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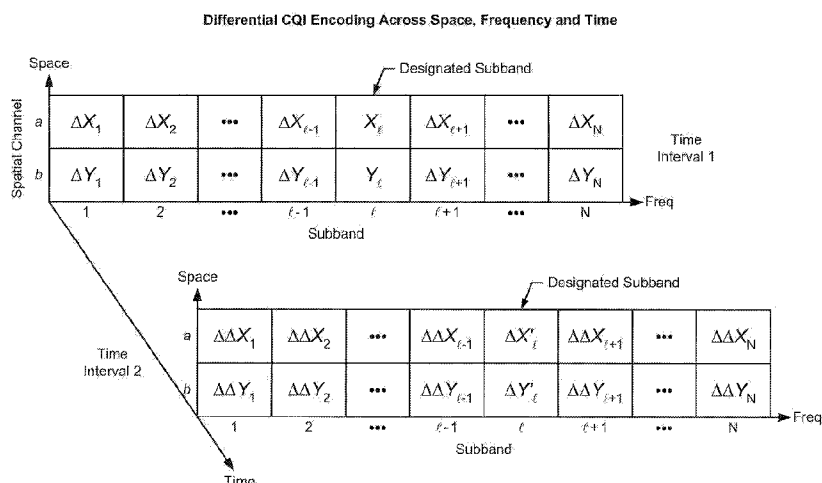
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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: FEEDBACK OF CHANNEL STATE INFORMATION FOR MIMO AND SUBBAND SCHEDULING IN A WIRELESS COMMUNICATION SYSTEM



(57) Abstract: Techniques for efficiently sending channel state information using differential encoding are described. Differential encoding may be performed across space, across frequency, across space and frequency, across space, frequency and time, or across some other combination of dimensions. In one design, spatial state information may be determined for multiple spatial channels on multiple subbands. The spatial channels may correspond to different antennas, different precoding vectors, etc. Channel quality indicator (CQI) values may be obtained for the multiple spatial channels on the multiple subbands. The CQI values may be differentially encoded across the multiple spatial channels and the multiple subbands to obtain differential CQI information. In another design, CQI values may be obtained for multiple spatial channels on the multiple subbands in multiple time intervals and may be differentially encoded across space, frequency and time. The differential CQI information and the spatial state information may be sent as feedback.

WO 2007/112371 A1



- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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