Title (en)

USE OF PHASE SHIFT KEYED COHERENT OPTICAL SIGNALING IN A WAVELENGTH DIVISION MULTIPLEXED OPTICAL FIBER LINKS

Title (de)

VERWENDUNG VON PHASENSPRUNGMODULIERTER KOHÄRENTER OPTISCHER SIGNALISIERUNG IN OPTISCHEN GLASFASERVERBINDUNGEN MIT WELLENLÄNGENMULTIPLEX

Title (fr)

UTILISATION DE SIGNALISATION OPTIQUE COHERENTE PAR DECALAGE DE PHASE DANS DES LIAISONS DE FIBRES OPTIQUES MULTIPLEXEES EN LONGUEUR D'ONDES

Publication

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Application

EP 01946995 A 20010111

Priority

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Abstract (en)

[origin: WO0156196A1] A wavelength division multiplexed (23) fiber optic link (40) including a phase shift keyed coherent transmitter (20) and receiver (30) coupled together by a way of periodic optically amplified (42, 44) fiber link. The transmitter has a plurality of phase shift keyed modulators (22) that each receive data for transmission over the fiber link. A separate laser (21) is coupled to each of the modulators (22) whose respective output beams are modulated with the data for transmission. Outputs of the modulators are input to a wavelength division multiplexer (23) that multiplexes the phase shift keyed modulated outputs of the phase shift keyed modulators for transmission over the fiber link. The receiver (30) includes an optical power splitter (31) or wavelength division multiplexed demultiplexer (32) that produces a plurality of data channels. A coherent optical demodulator (33) demodulates the plurality of data channels to produce data for each data channel. A corresponding optical signaling method is also disclosed.

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