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Patent Number(s): WO2012047232-A1

Title: Integrated optical data transmission system for use in computer system to transfer optical signal, has multiplexing system combining each sets data signal to generate multi-channel signals that are transmitted from transmission system

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Derwent Primary Accession No.: 2012-E33949

Abstract: NOVELTY - The system (10) has an array (14) lasers (18) i.e. vertical cavity surface-emitting lasers, modulated by a set modulation signals (D1-1 to D1-N) to provide a set sets orthogonally polarized optical data signals (OPT-1 to OPT-N), where each optical data signal has distinct wavelength. A wavelength division multiplexing (WDM) system (20) combines each sets the optical data signals to generate a set multi-channel optical data signals (OPTmux-1 to OPTmux-Y) that are transmitted from the transmission system via respective optical transmission media (22) e.g. waveguides.

USE - Integrated optical data transmission system for use in a computer system to transfer data i.e. optical signal.

ADVANTAGE - The design the system realizes a low-cost laser that occupies small physical space in the computer system. The system has optical data rate connectivity to meet consumer demands to achieve bandwidths in the Terahertz range.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for multiplexing optical signals.

DESCRIPTION DRAWING(S) - The drawing shows a block diagram an optical data transmission system.

Modulation signals (D1-1 to D1-N)

Orthogonally polarized optical data signals (OPT-1 to OPT-N)

Multi-channel optical data signals (OPTmux-1 to OPTmux-Y)

Integrated optical data transmission system (10)

Laser array (14)

Lasers (18)

WDM system (20)

Optical transmission media (22)

Drawing:

Derwent Class Code(s): T01 (Digital Computers); V08 (Lasers and Masers); W02 (Broadcasting, Radio and Line Transmission Systems)

Derwent Manual Code(s): T01-C07B; V08-A03C; V08-A09; W02-C01A1; W02-C04A; W02-C04B1; W02-C04B4B; W02-K04

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MAHGEREFTEH D; TAYEBATI P

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