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(54) **RADIO COMMUNICATION BASE STATION
DEVICE AND CONTROL CHANNEL
ARRANGEMENT METHOD**

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455/455; 455/434; 455/464; 370/330; 370/343;
370/347; 370/328; 370/329

(58) **Field of Classification Search** 455/450,
455/451, 452.1, 455, 434, 464; 370/329,
370/328, 343, 347, 330

See application file for complete search history.

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Primary Examiner — Nick Corsaro

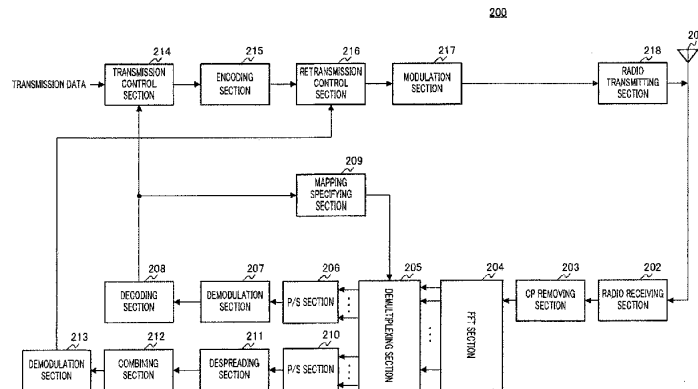
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(57) **ABSTRACT**

Provided is a radio communication base station device which
can obtain a maximum frequency diversity effect of a down-
stream line control channel. The device includes: an RB allo-
cation unit (101) which allocates upstream line resource
blocks continuous on the frequency axis for respective radio
communication mobile stations by the frequency scheduling
and generates allocation information indicating which
upstream line resource block has been allocated to which
radio communication mobile station device; and an arrange-
ment unit (109) which arranges a response signal to the radio
communication mobile station device in the downstream line
control channels distributed/arranged on the frequency axis
while being correlated to the continuous upstream line
resource blocks according to the allocation information.

18 Claims, 23 Drawing Sheets



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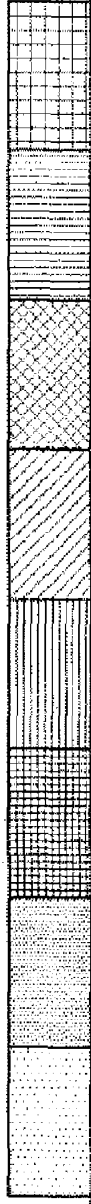
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RB#1 RB#2 RB#3 RB#4 RB#5 RB#6 RB#7 RB#8



FREQ

FIG.1

CODE

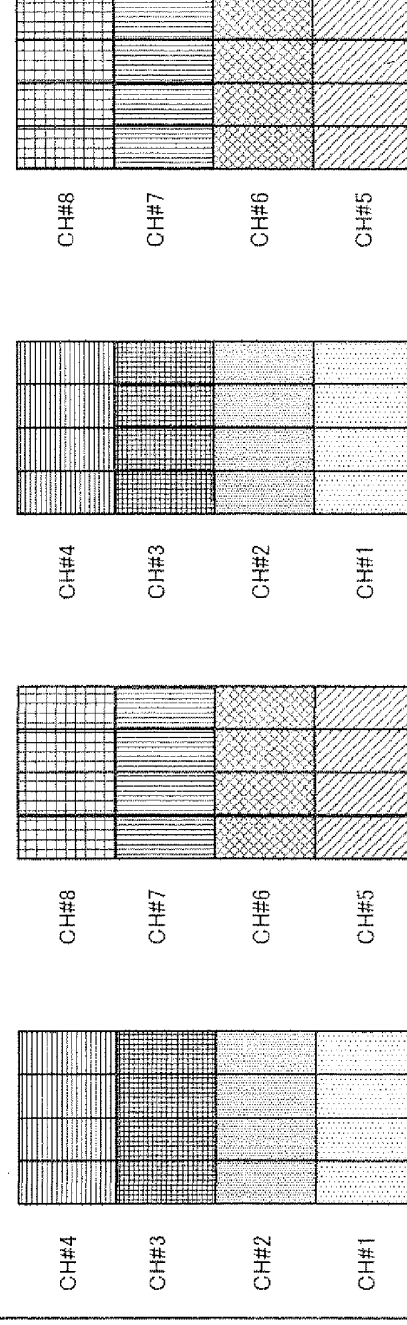


FIG.2

UPLINK RB	DOWNLINK CONTROL CHANNEL
RB#1	CH#1
RB#2	CH#2
RB#3	CH#3
RB#4	CH#4
RB#5	CH#5
RB#6	CH#6
RB#7	CH#7
RB#8	CH#8

FIG.3

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