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(54) **Title**: POWER-LIMIT REPORTING IN A COMMUNICATION SYSTEM USING CARRIER AGGREGATION

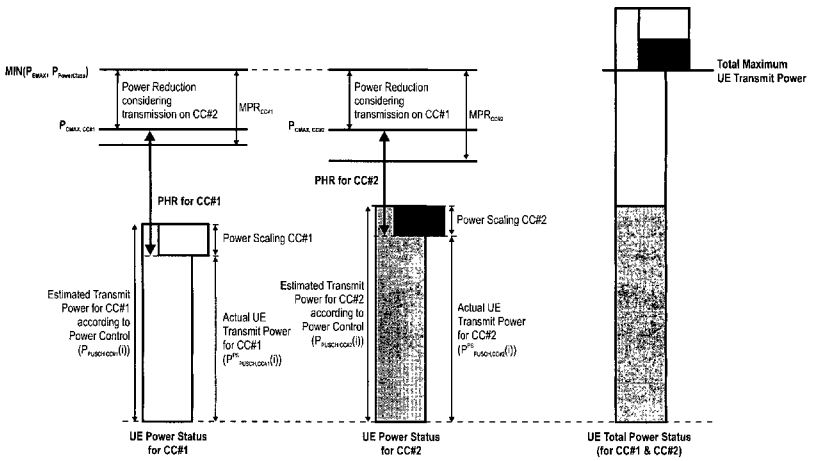


Fig. 27

(57) **Abstract**: The invention relates to methods for informing an eNodeB on the transmit power status of a user equipment in a mobile communication system using component carrier (CC) aggregation. Furthermore, the invention is also related to the implementation of these methods by hardware and their implementation in software. The invention proposes procedures that allow the eNodeB to recognize the power usage status of a UE in a communication system using carrier aggregation. The UE indicates to the eNodeB, when the UE is close to using its total maximum UE transmit power or when it has exceeded same. This is achieved by the UE including indicator(s) and/or new MAC CEs to one or more protocol data units transmitted on respective component carriers within a single sub-frame that is providing the eNodeB with power status information. The MAC CEs may report a per-UE power headroom. Alternatively, the MAC CEs may report per-CC power headrooms and/or power reductions applied to the respective uplink CCs.

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