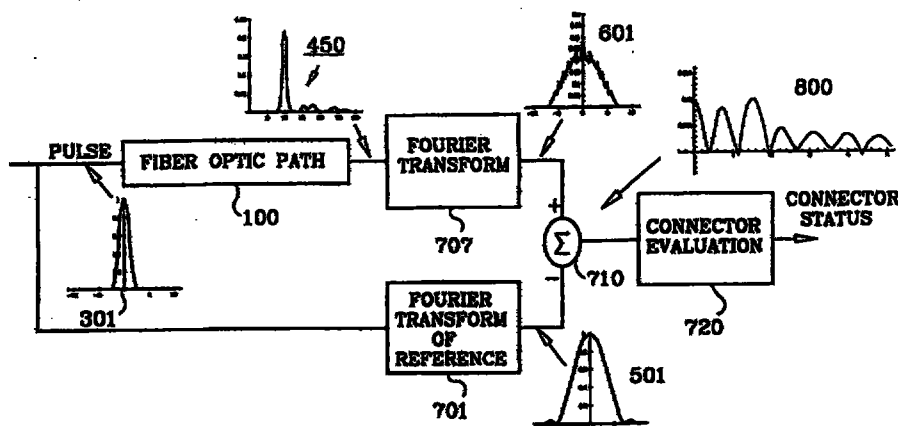




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(54) Title: METHOD OF AND SYSTEM FOR CHARACTERIZATION OF FIBER OPTIC CONNECTIONS IN SITU



(57) Abstract

A test method and system for the testing of fiber optic connectors in a fiber optic system while the system is operational without external test equipment. An input signal is applied to one end of a fiber optic path comprising a plurality of connections, which results in an output signal. The input signal has known characteristics (e.g., a training pulse) over the fiber optic path. The output signal, which is generated in response to the input signal, is converted from a time domain expression to a frequency domain expression using, for example, Fourier transform analysis. Then, the frequency domain expression of the output signal is combined with a frequency domain expression of the input signal to provide a waveform from which the location of each connector and its relative level of performance can be determined. Advantageously, the method and system do not require disassembly of the fiber optic path.