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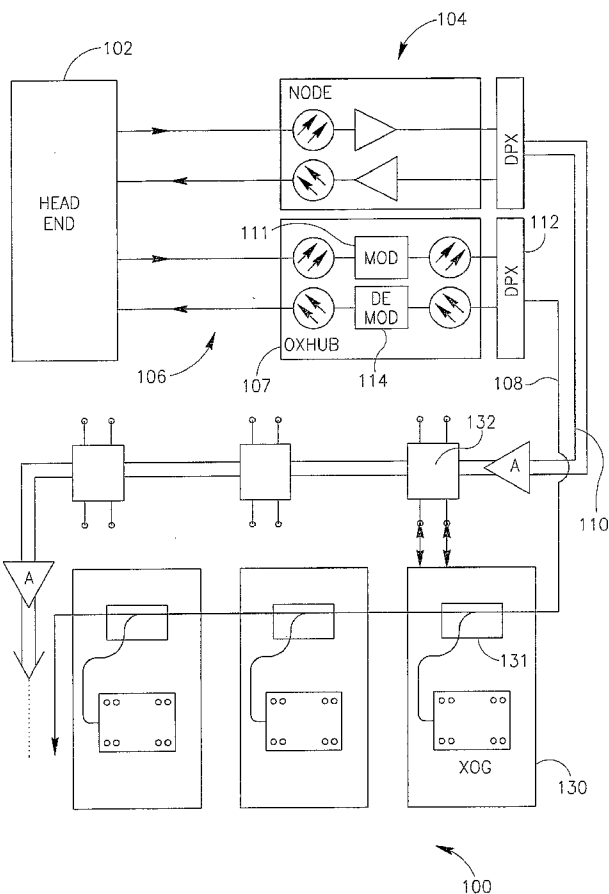
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[Continued on next page]

(54) Title: SYSTEM, DEVICE AND METHOD OF EXPANDING THE OPERATIONAL BANDWIDTH OF A COMMUNICATION INFRASTRUCTURE



(57) Abstract: Embodiments of the invention include a method, device and/or system of expanding the operational bandwidth of a communication infrastructure. An optical gathering box may include, according to some demonstrative embodiments of the invention, an optical connector to optically connect the apparatus to an optic fiber; and at least one interface including first and second radio-frequency connectors; an optical to radio-frequency converter to convert a downstream optical signal received via the optical connection into an extended downstream radio-frequency signal in an extended downstream frequency band; and a triplexer to route the extended downstream signal to the first radio-frequency connector; to route a legacy downstream radio-frequency signal in a legacy frequency band from the second radio-frequency connector to the first radio-frequency connector; and to route a legacy upstream radio-frequency signal in the legacy frequency band from the first radio-frequency connector to the second radio-frequency connector. Other embodiments are described and claimed.

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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. : 398/67, 66,68-73; 725/80,127

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.
A,P	US 6,895,185 B1 (Chung et al.) 17 May 2005 (17.05.2005), column 15, line 23 through column 22, line 26.	1-23
A,P	US 6,667,723 B2 (Forrester) 23 December 2003 (23.12.2003), column 6, line 25 through column 7, line 46.	1-23
A	US 5,774,458 (Williamson) 30 June 1998 (30.06.1998), column 5, lines 3-37.	1-23
A	US 5,963,844 (Dail) 5 October 1999 (05.10.1999), column 3, line 50 through column 5, line 67.	1-23
A,P	US 6,362,908 B1 (Kimbrough et al.) 26 March 2002, column 12, line 39 through column 5, line 13.	1-23

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