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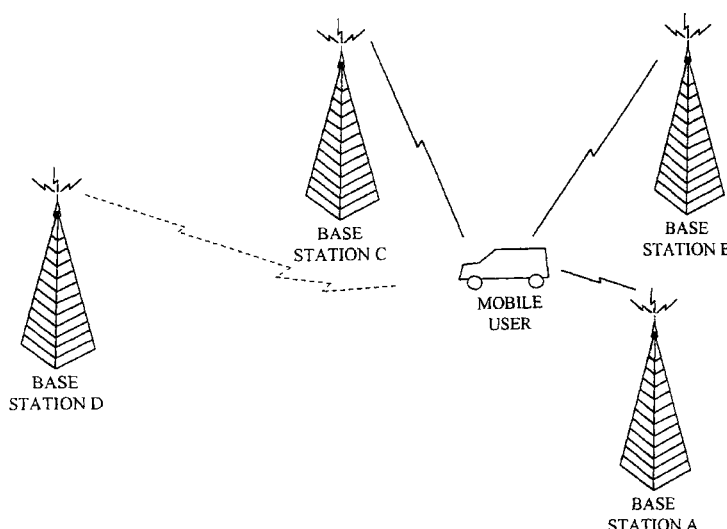
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(54) Title: MODIFIED FINGER ASSIGNMENT ALGORITHM FOR HIGH DATA RATE CALLS



(57) Abstract: A method and communication system for assigning the plurality of fingers to demodulation paths in a path list which insures that at least one finger will be assigned to a demodulation path supporting a supplemental channel, if one exists. The method involves determining whether any of the fingers is demodulating a supplemental channel. When no fingers are demodulating supplemental channels, it is determined whether the sector containing the path under consideration supports supplemental channels. If the sector containing the path under consideration supports supplemental channels, then the method determines the strength of the signal path relative to the weakest finger. If the path is a certain amount greater in strength then the weakest finger, then the method involves reassigning that finger to the path with the supplemental channel and if the path with the supplemental channel is a certain amount of strength weaker than the weakest finger plus a certain value, then the method involves determining whether the weakest finger is the only one supporting the supplemental channel.



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