

ABSTRACT OF THE DISCLOSURE

BASE STATION DEVICE, MOBILE STATION DEVICE, AND
SYNCHRONIZATION CHANNEL TRANSMISSION METHOD

5 A base station apparatus in a radio communications
system is disclosed. The base station apparatus
communicates with a mobile station using an OFDM scheme
in downlink. The base station apparatus includes a sync
signal generating unit which generates a secondary sync
10 channel; a multiplying unit which multiplies a scramble
code with the secondary sync channel; and a transmitting
unit which transmits the secondary sync channel with which
the scramble code is multiplied. Cell-specific
information is detected by the secondary sync channel.

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FIG. 7