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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:** TRANSMISSION STRUCTURE SUPPORTING MULTI-USER SCHEDULING AND MIMO TRANSMISSION

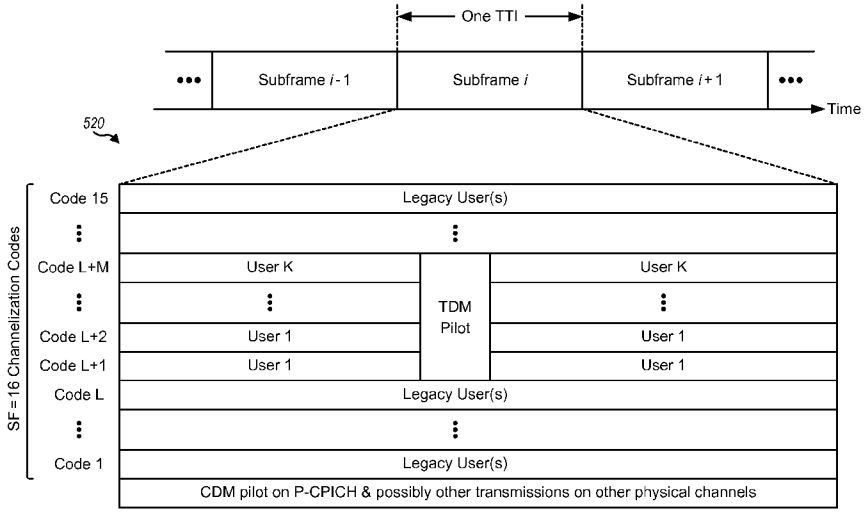

FIG. 5B

(57) **Abstract:** Techniques for transmitting data in a manner to support multi-user scheduling, multiple-input multiple-output (MIMO) transmission, and interference cancellation are described. A base station assigns multiple time segments of a transmission time interval (TTI) to at least one terminal, maps data for each terminal to at least one time segment assigned to the terminal, and spreads the data in each time segment with at least one channelization code used in the TTI. A terminal receives an assignment of at least one time segment from among multiple time segments of the TTI, obtains input samples for the at least one time segment, and despreads the input samples with the at least one channelization code used in the TTI.

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