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(54) Title: CSI REPORTING METHOD AND APPARATUS, PRECODING MATRIX DETERMINATION METHOD AND APPARATUS, AND DEVICE

(54) 发明名称: CSI 的上报方法、预编码矩阵的确定方法、装置及设备

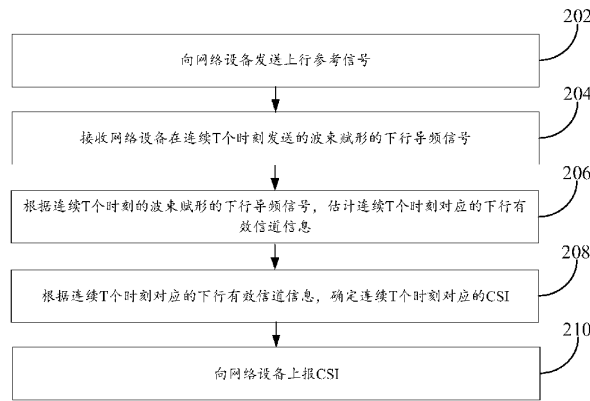


图 2

202 Send an uplink reference signal to a network device
204 Receive beamformed downlink pilot signals that are sent by the network device at T consecutive moments
206 According to the beamformed downlink pilot signals at the T consecutive moments, estimate downlink effective channel information corresponding to the T consecutive moments
208 According to the downlink effective channel information corresponding to the T consecutive moments, determine CSI corresponding to the T consecutive moments
210 Report the CSI to the network device

(57) Abstract: The present application relates to the field of mobile communications. Disclosed are a CSI reporting method and apparatus, a precoding matrix determination method and apparatus, and a device. The CSI reporting method comprises: sending an uplink reference signal to a network device; receiving beamformed downlink pilot signals that are sent by the network device at T consecutive moments; according to the downlink pilot signals, estimating downlink effective channel information corresponding to the T consecutive moments; according to the downlink effective channel information, determining CSI corresponding to the T consecutive moments;

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and reporting the CSI to the network device, wherein the CSI is used by the network device to calculate a precoding matrix for downlink data transmission at a moment t . In the present application, a network device can calculate precoding matrixes at different moments in the future according to CSI reported once by a terminal device. A terminal device frequently reporting CSI due to rapid movement is avoided, while the data transmission performance is ensured, thereby reducing the period of the terminal device reporting CSI and decreasing the uplink feedback overhead of the terminal device.

(57) 摘要: 本申请公开了一种CSI的上报方法、预编码矩阵的确定方法、装置及设备, 涉及移动通信领域。该方法包括: 向网络设备发送上行参考信号; 接收网络设备在连续 T 个时刻发送的波束赋形的下行导频信号; 根据下行导频信号, 估计连续 T 个时刻对应的下行有效信道信息; 根据下行有效信道信息, 确定连续 T 个时刻对应的CSI; 向网络设备上报CSI; 其中, CSI用于网络设备计算时刻 t 的下行数据传输的预编码矩阵。本申请能够使网络设备根据终端设备一次上报的CSI, 实现计算未来不同时刻的预编码矩阵。在保证数据传输性能的同时, 避免终端设备由于快速移动从而频繁上报CSI, 减小了终端设备上报CSI的周期, 降低了终端设备的上行反馈开销。