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**A CELL FORMATION CONTROL METHOD, A MOBILE COMMUNICATIONS
SYSTEM, AND A BASE STATION AND A MOBILE STATION USED THEREIN**

ABSTRACT OF THE DISCLOSURE

When a base station of a mobile
communications system attempts to reduce its cell
radius for power saving, frequency re-use
5 enhancement and the like, a risk is that an ongoing
communication between a mobile station served by the
base station may be disconnected, which is avoided
by: the base station transmitting information about
a new cell radius to mobile stations in the current
10 cell; the mobile stations responding to the base
station with a positive or a negative reply
determined from the information received from the
base station; the base station suspending or
revising the attempted cell radius reduction,
15 according to the responses from the mobile stations;
and further by the mobile stations being capable of
performing hand-over more efficiently than ever
owing to abilities to detect final cell radii of
adjacent base stations.

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Figure 1