

## ABSTRACT

OPTICAL TRANSPONDER AND AUTOMATIC OPTICAL SIGNAL  
TYPE IDENTIFICATION METHOD FOR USE THEREWITH

An optical transponder capable of effecting performance monitoring on the electrical signal equivalents of at least two different optical signal types each uniquely identifiable in terms of transmission protocol and/or bit rate. The  
5 optical transponder includes an optical/electrical (O/E) receiver module for converting an ingressing optical signal from an optical signal source into an electrical signal; a performance monitoring module for effecting performance monitoring on the electrical signal; and an electrical/optical (E/O) transmitter module for regenerating an egressing optical signal from the electrical signal  
10 for feeding to an optical signal destination.

FIG. 1