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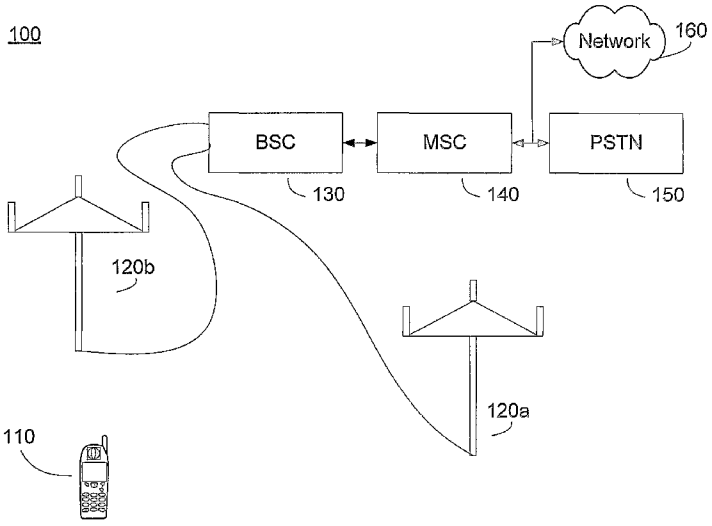
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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN,*

[Continued on next page]

(54) Title: INCREMENTAL PILOT INSERTION FOR CHANNEL AND INTERFERENCE ESTIMATION



(57) Abstract: Dynamic resource allocation systems, apparatus, and methods are disclosed for selectively improving the ability of a receiver to determine a channel estimate in an Orthogonal Frequency Division Multiple Access (OFDMA) system. A wireless communication system can use a common pilot channel configuration to aid channel estimation in one or more receivers in communication with the system. A receiver in communication with the system may be unable to demodulate received data due to an inaccurate channel estimate. The receiver can communicate to a transmitter in the system a request for additional channel estimation resources. The wireless communication system can provide additional channel estimation resources by inserting dedicated pilot channels into one or more of the frequencies allocated to symbols for the receiver. If the receiver is still unable to demodulate received data, the wireless communication system can incrementally insert additional pilot channels in the symbol associated with the receiver.

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