

ABSTRACT

BASE STATION, COMMUNICATION TERMINAL,
TRANSMISSION METHOD, AND RECEPTION METHOD

5

A disclosed base station includes a management unit for managing frequency blocks, a scheduler for generating scheduling information for each of the frequency blocks to allocate one or more resource blocks to each of selected communication terminals having good channel conditions, a channel generating unit for generating control channels including the scheduling information for the respective frequency blocks, a multiplexing unit for frequency-multiplexing the control channels in a system frequency band, and a transmitting unit for transmitting the frequency-multiplexed control channels according to a multicarrier scheme. The control channels transmitted by the base station includes a general control channel to be decoded by communication terminals in general and specific control channels to be decoded by selected communication terminals that are allocated one or more resource blocks.

FIG.9B

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