Title (en)

FREE-SPACE OPTICAL COMMUNICATION NETWORK

Title (de)

OPTISCHES FREIRAUM-KOMMUNIKATIONSNETZ

Title (fr)

RESEAU DE COMMUNICATION OPTIQUE SANS CONTRAINTE D'ESPACE

Publication

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Application

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- GB 0304043 A 20030222

Abstract (en)

[origin: GB2398684A] The invention provides an optical line of sight (LOS) network comprising a mesh of interconnected nodes 1a-1h with at least one of the nodes connected to an external data network such as the Internet. The nodes may be houses at which Internet access is required, each house preferably having at least two physically steerable optical transmitters and receivers. Also disclosed is a routing mechanism enabling a transmitter at each node to transmit data to a desired receiver depending upon the ultimate route of the message, and a self-healing mechanism for dynamically altering the path in the event of node failures or alterations in node topology. Transmission is preferably by modulated carriers using infrared laser diodes to transmit between nodes. High bandwidths are obtainable for local optical mesh networks.

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