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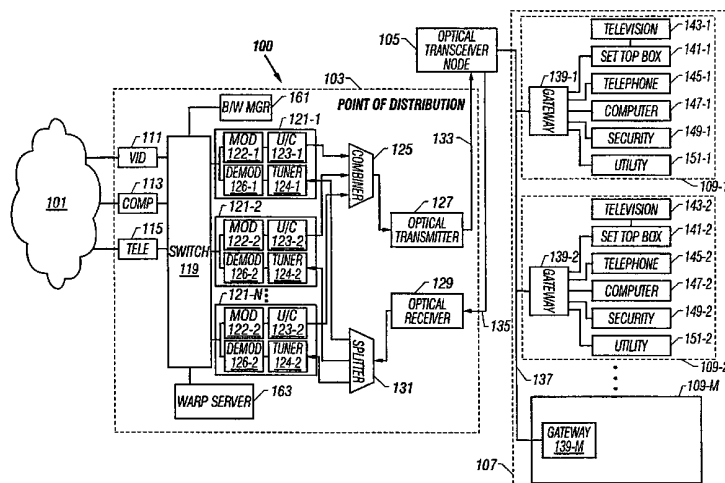
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(54) Title: A SYSTEM AND METHOD FOR DISTRIBUTING INFORMATION VIA A COMMUNICATION NETWORK



(57) Abstract: A communication system (100) for distributing information via an HFC network to subscriber destinations (109) including a multi-port switch (119), one or more radio frequency (RF) modems (121) coupled to restrictive ports of the switch, a combiner (125) and a transmitter (127). The switch forwards source information to the RF modems based on address information. Each RF modem modulates and up converts information from the switch to an RF signal within a respective subscriber channel of the television broadcast spectrum. Each channel is assigned to one or more subscribers, and is subscriber is allocated unshared bandwidth. The HFC network includes a distribution point (103), one or more optical nodes (105) and corresponding coaxial cables (137). Each subscriber destination includes a gateway device (139) that is tuned to a corresponding channel to retrieve source information from that channel, and to deliver the information to one or more local subscriber devices.



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/US01/05746

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04H 1/00

US CL : 725/114, 117, 118, 120, 129.

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. : 725/114, 117, 118, 120, 129.

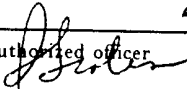
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
None.Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,526,034 A (HOARTY et al.) 11 June 1996, see col. 2, line 16 to col. 3, line 45.	1-58.
X	US 5,557,316 A (HOARTY et al.) 17 September 1996, see col. 2, line 25 to col. 3, line 54.	1-58.
Y	US 5,708,961 A (HYLTON et al.) 13 January 1998, see col. 2, line 23 to col. 4, line 15.	1-33.
Y	US 5,740,075 A (BIGHAM et al.) 14 April 1998, see col. 4, line 15 to col. 6, line 20.	1-58.
Y	US 5,684,799 A (BIGHAM et al.) 04 November 1997, see 6, line 65 to col. 8, line 41.	34-58.

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier document published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,544,161 A (BIGHAM et al.) 06 August 1996, see col. 7, line 50 to col. 9, line 55.	1-58.

INTERNATIONAL SEARCH REPORT

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B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

EAST.

Search terms: distributing information, allocating/allocation bandwidth, subscriber channel, modulating source information, upstream or downstream, television or TV, HFC or hybrid fiber coax, optical, optical signal, frequency range, determined bandwidth, predetermined bandwidth, MPEG, matrix, RF modem, modem, server, tuner and extracting/extraction.