



(51) International Patent Classification:

H04W 28/02 (2009.01) H04W 84/04 (2009.01)  
H04W 88/04 (2009.01)

(21) International Application Number:

PCT/US2024/027478

(22) International Filing Date:

02 May 2024 (02.05.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/464,996 09 May 2023 (09.05.2023) US

(71) Applicant: **INTERDIGITAL PATENT HOLDINGS, INC.** [US/US]; 200 Bellevue Parkway, Suite 300, Wilmington, Delaware 19809 (US).

(72) Inventors: **FREDA, Martino**; 1000 Sherbrooke Street West, 10th Floor, Montreal, Québec H3A 3G4 (CA). **HOANG, Tuong**; 1000 Sherbrooke Street West, 10th Floor, Montreal, Québec H3A 3G4 (CA). **TEYEB, Oumer**; 1000 Sherbrooke Street West, 10th Floor, Montreal, Québec H3A 3G4 (CA). **HONG, Jongwoo**; 111 West 33rd Street, Suite 1420, New York, 10120 (US). **KINI, Ananth**; 1001 E. Hec-

tor Street, Suite 300, Conshohocken, Pennsylvania 19428 (US). **PELLETIER, Benoit**; 1000 Sherbrooke Street West, 10th Floor, Montreal, Québec H3A 3G4 (CA).

(74) Agent: **SANTOS, Julian F.**; 200 Bellevue Parkway, Suite 300, Wilmington, Delaware 19809 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT,

(54) Title: METHODS, ARCHITECTURES, APPARATUSES AND SYSTEMS FOR DETERMINING FIRST AND SECOND CONFIGURATIONS BASED ON A QoS PROFILE

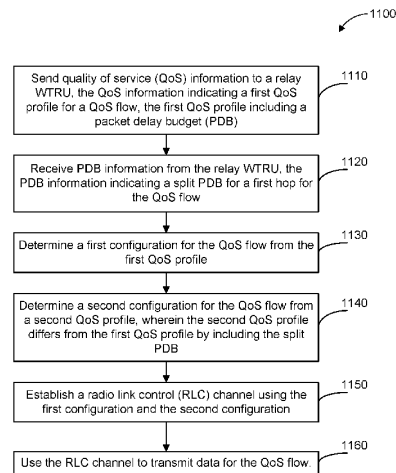


FIG. 11

(57) Abstract: A method implemented in a wireless transmit/receive unit WTRU is described herein. The method may include sending QoS information to a relay WTRU, the QoS information indicating a first QoS profile for a QoS flow, the first QoS profile including a packet delay budget (PDB). The method may include receiving PDB information from the relay WTRU, the PDB information indicating a split PDB for a first hop for the QoS flow. The method may include determining a first configuration for the QoS flow from the first QoS profile and determining a second configuration for the QoS flow from a second QoS profile. The second QoS profile may differ from the first QoS profile by including the split PDB. The method may include establishing a radio link control (RLC) channel with the first configuration and the second configuration and using the RLC channel to transmit data for the QoS flow.

LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE,  
SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, KM, ML, MR, NE, SN, TD, TG).

**Published:**

— *with international search report (Art. 21(3))*