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(54) **SYSTEM AND METHOD FOR FAIR,
CHANNEL-DEPENDENT SCHEDULING FOR
WIRELESS SYSTEMS**

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X. Liu, E. K. P. Chong and N. Shroff, "Opportunistic Transmission Scheduling with Resource-Sharing Constraints in Wireless Networks," *IEEE Journal on Selected Areas in Communications*, vol. 19, No. 10, pp. 2053-2064, Oct. 2001.

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K. Lee and M. El Zarki, "Comparison of Different Scheduling Algorithms for Packetized Real-Time Traffic Flows," Proceedings of 4th International Symposium on Wireless Personal Multimedia Communications (WPMC '01), Aalborg, Denmark, Sep. 9-12, 2001.

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H04Q 7/00 (2006.01)

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(52) **U.S. Cl.** **370/329; 370/437**

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(58) **Field of Classification Search** None
See application file for complete search history.

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(57) **ABSTRACT**

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System and method for channel-dependent scheduling wherein data is stored indicating previous channel conditions between a transmitting node and at least one destination node. Additionally, data packets to be transmitted to at least one destination node are queued for later transmission. A determination of the present channel conditions between the transmitting node and the at least one destination node is made and transmissions of the queued packets are scheduled from the transmitting node to the at least one destination node responsive to the present channel conditions and the previous channel conditions.

15 Claims, 3 Drawing Sheets



