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(54) **TECHNIQUE FOR SCHEDULING
DOWNLINK DATA ALLOCATIONS AND
UPLINK DATA ALLOCATIONS IN A
WIRELESS NETWORK**

(52) **U.S. Cl.**
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(57) **ABSTRACT**

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A base station for wireless communication is provided. The base station including communication circuitry configured to, during transmission time slots, transmit downlink data for reception by terminals, and configured to, during reception time slots, receive uplink data transmitted by the terminals. Downlink scheduling circuitry determines, for each transmission time slot, downlink data allocations, each identifying a terminal to which downlink data is to be transmitted, and wireless communication resources to be used by the wireless communication circuitry to transmit the downlink data to the identified terminal. Uplink scheduling circuitry determines a candidate list of uplink data allocations identifying, for reception time slots, terminals to be allocated to transmit uplink data within the reception time slots and, for each identified terminal, the wireless communication resources to be used. Control information generation circuitry generates downlink information identifying downlink data allocations, and uplink information identifying uplink data allocations selected from the candidate list.

