

ABSTRACT

BASE STATION DEVICE, USER DEVICE, AND METHOD
USED IN MOBILE COMMUNICATION SYSTEM

5 A base station apparatus is used in a mobile
communication system that uses an OFDM scheme in a
downlink. The base station apparatus includes: a
unit configured to perform inverse Fourier transform
on a signal in which a first signal and a second
10 signal is mapped to subcarriers with different
transmission power density, and to generate a
transmission signal; and a transmission unit
configured to transmit the transmission signal to a
user apparatus. A subcarrier (prohibited
15 subcarrier) in which mapping of the second signal is
prohibited is determined such that transmission
power density of the second signal is kept constant
among a plurality of OFDM symbols regardless of
whether the first signal is included in an OFDM
20 symbol including the second signal. The prohibited
subcarrier is determined based on a subcarrier to
which the first signal is mapped.

25 FIG.6B