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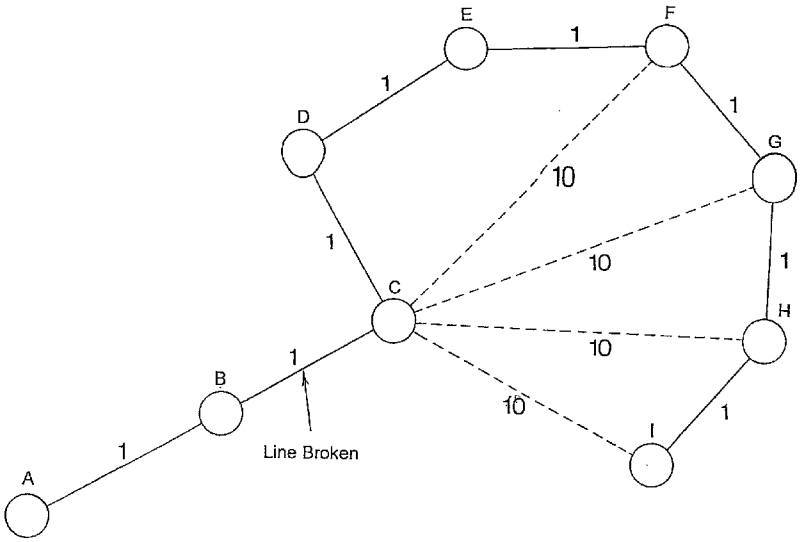
(54) Title: PROBING METHOD FOR A MULTI-STATION NETWORK



(57) Abstract: The invention relates to a method of operating a communication network, the network comprising a plurality of stations which are able to transmit data to and receive data from one another. The method comprises defining a first probing channel for the transmission of probe signals to other stations. Other stations which receive the first probe signals from a probing station indicate to the probing station their availability as destination or intermediate stations. A neighbor table comprising details of these other available stations is maintained at each station. Also, second probe signals are sent and received from stations in the neighbor table and a gradient table comprising data related to the cost of communicating with each neighbor station is maintained at each station, thereby to allow each station to select a predetermined number of intermediate stations for onward transmission of data from an originating station to a destination station at minimum cost.

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