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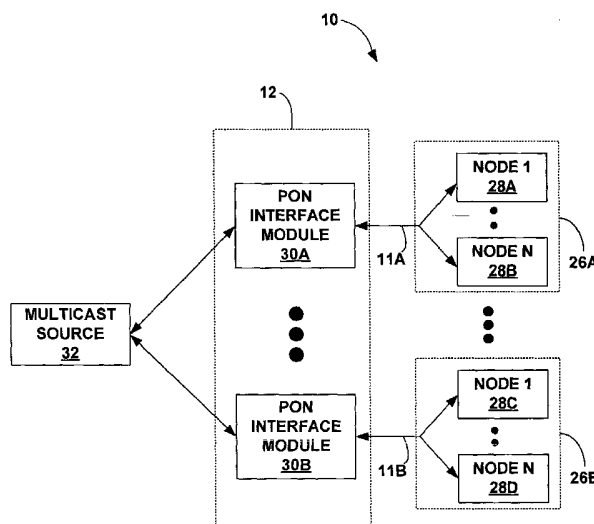
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(54) Title: DELIVERING MULTICAST STREAMS IN A PASSIVE OPTICAL NETWORK



(57) Abstract: An interface module (30A, 30B) of a Passive Optical Network (PON) maintains information associating Class-D Internet Protocol (IP) addresses for multicast streams with Asynchronous Transfer Mode (ATM) Virtual Circuit Channels (VCCs), and with nodes (28A, 28B, 28C, 28D) of the PON that have requested the multicast streams. When an interface module (30A, 30B) receives a first request for a multicast stream, it will associate a VCC and the requesting node (28A, 28B, 28C, 28D) with Class-D IP address of the stream and deliver the stream on the associated VCC. The interface module (30A, 30B) may periodically deliver map packets to nodes (28A, 28B, 28C, 28D) to indicate the current Class-D IP to VCC mappings, and subsequent requesting nodes (28A, 28B, 28C, 28D) may obtain the stream by referring to the map packet. The interface module (30A, 30B) deletes the association of a node (28A, 28B, 28C, 28D) with a stream when it receives a disassociation request from the node (28A, 28B, 28C, 28D), and delivers the stream on the associated VCC so long as any node (28A, 28B, 28C, 28D) is associated with the stream.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : H04B 10/00; H04J 3/16; H04L 12/56		
US CL : 370/230, 395.41, 395.42, 395.43, 422, 426, 438, 439, 447, 448, 449, 450, 451, 452, 453, 455, 458		
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. : Please See Continuation Sheet		
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, P	US 6,498,667 B1 (MASUCCI ET AL.) 24 DECEMBER 2002, COL. 2, LINES 3-23, COL. 5, LINES 15-27, COL. 9, LINES 28-45.	1-16
Y	US 6,065,061 A (BLAHUT ET AL.) 16 MAY 2000, COL. 3, LINES 25-35.	1-16
A, P	US 6,546,014 B1 (KRAMER ET AL.) 08 APRIL 2003, COL. 2, LINES 40-60.	1-16
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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"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
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"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	
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Continuation of B. FIELDS SEARCHED Item 1:

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