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(54) Title: SPATIAL INTERFERENCE MITIGATION SCHEMES FOR WIRELESS COMMUNICATION

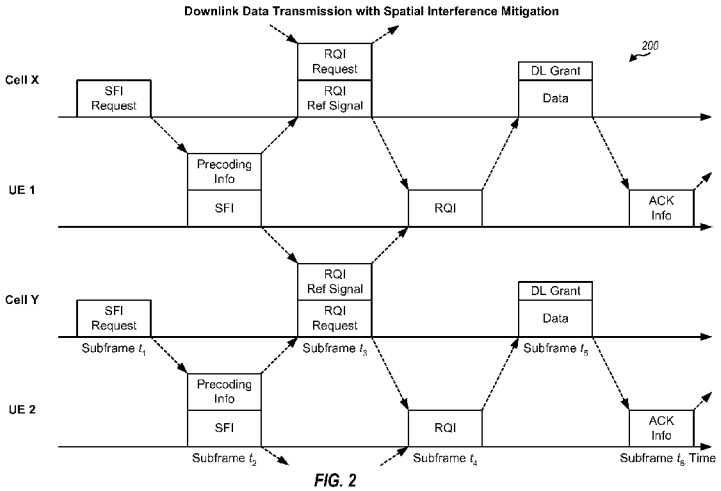



FIG. 2

(57) Abstract: Techniques for transmitting and receiving data with spatial interference mitigation in a wireless communication network are described. In one design, a cell may receive precoding information from a first user equipment (UE) communicating with the cell and spatial feedback information (SFI) from a second UE not communicating with the cell. The cell may select a precoding matrix based on the precoding information and the SFI. The precoding matrix may steer a transmission toward the first UE and away from the second UE. The cell may send a reference signal based on the precoding matrix, send a resource quality information (RQI) request to the first UE, receive RQI determined by the first UE based on the reference signal, and determine a modulation and coding scheme (MCS) based on the RQI. The cell may then send a data transmission to the first UE with the precoding matrix and in accordance with the MCS.

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