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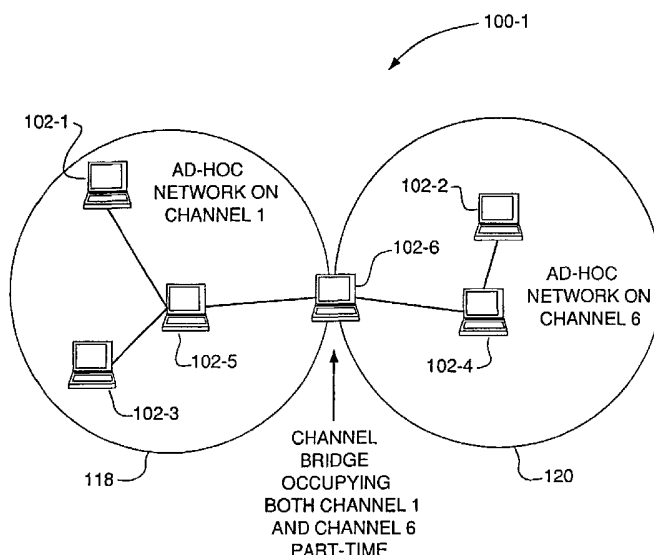
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(54) Title: A SYSTEM AND METHOD FOR ROUTING 802.11 DATA TRAFFIC ACROSS CHANNELS TO INCREASE AD-HOC NETWORK CAPACITY



(57) Abstract: A system and method for data transmission incorporating a channel bridge node (102-6) which can identify and deliver data traffic requiring delivery via alternate 802.11 data channels (Fig.4). The system and method provides a channel bridging node which is configured to communicate via each channel of the available spectrum in series. The node advertises this capability and accepts data traffic for communication over any number of channels. Data is buffered for subsequent delivery once the node is configured to communicate via the channel to which the data is addressed. In doing so, the system and method provides a channel bridge which enables routing of 802.11 data traffic across channels in 802.11 ad-hoc networks, thus increasing ad-hoc network capacity.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04Q 7/20

US CL : 455/519,450;370/331,255

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 EAST and WEST

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,987,011 A (TOH) 16 November 1999, column 7, lines 17-column 8 line 23 and figs.4 &10, column 18 lines 31-48.	1-30
A	US 6,338,087 B1 (OKANOUE) 08 January 2002, column 10 line 55- column 18 and fig.1	1-30
A	US 6,130,892 A (SHORT et al) 10 October 2000, column 5 lines 33-68 and fig.1	1-30
Y	US 6,034,951 A (DU) 07 March 2000, column 9, line 45-column 10 line 26 and fig.6.	1-30
A	US 6,115,580 A (CHUPRUN et al) 05 September 2000, column 2 line 40-column 3 line 40 and fig.1	1-30



Further documents are listed in the continuation of Box C.



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* 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
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"O" document referring to an oral disclosure, use, exhibition or other means	
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