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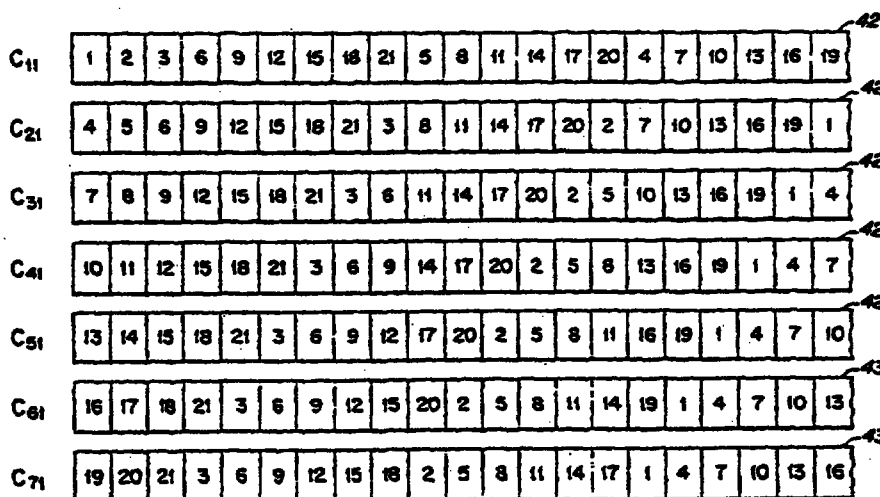
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(54) Title: CHANNEL SELECTION IN A CELLULAR COMMUNICATION SYSTEM



(57) Abstract

A method in a cellular communication system provides selection of a channel for use in a pending communications operation, the selection reducing the likelihood of co-channel interference. In each co-channel cell, frequencies from the cell's frequency group are ordered in a sequence. A different frequency in each cell is designated as having a highest priority. Successively lower priorities are then assigned, in each cell, to remaining frequencies in sequence. Then, in each cell, selection is made by identifying the available frequency having the highest priority. The method may be modified to provide for even distribution of hardware use by changing the priorities in each cell periodically. The method may also be modified for use in a fully synchronized time division multiple access (TDMA) system by performing the above steps with respect to channels instead of frequencies. The method may further be modified for use in a pseudo-synchronized TDMA system (i.e., one in which the TDMA time slots of one cell are slowly shifting with respect to the time slots of another cell) by selecting, instead of the highest priority channel, one having a lower priority based on a time difference between corresponding time slots in two co-channel cells.