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(54) Title: HYBRID WIRED/WIRELESS LOCAL AREA NETWORKING

(57) Abstract: Hybrid wireless/wired networks providing a wireline extension of a wireless transmission in order to fill in poor coverage regions and/or increase signaling range without increasing transmit power levels or decreasing data rates. In one implementation, a hybrid network (200) includes a communication terminal (102) for communicating wirelessly with each of a plurality of remote communication terminals (106) of a wireless network, the communication terminal functioning as an access point. The network also comprises an antenna (104) coupled to an output of the communication terminal for wirelessly transmitting signaling to the remote communication terminals; and a wireline extension (204) coupled to the output of the communication terminal for transmitting the signaling via the wireline extension a distance to a remote location. In preferred implementations, the network communicates using OFDM in which additional multipaths are added over at least a portion of a wireline.



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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US03/34998

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC(7) : H04Q 007/20; H04M 001/00; H04B 001/38  
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 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**  
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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.
X	US 6223055 B1 (CYR) 24 April 2001, col. 3, lines 7-19	1,3,5,8-10,15,16, and 30
Y		2,7,11-14
Y	US 6647015 B2 (MALKEMES et al) 11 November 2003, col. 6, lines 13-62	2,7, and 11-14
A	US 6591114 B1 (INBODY) 08 July 2003, see entire document	
A	US 6560213 B1 (IZADPANAH et al) 06 May 2003, see entire document	
A	US 6650617 B1 (BELOTSERKOVSKY et al) 18 November 2003, see entire document	

Further documents are listed in the continuation of Box C.

See patent family annex.

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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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