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Dacosta et al.

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(54) **SYSTEM AND METHOD FOR
DYNAMICALLY ALLOCATING DATA RATES
AND CHANNELS TO CLIENTS IN A
WIRELESS NETWORK**

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OTHER PUBLICATIONS

This patent is subject to a terminal dis-
claimer.

PCT Search Report.

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370/468

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See application file for complete search history.

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(57) **ABSTRACT**

Disclosed is a system, apparatus, and method for dynamically allocating wireless channels in a wireless network. At least two client devices are present in the wireless network. Each client device is capable of transceiving wireless data over a wireless channel. In one embodiment, a server capable of a transceiving wireless data over at least one wireless channel determines the number of client devices in the wireless network. The server allocates client devices to different wireless channels. Particularly, client devices that receive data at substantially different data rates are allocated to different wireless channels in order to optimize the total system utility of the wireless network. Furthermore, client devices that receive data at substantially similar data rates are allocated to the same wireless channel.

21 Claims, 4 Drawing Sheets

