

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/006575 A3

- (51) International Patent Classification:
H04B 10/00 (2006.01)
- (21) International Application Number:
PCT/US2004/021432
- (22) International Filing Date: 3 July 2004 (03.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/614,112 3 July 2003 (03.07.2003) US
- (71) Applicant (for all designated States except US): FINISAR CORPORATION [US/US]; 1308 Moffett Park Drive, Sunnyvale, CA 94089-1133 (US).
- (72) Inventors: ARONSON, Lewis, B.; 794 Manor Way, Los Altos, CA 94024 (US). LIGHT, Greta, L.; 214 42nd Avenue, San Mateo, CA 94403 (US). HOSKING, Stephen, G.; 320 Swift Street, Santa Cruz, CA 95060 (US).
- (74) Agents: MASCHOFF, Eric, L. et al.; Workman Nydegger, 1000 Eagle Gate Tower, 60 East South Temple, Salt Lake City, UT 84111 (US).

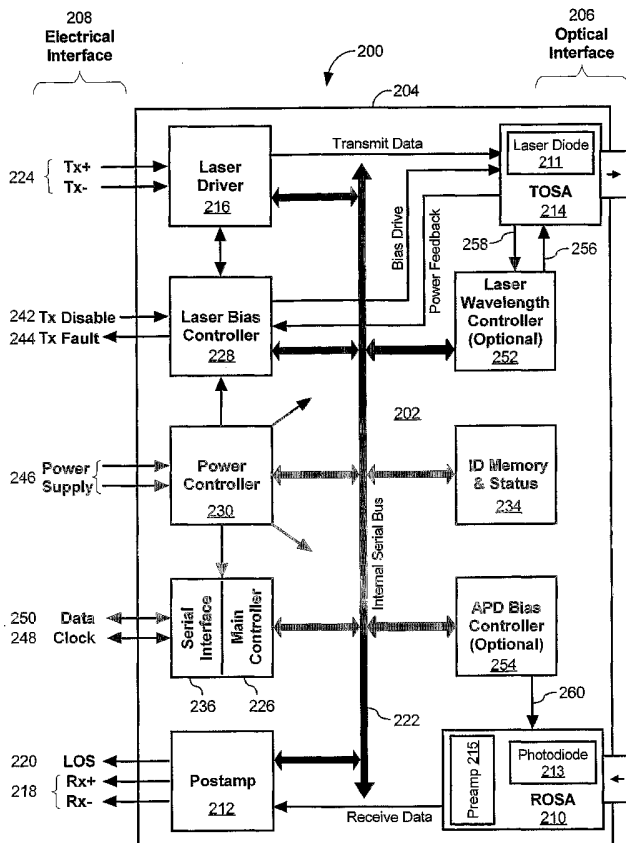
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: OPTICAL TRANSCIVER MODULE WITH POWER INTEGRATED CIRCUIT



(57) Abstract: The optical transceiver module includes a housing (204) and a plurality of components disposed at least partially within the housing. The components include an optical transmitter (214), an optical receiver (210), and a power controller integrated circuit (230). The power controller IC is electrically coupled to at least one of the plurality of components. The power controller IC is configured to perform power supply functions for the optical transceiver module. Also, the power controller IC includes multiple voltage regulators (504, 506, 508) providing power to the components at two or more voltages.

WO 2005/006575 A3



Published:

— *with international search report*

(88) Date of publication of the international search report:

7 December 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/21432

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H04B 10/00**(2006.01)

USPC: 398/136

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 398/136, 38, 94, 197

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,040,242 A (TSUCHIYA et al.) 13 August 1991 (13.08.1991), see entire document, especially Figures 1 and 3, and column 7, lines 30-63.	1-14
Y	US 4,675,770 A (JOHANSSON) 23 June 1987 (23.06.1987), see entire document, especially Figure 1 and Abstract.	1-14
Y	US 5,953,690 A (LEMON et al.) 14 September 1999 (14.09.1999), see Figures 1, 2A, and 2B.	9

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

17 August 2006 (17.08.2006)

Date of mailing of the international search report


22 SEP 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Jason Chan 
Telephone No. 703-305-4700