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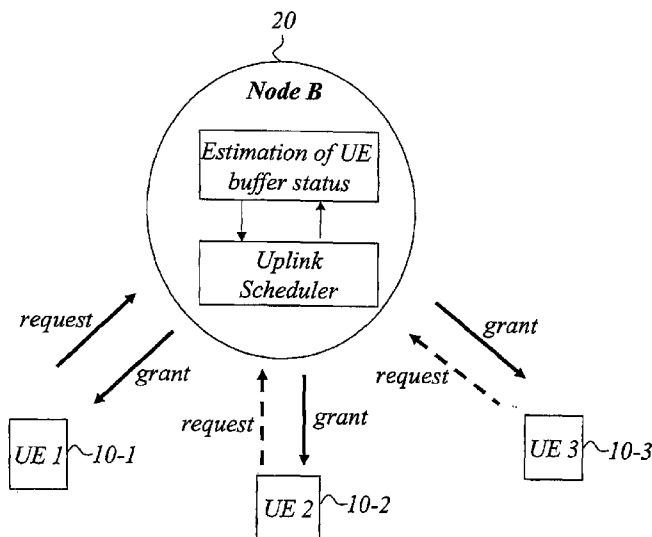


Fig. 6

(57) Abstract: In network-based uplink scheduling, users are scheduled by the network for uplink communication between a user side and a network side. In this context, the invention provides an efficient estimation of User Equipment (UE) buffer status on the network side such as at Node B (20), for each of a number of users (10), and determines an uplink scheduling priority order of the users based on the network-estimated buffer status information. The users (10) are allocated communication resources based on the determined uplink scheduling priority order. In this way, the UE buffer status may be considered in the uplink scheduling procedure without explicit UE buffer status reports (that would waste valuable uplink transmission resources) from the UE side. This means that efficient scheduling and optimal exploitation of the uplink transmission resources are ensured, with clearly improved system performance as a result.

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