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- (71) Applicant (for all designated States except US):
HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P. [US/US]; 11445 Compaq Center Drive West, Houston, TX 77070 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **FATTAL, David** [FR/US]; 1501 Page Mill Road, Palo Alto, California 94304 (US). **BICKNELL, Robert** [US/US]; 1000 NE Circle Blvd, Corvallis, Oregon 97330 (US). **SANTORI,**

Charles [US/US]; 1501 Page Mill Road, Palo Alto, California 94304 (US). **WU, Wei** [CN/US]; 1501 Page Mill Road, Palo Alto, California 94304 (US).

- (74) Agent: **COLLINS, David W.**; Hewlett-Packard Company, Intellectual Property Administration, P O Box 272400, M/S 35, Fort Collins, Colorado 80527-2400 (US).
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(54) Title: OPTICAL INTERCONNECT

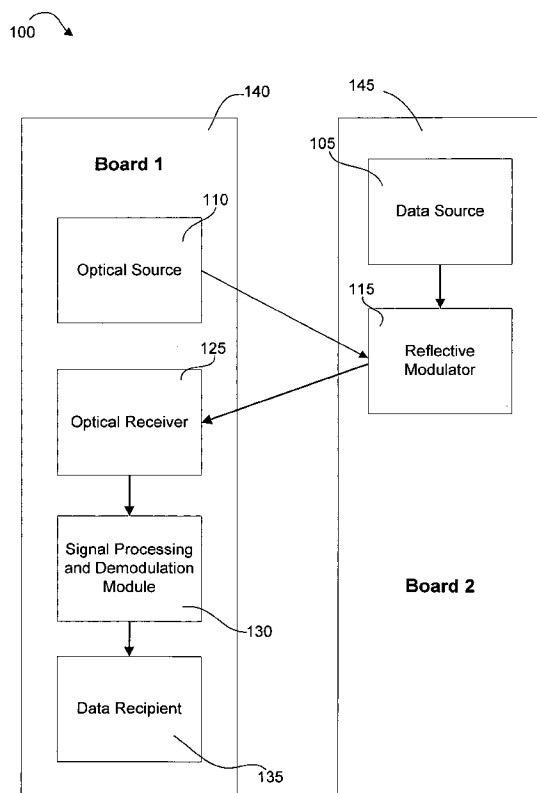


Fig. 1

(57) Abstract: An optical interconnect (100, 200, 300, 400, 445) includes a first circuit board (140, 260, 350, 405) having an optical source (110, 210, 240, 305, 440) and an optical receiver (125, 220, 235, 315, 441); and a second circuit board (145, 265, 355, 410) having data source (105, 205, 250) and an optical modulator (225, 230, 310, 425, 430, 435) optically coupled with the optical source (110, 210, 240, 305, 440) and optical receiver (125, 220, 235, 315, 441), wherein the optical modulator (225, 230, 310, 425, 430, 435) is configured to encode data from the data source (105, 205, 250) into an optical signal from the optical source (110, 210, 240, 305, 440). The optical receiver (125, 220, 235, 315, 441) is configured to receive the optical signal from the optical modulator (225, 230, 310, 425, 430, 435). A method of optical communication includes generating on a first circuit board (140, 260, 350, 405) an optical signal directed at a second circuit board (145, 265, 355, 410); modulating the optical signal with data at the second circuit board (145, 265, 355, 410); reflecting the optical signal to the first circuit board (140, 260, 350, 405); and demodulating the optical signal to receive the data at the first circuit board (140, 260, 350, 405).



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FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,
NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,
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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility Models since 1975

Japanese Utility models and applications for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS (KIPO internal) & Keywords : circuit board, optical interconnect, modulator, wavelength, and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5101460 A (RICHARD, FRED V.) 31 March 1992 See abstract, and figure 1.	1-6, 12-15
A	US 3215842 A (THOMAS, NUMA E.) 02 November 1965 See claim 1, and figures 1, 2, 5.	1-6, 12-15
A	US 2003-0202730 A1 (FUJIEDA, ICHIRO; MIKAMI, OSAMU) 30 October 2003 See abstract, and figures 1-2.	1-6, 12-15
A	JP 08-096677 A (YAMATAKE HONEYWELL CO., LTD.) 12 April 1996 See abstract, and figures 1-2.	1-6, 12-15
A	US 4892376 A (WHITEHOUSE, WILLIAM A.) 09 January 1990 See abstract, and figure 3.	7-11



Further documents are listed in the continuation of Box C.



See patent family annex.

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Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seonsa-ro, Seo-
gu, Daejeon 302-701, Republic of Korea

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Authorized officer

LEE, Eunju

Telephone No. 82-42-481-8531



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Information on patent family members

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