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Declarations under Rule 4.17:
— *of inventorship (Rule 4.17(iv))*

(54) Title: COMMUNICATION APPARATUS AND COMMUNICATION METHOD FOR OVERHEAD REDUCTION OF WLAN SENSING

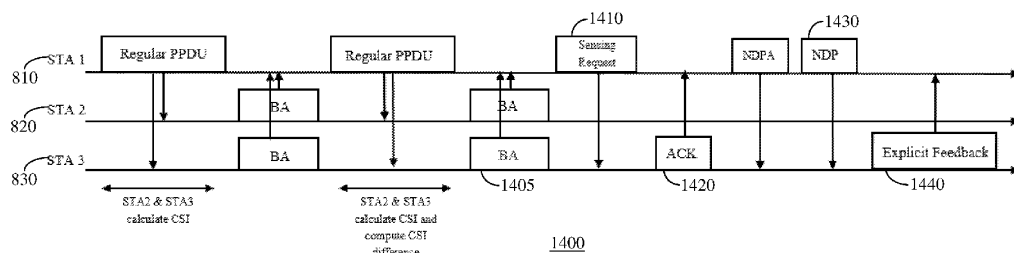


FIG. 14

(57) **Abstract:** Apparatuses and methods for providing multiple structures and methods to enable minimising the use of sounding and related frame exchanges for wireless local area network (WLAN) sensing in order to reduce sounding overhead are provided. The techniques disclosed here feature a communication apparatus including a transceiver and circuitry. The transceiver, in operation, receives signals from a WLAN. The circuitry, in operation, demodulates and decodes the signals, the decoded signals comprising a first physical layer protocol data unit (PPDU) and a second PPDU, wherein the circuitry, in operation, performs full channel measurement based on a first physical layer (PHY) header of the first PPDU and a second PHY header of the second PPDU, wherein the first PHY header and the second PHY header include long training fields (LTFs) for estimating channel quality.

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