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(71) Applicant (for all designated States except US): **INTER-DIGITAL PATENT HOLDINGS, INC.** [US/US]; 3411 Silverside Road, Concord Plaza, Suite 105, Hagley Building, Wilmington, Delaware 19810 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PANI, Diana** [CA/CA]; 1950 Lincoln Avenue, Apt. #1812, Montréal,

Québec H3H 2N8 (CA). **MARINIER, Paul** [CA/CA]; 1805 Stravinski, Brossard, Québec J4X 2J7 (CA). **CAVE, Christopher R.** [CA/CA]; 201 chemin du Golf, Apt. 304, Ile-des-soeurs (verdun), Québec H3E 1Z4 (CA).

(74) Agent: **WALSH, Christina R.**; Volpe and Koenig, P.C., 30 South 17th Street, United Plaza, Suite 1600, Philadelphia, Pennsylvania 19103 (US).

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(54) Title: METHOD AND APPARATUS FOR LAYER 2 PROCESSING AND CREATION OF PROTOCOL DATA UNITS FOR WIRELESS COMMUNICATIONS

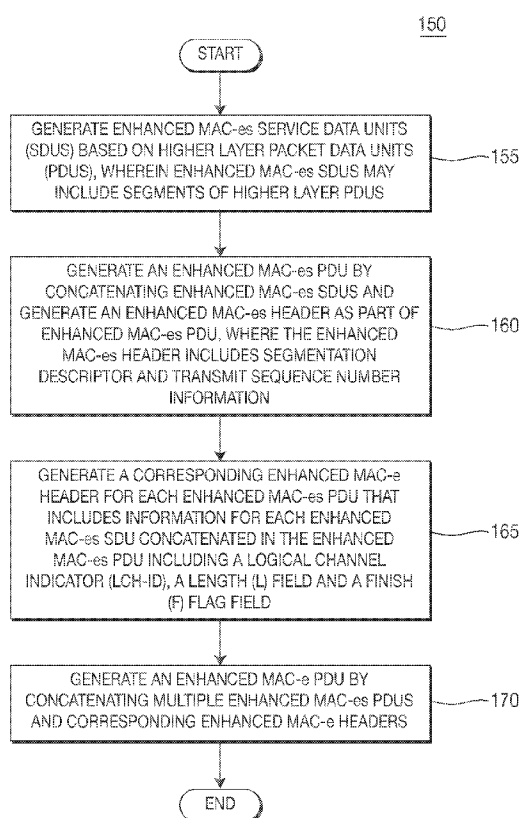


FIG. 11

(57) Abstract: Enhanced MAC-es PDUs are created by concatenating enhanced MAC-es service data units (SDUs) based on higher layer PDUs and segments thereof, where segmentation information is included in the enhanced MAC-es headers. An enhanced MAC-e header is generated for each enhanced MAC-es PDU to describe information about the enhanced MAC-es PDU. An enhanced MAC-e PDU is created by concatenating enhanced MAC-es PDUs and enhanced MAC-e headers. An enhanced MAC-es header may include a Transmit Sequence Number (TSN) field, a Segmentation Description (SD) field, length (L) fields to indicate the length of each enhanced MAC-es SDU and/or logical channel indicator (LCH-ID) fields. An enhanced MAC-e header may include one or more logical channel indicator (LCH-ID) fields for corresponding enhanced MAC-es PDUs or MAC-s SDUs and length (L) fields. Various techniques are disclosed for indicating the end of the enhanced MAC-e header. In another embodiment, methods for signaling over the Iub frame protocol are proposed to support MAC segmentation and flexible RLC PDU sizes.



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