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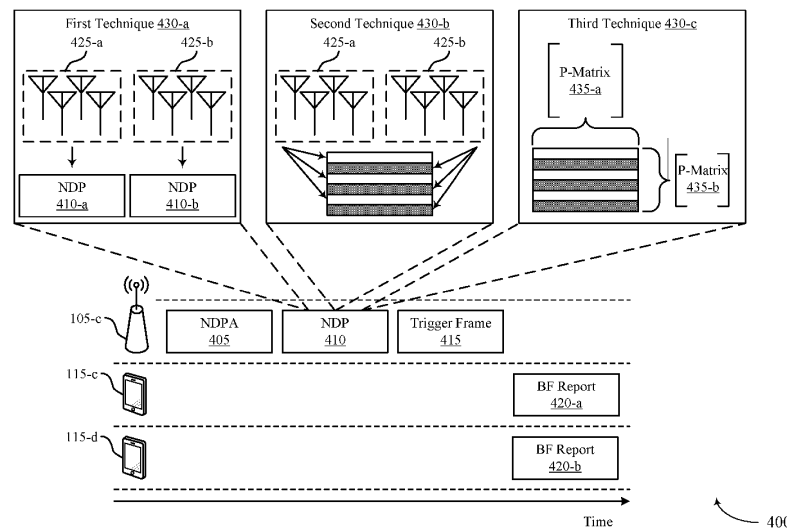
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(54) Title: MANAGING HIGH VOLUMES OF SPACE-TIME-STREAMS IN NEXT GENERATION EXTREMELY HIGH THROUGHPUT (EHT) WI-FI SYSTEMS

FIG. 4



(57) Abstract: This disclosure provides systems, methods, and apparatuses, including computer programs encoded on computer storage media, for managing high volumes of space-time-streams in Wi-Fi systems. An access point (AP) may transmit packets including long training field (LTF) sections using a number of space-time-streams greater than eight. Mobile stations (STAs) in the system may or may not be capable of processing this number of streams. The AP may modulate an LTF section using a matrix with dimensions smaller than the number of streams by using tone-interleaving or by performing modulation with separate matrices in time and frequency. In some other implementations, the AP may split the antennas for transmission into groups, each group transmitting either different packets in a subset of streams or a same packet in a subset of tones. In further implementations, the AP may combine multiple space-time-streams into a super stream that supports reception at different types of STAs.

[Continued on next page]

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