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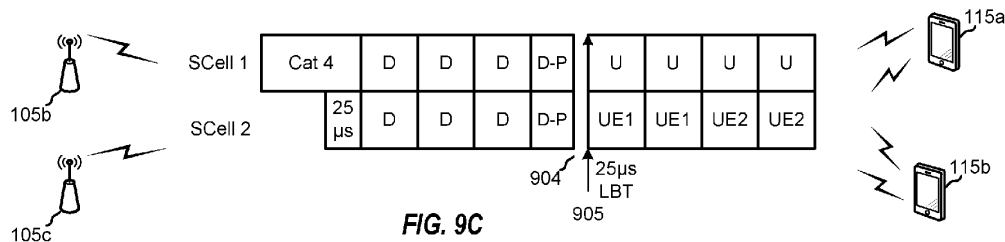
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(54) **Title:** HANDLING RESUMPTION OF TRANSMISSIONS AND LBT PERFORMANCE IN 3GPP MULTI-CARRIER ELAA,
LICENSE-ASSISTED ACCESS

**FIG. 9C**

(57) **Abstract:** Handling uplink transmissions by UEs in unlicensed carrier components, in the context of 3GPP eLAA, enhanced license assisted access, and in particular, the configuration by the eNodeB of multi-carrier LBT, Listen Before Transmit, is discussed. The eNodeB signals together with the Uplink grant the LBT procedure to be used before transmitting in uplink, either a short, Category 2 LBT procedure, or else a longer, category 4 LBT procedure. The eNodeB signals, for a particular carrier component, the same LBT procedure it has used itself to sense and then securing the carrier. Also, when pauses occur during the uplink transmission on contention-based shared channels involved in eLAA communications, various procedures may be used to restart transmissions on the contention-based shared channels on the uplink when the original channel occupancy was reserved by a serving base station.