



ABSTRACT

In an IC testing apparatus which is provided with a mainframe having housed therein electronic circuit devices such as a pattern generator, a waveform generator and a logic comparator and a test head connected to the tip end of a cable led out of the mainframe: an optical driver and an optical output type voltage sensor are provided at the test head side; an optical signal converter for converting a test pattern signal to an optical signal and a photodetector for converting the optical signal to an electric signal are provided at the mainframe side; at the mainframe side, the test pattern signal available from the waveform generator is converted by the optical signal converter to an optical signal; the optical signal is sent to the test head through an optical waveguide to drive the optical driver in the test head; and the optical signal is thereby converted to an electric signal and is applied to an IC under test. The invention proposes an IC testing apparatus capable of high-speed operation which performs signal transmission between the mainframe and the test head by optical signals and wherein a response signal from the IC under test is applied to the optical output type voltage sensor; and a voltage signal from the IC under test is sent to the mainframe after being converted by the optical output type voltage sensor to an optical signal.