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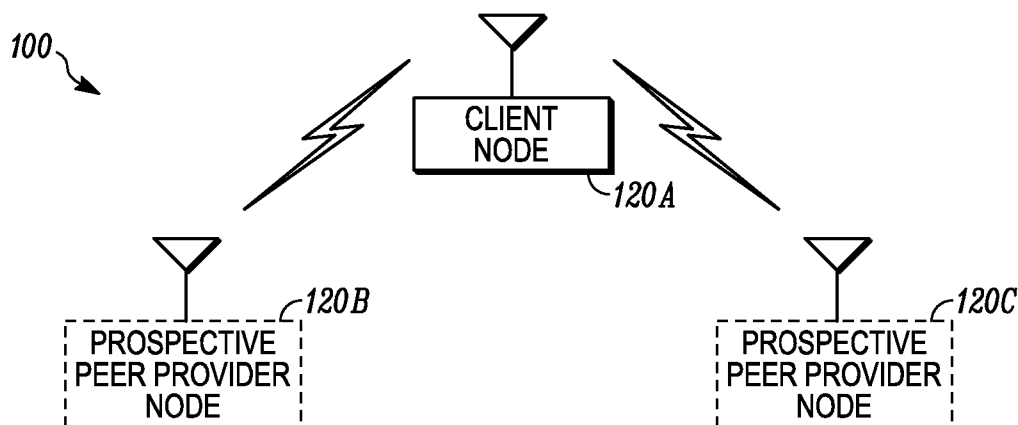
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(54) Title: METHOD FOR ENERGY EFFICIENT PROSPECTIVE PEER DISCOVERY IN AN AD HOC NETWORK



(57) Abstract: Energy-efficient discovery techniques are provided for a client node (120A) to discover at least one peer provider node (120B, 120C) in an ad hoc network. For example, the client node can be configured to turn on its first ad hoc interface while in a discovery mode to establish a channel for a first time period. The client node (120A) can then transmit a first beacon to advertise its presence to other nodes within the transmission range of the client node to acquire service information from at least one of a plurality of prospective peer provider nodes within the transmission range of the client node. At least one of the prospective peer provider nodes is configured to turn on its second ad hoc interface for a second period of time to listen for beacons from other nodes. The second period of time is less than or equal to the first period of time.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/67775

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H04Q 7/24**( 2006.01)

USPC: 370/338

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. : 370/338

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	US 2003/0163579 (KNAUERHASE et al) 28 August 2003, paragraph [0016]-[[0028]	1
y	US 6,704,301(CHARI et al) 9 March 2004 Fig. 2, col. 3, line 9 to col. 4, line 31	1
A	US 2005/0128958 (HAMDAN Amen) 16 June 2005, Fig. 7, [0052]-[0083]	1-10



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	"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	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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