

Wireless Communications Link

ABSTRACT

A method, a system (10), a transceiver of a base station and a transceiver for a client or mobile station for providing a hybrid wireless communications connection suitable for use in a Local Area Network (LAN) (14) are disclosed. A small number of conventional optical and infrared wireless LANs are also discussed. The method of the invention exchanges data between network entities (12, 16A-C) in a LAN (14) through wireless communications media. The principal steps are: transferring data from a first entity (12) connected to a physical-line communications portion of the LAN (14) to a second entity (16A-C) using Infrared optical communications, and from the second entity (16A-C) to the first entity (12) using Radio Frequency communications; and transmitting data from the first and second entities (12, 16A-C) at independent data transfer rates. The transmitting step involves transmitting data from the first entity (12) using Time Division Multiplexing Access (TDMA) and from the second entity (16A-C) using Frequency Division Multiple Access-Time Division Multiple Access (FDMA-TDMA).

FIG. 1