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(US). **CHAPONNIERE, Etienne, F.** [US/US]; 5775 Morehouse Drive, San Diego, CA 92111 (US).

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(74) Agent: **PATEL, Milan, I.**; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, CA 92121 (US).

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(71) Applicant (for all designated States except US): **QUALCOMM INCORPORATED** [US/US]; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, CA 92121 (US).

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(72) Inventors; and

(75) Inventors/Applicants (for US only): **MEYLAN, Arnaud** [CH/US]; 5775 Morehouse Drive, San Diego, CA 92121

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(54) Title: CIPHERING SEQUENCE NUMBER FOR AN ADJACENT LAYER PROTOCOL IN DATA PACKET COMMUNICATIONS

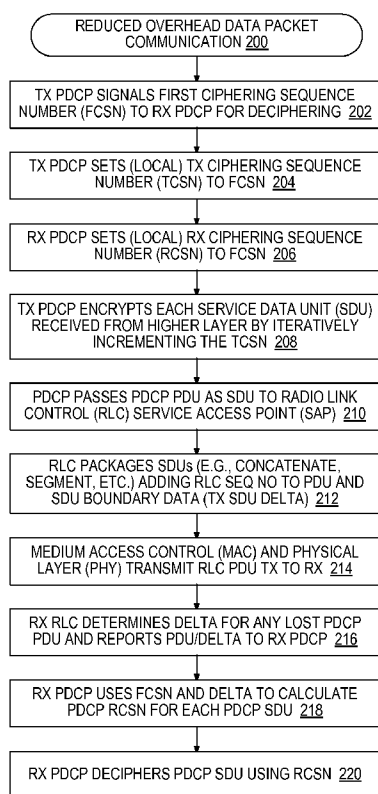


FIG. 2

(57) Abstract: A data packet communication system employs data encryption in a packet data convergence protocol (PDCP) and radio link control (RLC) in Layer 2 of transmission between a transmitter (TX) and a receiver (RX). A single sequence number is used for both the PDCP and RLC to reduce overhead by signaling a TX PDCP first ciphering sequence number to the RX prior to encrypted data packet communication. A sequence number accompanies each RLC PDU, which can encompass concatenated or segmented service data units (SDUs) from the higher layer PDCP. This sequence number is sufficient for the RLC to perform re-ordering, gap detection, retransmission, etc., while also allowing the RX upper layer PDCP to reconstruct a sequenced value used to encrypt content.



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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*