

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 November 2003 (06.11.2003)

PCT

(10) International Publication Number
WO 2003/091854 A3

(51) International Patent Classification⁷: H04J 3/16, 3/22

(21) International Application Number:
PCT/US2003/013043

(22) International Filing Date: 25 April 2003 (25.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/375,950 25 April 2002 (25.04.2002) US

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(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC,
VN, YU, ZA, ZM, ZW.

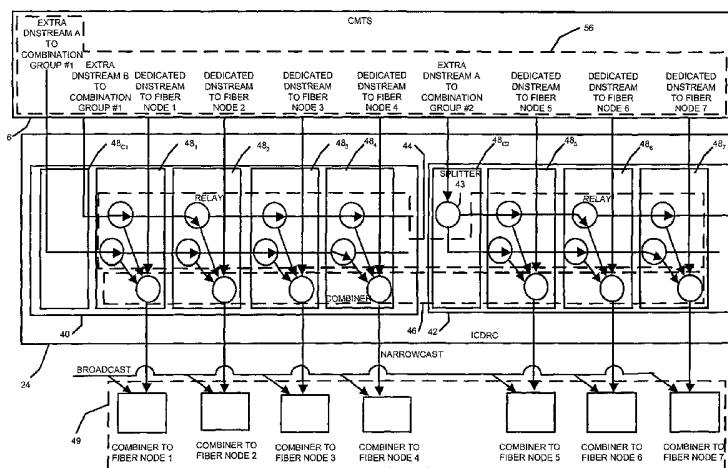
(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

(88) Date of publication of the international search report:
12 February 2004

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.

(54) Title: METHOD AND SYSTEM FOR ADJUSTING BANDWIDTH IN A HYBRID-FIBER COAXIAL NETWORK

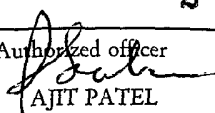


(57) Abstract: Relays (54) are set dynamically and automatically in response to subscriber bandwidth demands placed on HFC fiber nodes. Demand is periodically measured for each node served by a CMTS to generate information corresponding to that node's demands. This information is fed back to the CMTS, or a computing system, where it is synthesized with information corresponding to the usage demands of the other nodes. Control signals based on the synthesized information determine the relay settings, thus facilitating the steering of bandwidth to nodes serving subscribers that are collectively demanding higher usage levels than others. Bandwidth being steered is provided by extra MAC domains not dedicated to a particular fiber node. Combiners combine the extra bandwidth with bandwidth dedicated to a given node; the combined downstream bandwidth is provided to the nodes. Upstream bandwidth is similarly steered so that upstream and downstream channels associated with the same MAC domain are steered together.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/13043

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(7) :H04J3/16,3/22 US CL :370/468,431 According to International Patent Classification (IPC) or to both national classification and IPC</p>																	
<p>B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 370/229,235,236,352,468,431</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)</p>																	
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>US 6,324,184 B1 (HOU ET AL) 27 November 2001, see entire reference.</td> <td>1-31</td> </tr> <tr> <td>A</td> <td>US 6,137,793 A (GORMAN ET AL) 24 October 2000, see fig. 3.</td> <td>1-31</td> </tr> <tr> <td>A</td> <td>US 2001/0030785 A1 (PANGRAC ET AL) 18 October 2001, see figs. 1-3.</td> <td>1-31</td> </tr> <tr> <td>A,P</td> <td>US 6,553,568 B1 (FIJOLEK ET AL) 22 April 2003, see entire reference.</td> <td>1-31</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	A	US 6,324,184 B1 (HOU ET AL) 27 November 2001, see entire reference.	1-31	A	US 6,137,793 A (GORMAN ET AL) 24 October 2000, see fig. 3.	1-31	A	US 2001/0030785 A1 (PANGRAC ET AL) 18 October 2001, see figs. 1-3.	1-31	A,P	US 6,553,568 B1 (FIJOLEK ET AL) 22 April 2003, see entire reference.	1-31
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.</p>																	
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"P" document published prior to the international filing date but later than the priority date claimed																	
<p>Date of the actual completion of the international search 20 SEPTEMBER 2003</p>		<p>Date of mailing of the international search report 26 NOV 2003</p>															
<p>Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230</p>		<p>Authorized officer  AJIT PATEL Telephone No. (703) 305-3900</p>															