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LG ELECTRONICS INC.

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[Title of the invention] Reverse link packet transmission method and apparatus

[Title of the invention in English] Method and apparatus of Packet transmission for the reverse

link

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

the Patent Act. Agent

HEO, Yong-Rok (seal)

[Fees]

[Basic application fee] 17 29,000 won page(s) [Additional application fee] 0 0 page(s) won [Priority claim fee] 0 case(s) 0 won 0 0 [Examination request fee] claims(s) won

[Total] 29,000 won

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



[Abstract]

[Abstract]

The present invention relates to a reverse link packet transmission method and apparatus for transmitting a packet transmission rate increase or decrease message to each mobile station using load information of a reverse link at a base station to improve data transmission efficiency of a reverse link in a mobile communication system.

In connection with data transmission of a reverse link, the present invention comprises: a step of a base station measuring interference level of an entire traffic channel; a step of determining load of a reverse link by comparing the measured interference value and a threshold value; and a step for dedicatedly transmitting information on the increase and decrease of transmission data rate for each mobile station by using the load information and distance information between each base station and the mobile station.

Therefore, according to the present invention, each transmission rate can be controlled for each mobile station by dedicatedly transmitting RAB information to each mobile station in consideration of the load information of the reverse information and the mobile station distance, and since it is possible to obtain information on increase and decrease of transmission data rate, which was not possible in the conventional art, through RAB, the data transmission efficiency (throughput) can be increased.

[Representative figure]

Fig. 5

[Keywords]

Mobile communication, transmission speed, transmission rate, dedicated common channel



[Specification]

[Title of the invention]

Reverse link packet transmission method and apparatus {Method and apparatus of Packet transmission for the reverse link}

[Brief description of figures]

Fig. 1 is a conventional channel structure for transmitting increase and decrease information (RAB) of a transmission data rate.

Fig. 2 is a configuration diagram of an embodiment for transmitting information on increase and decrease of transmission data to each mobile station in a base station of the mobile communication system according to the present invention.

Fig. 3 is a configuration diagram of an embodiment for receiving information on the increase and decrease of transmission data from a base station in a mobile station of a mobile communication system according to the present invention.

Fig. 4 is a detailed block diagram of information on the increase and decrease of transmission data rate and transmission channel determination unit (24) in the base station of Fig. 2.

Fig. 5 is a flowchart of an embodiment describing an operation for transmitting information on the increase and decrease of transmission data rate to each mobile station in a 1XEV-DV system.

[Detailed description of the invention]

[Object of the invention]

[Technical field to which the invention pertains and prior art in the field]

The present invention relates to a reverse link packet transmission method and apparatus for transmitting a message about an increase or a decrease in a packet transmission rate to each mobile station using load information of a reverse link at a base station in order to improve data transmission efficiency of the reverse link in a mobile communication system, and in particular, it relates to a reverse link packet transmission method and apparatus using forward link feedback information capable of controlling a transmission rate for each mobile station by measuring interference level of an entire traffic channel in a base station, comparing it with the threshold value, and using the derived value to dedicatedly transmit information on the increase and decrease of transmission data rate (Reverse Activity Bit, RAB) for each mobile station.



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