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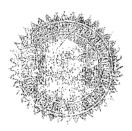|	
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[Title of the invention]	Reverse link data rate control method
[Title of the invention in English]	Method for controlling data rate in reverse link
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[Purpose]	I hereby apply as described above according to the provisions of Article 42 of the Patent Act. Agent	
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[Fees]

[Basic application fee]	20	page(s)	29,000	won
[Additional application fee]	7	page(s)	7,000	won
[Priority claim fee]	0	case(s)	0	won
[Examination request fee]	0	claims(s)	0	won
[Total]	36,000 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 rate control method in a reverse link. Such a reverse data rate control method according to the present invention comprises: a step of calculating transmission energy level required in a terminal, by applying cell interference probability of each terminal; a step of receiving data rate information for which transmission of each of the terminals is possible; and a step of generating data rate control information of each of the terminals according to the calculated transmission energy level and data rate information.

[Representative figure]
Fig. 2

[Keywords]
Cell interference probability, reception energy, total interference amount

[Specification]

[Title of Invention]

Reverse link data rate control method {Method for controlling data rate in reverse link}

[Simple Explanation of Figures]

Fig. 1 is a flowchart showing a data rate control procedure for the prior art.

Fig. 2 is a flowchart showing an example of a dedicated rate control procedure for a terminal of a base station according to the present invention.

Fig. 3 is a figure showing a renewal process of BS_RCV according to the present invention.

Fig. 4 is a figure showing a rate control information generation procedure using BS_RCV according to the present invention.

Fig. 5 is a flowchart showing another example of a dedicated rate control procedure for a terminal of a base station according to the present invention.

[Detailed Explanation of Invention]

[Technical Field of the Invention and Prior Art]

<6> The present invention pertains to a mobile communication system, and specifically pertains to a data rate control method in a reverse link.

<7> In general, reverse data transmission is closely related to the total interference amount (Rise Over Thermal: hereinafter abbreviated as "ROT") that is received by a base station. Total interference amount received by the base station refers to the total signal power of all terminals that are received by a base terminal. This will be explained using Fig. 1 as an example.

<8> Fig. 1 is a flowchart showing a data rate control procedure for the prior art.

<9> If total interference amount received by a base station is low, a terminal can transmit by increasing the data rate of a reverse transmission, but if this is not the case, in other words, if the total interference amount is above a certain level, there are cases where the data rate must be reduced or data transmission must be discontinued.

<10> In the case of 1x EV-DO (1x Evolution Data Only) systems, as depicted in Fig. 1, a base station estimates the total interference level in reverse (S10), generates commands for increasing or decreasing data rate, in other words, RA (Reverse Activity) bits, and transmits to all active terminals (S12). This RA command transmits data to all terminals within active sets transmitting data in reverse through a common channel referred to as an RA (Random Access) channel.

<11> The base station compares the measured total interference amount received and the threshold (S11), and if the total interference amount received is high, in other words, if total signal power of all terminals is above a certain threshold, RA bits corresponding to a data rate reduction command are generated and transmitted to active terminals.

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