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(54) Title: **WEIGHTED FAIR SHARING OF A WIRELESS CHANNEL USING RESOURCE UTILIZATION MASKS**

(57) Abstract: Systems and methods are described that facilitate data communication in a wireless communication environment. According to various aspects, a node, such as an access point or an access terminal, may determine a number of channels over which it will transmit a communication signal. The node may then select channels based on whether the channels are available or unavailable, wherein available channels are preferentially selected over unavailable channels. The node may then transmit a signal over the at least one of the selected channels.

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