

ABSTRACT

THIS SHEET HAS BEEN
REPLACED

A METHOD FOR COMMUNICATION IN A TDMA CELLULAR
MOBILE RADIO SYSTEM USING FREQUENCY HOPPING

A method and means for communication in a cellular TDMA mobile radio communication system with channel hopping, where base and mobile stations transmit radio signal bursts in time slots of a plurality of radio channels in accordance with channel hopping schemes, all of the schemes used by a base and mobile stations in a cell being free from coincidence on any radio channel with any other of the schemes used for transmission within the same cell, a scheme used by a mobile station in one cell occasionally coinciding on a radio channel with a scheme used by a mobile station in an other cell, the major part of every channel shifting scheme used by a mobile station in a cell being free from coincidence on any radio channel with the major part of any channel hopping scheme used by a mobile station in an other cell, signal to interference ratio or other signal characteristics such as signal strength or bit error rate for signals received by mobile stations are estimated and compared, the output power of stations being controlled, the existence of further possible channel hopping schemes in a cell, free from coincidence on every radio channel with every other of the channel hopping schemes already in use in that cell, is checked, and when another connection to a particular mobile is desired and there is a possible mobile scheme free from coincidence, the desired connection is establishing using the possible channel hopping scheme in the cell, only if the estimated C/I for certain mobile stations involved in connections exceed a minimum level.

No drawing can appropriately accompany the Abstract

This Sheet Has Been Replaced

