

ABSTRACT

BASE STATION APPARATUS, MOBILE STATION
APPARATUS, AND SYNCHRONIZATION CHANNEL TRANSMISSION
5 METHOD

A base station communicating with a mobile
station in a radio communication system by using OFDM
for downlink is disclosed. The base station includes a
10 sequence selecting unit configured to select multiple
synchronization signal sequences; a synchronization
signal generating unit configured to generate a
secondary synchronization channel based on a part of the
selected synchronization signal sequences and another
15 part of the selected synchronization signal sequences;
and a transmitting unit configured to transmit the
secondary synchronization channel. The secondary
synchronization channel is used to detect cell-specific
information.

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FIG. 20