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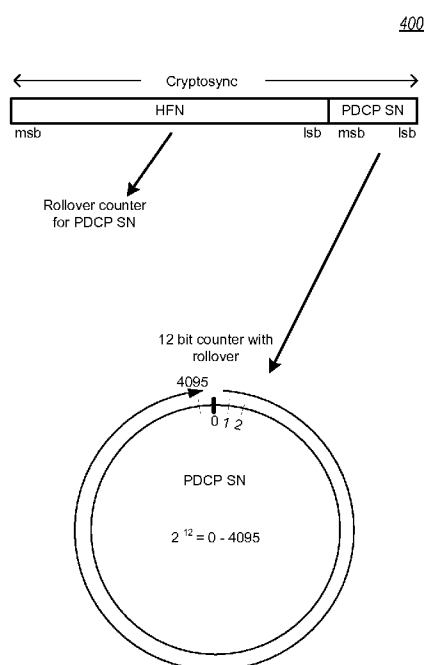
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[Continued on next page]

(54) Title: METHODS AND SYSTEMS FOR HFN HANDLING AT INTER-BASE STATION HANDOVER IN MOBILE COMMUNICATION NETWORKS



HFN	0	0	0	1	1	1
PDCP SN	4093	4094	4095	0	1	2

Fig. 4

(57) Abstract: Systems and methods for addressing the de-synchronization of the cryptosync between the network and the mobile stations (eNB) that can occur at mobility are addressed. De-synchronization is resolved by forwarding HFN and PDCP Sequence Number(s) from the source eNB to the target eNB. In order to avoid re-use of a cryptosync for a given key, a backward offset from the initial COUNT value is used by the target eNB. These approaches do not require an over-the-air signaling and the COUNT value handling in the network is transparent to the mobile station.

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