

WIRELESS COMMUNICATION TERMINAL APPARATUS, WIRELESS
COMMUNICATION BASE STATION APPARATUS, AND CLUSTER
CONSTELLATION SETTING METHOD

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ABSTRACT

A wireless communication terminal apparatus wherein even when
a SC-FDMA signal is divided into a plurality of clusters and the
10 plurality of clusters are then mapped to respective discontinuous
frequency bands (when C-SC-FDMA is used), the improvement effect of
system throughput can be maintained, while the user throughput can be
improved. In the apparatus, a DFT unit (210) subjects a symbol
sequence of time domain to a DFT process, thereby generating signals
15 of frequency domain. A setting unit (211) divides the signals input
from the DFT unit (210) into a plurality of clusters according to a
cluster pattern that is in accordance with an MCS set, an encoding size,
or the number of Ranks occurring during MIMO transmissions, which is
indicated in those signals input, and then maps the plurality of clusters
20 to the respective ones of a plurality of discontinuous frequency
resources, thereby setting a constellation of the plurality of clusters in
the frequency domain.

Figure 2