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(54) **SCHEDULING OF WIRELESS PACKET DATA TRANSMISSIONS**

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See application file for complete search history.

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(57) **ABSTRACT**

A method for scheduling packet data transmissions in a wireless communication system is described wherein a priority function is based on a channel state indicator (CSI), the projected average throughput of the users, and a tuning parameter designed to control the throughput and fairness characteristics of the scheduling algorithm. The method also considers fairness criteria dictated by predetermined Quality of Service (QoS) requirements. The channel state indicator may be a Requested Data Rate (RDR) or Carrier-to-Interference ratio (C/I) information. The base station calculates a priority function for the multiple mobile users. Each priority function is a function of the CSI, the projected average throughput of a given mobile user, the average projected throughput over a set of users, and the tuning parameter.

**19 Claims, 4 Drawing Sheets**

