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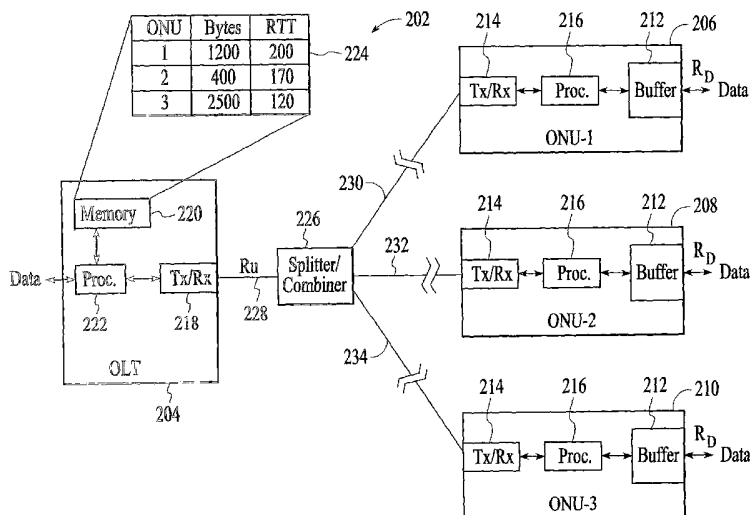
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16 October 2003

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 DYNAMIC BANDWIDTH ALLOCATION IN AN OPTICAL ACCESS NETWORK



(57) Abstract: An optical access network (202) and method for transmitting optical data in the network (202) utilizes an interleaved polling scheme to efficiently use the available bandwidth of the network (202). The use of the interleaved polling scheme allows a central terminal (204) of the network (202) to dynamically allocate upstream bandwidth from remote terminals (206, 208, 210) of the network (202) to the central terminal (204) in response to the amount of data that is waiting at the remote terminals (206, 208, 210) to be transmitted to the OLT (204). In one embodiment, the optical access network (202) is based on Passive Optical Network (PON) technology. In another embodiment, the optical access network (202) utilizes Ethernet protocol to encapsulate data in Ethernet frames for transmission. Thus, in these embodiments, the optical access network (202) includes all of the advantages associated with the PON technology and/or the Ethernet protocol.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/00664

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04L 12/56
 US CL : 370/395.41

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. : 370/395.4, 395.41, 395.42, 395.43, 422, 426, 438, 439, 447, 448, 461, 462

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)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,917,822 A (LYLES et al) 29 June 1999 (29.06.1999), column 7-8	1-43

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
- "E" earlier application or patent published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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- "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
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- "&" document member of the same patent family

Date of the actual completion of the international search

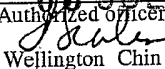
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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: bandwidth, grant, request