

Abstract of the Disclosure

Method of Generating a Frequency-Hopping Sequence for Radio Communication, as well as Radio Facility and Radio Communication System Therefor

From the GSM system (Global System for Mobile Communications) it is known to generate frequency-hopping sequences using an algorithm which accesses a lookup table (so-called RNTABLE) to scramble intermediate results in a pseudorandom fashion.

The invention is based on recognition that the lookup table, which is known per se, can be used not only to scramble intermediate results but also to uniquely associate radio facilities with one another, particularly to associate mobile stations with a base station. It is proposed to use several different lookup tables (RNTBLi) which are uniquely assigned to the radio facilities, with the intercommunicating radio facilities being assigned the same lookup table. The different lookup tables are preferably generated on the basis of subscriber identifications, whereby each subscriber is assigned a respective one of the lookup tables. The invention is particularly suited for the construction of private radio communication systems.

(Fig. 1)