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LG ELECTRONICS INC.



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[Title of the invention] Data transmission rate control method in a reverse link

[Title of the invention in English] The data rate control method on the reverse link

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[Purpose] I hereby apply as described above according to Article 42 of

the Patent Act. Agent

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[Fees]

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[Total] 29,000 won

[Attached documents] 1. Abstract and Specification (figures)_1 copy



[Abstract]

[Abstract]

The present invention pertains to a mobile communication system, and specifically pertains to a data transmission rate control method in a reverse link. Such a data transfer rate control method in a reverse link, according to the present invention comprises: a step of calculating total interference amount of a signal that is received from one or more terminals; a step of finding a data transmission control threshold according to the total interference amount; a step of calculating transmission status value by receiving reception pilot strength and a reverse data transmission rate from the terminal; and a step of generating a reverse data transmission rate command by comparing the transmission status value and the data transmission control threshold, and transmitting it to each of the terminals.

[Representative Figure]

Fig. 2

[Keywords]

Reverse link, base station threshold value (thershold_bs)



[Specification]

[Title of the Invention]

Data transmission rate control method in a reverse link {The data rate control method on the reverse link}

[Brief Description of fFigures]

- Fig. 1 is a figure describing the conventional data transmission rate control in a reverse link.
- Fig. 2 is a figure describing a data transmission rate control in a reverse link according to the present invention.
- Fig. 3 is a figure showing a renewal relationship of a data transmission control threshold (threshold bs) of a base station according to total interference amount according to Fig. 2.
- Fig. 4 is a figure showing a comparative relationship between a data transmission control threshold (threshold_bs) of a base station and transmission status value (rate_value) according to Fig 2.
 - *Description of reference numerals for major parts of figures*
 - 10: Base station

20: Terminal

[Detailed Description of the Invention]

[Object of the Invention]

[Technical Field to which the Invention Pertains and Prior Art in the Field]

- <7> The present invention pertains to a mobile communication system, and specifically pertains to a data transmission rate control method in a reverse link.
- <8> Generally, reverse data transmission is closely related to the total amount of interference received at a base station.
- <9> If the total amount of interference received at the base station is low, the transmission can be performed by increasing a reverse data transmission rate, but if the total interference amount is above a certain level, there are cases where a terminal must reduce a data transmission rate or discontinue data transmission.
- <10> In a 1xEV-DO system, a base station creates a data transmission rate increase or decrease command, in other words, a transmission rate command (RA: Reverse Activity) by estimating the total amount of interference in the reverse direction.
- <11> The RA command is communicated to all users transmitting data in the reverse direction through a common channel referred to as an "RA channel."
- <12> Also, if the total among of interference received from the base station is large, in other words, if it is below a certain threshold, a data transmission rate decrease command is communicated, and if the total



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