



(51) International Patent Classification:

H04L 29/06 (2006.01) *H04W 88/16* (2009.01)
H04W 80/04 (2009.01)

Administration, 5775 Morehouse Drive, San Diego, California 92121 (US).

(21) International Application Number:

PCT/US2009/033155

(72) Inventors; and

(75) Inventors/Applicants (for US only): **AHMAVAARA, Kalle, I.** [FI/US]; 5775 Morehouse Drive, San Diego, California 92121 (US). **GIARETTA, Gerardo** [IT/US]; 5775 Morehouse Drive, San Diego, California 92121 (US). **CASACCIA, Lorenzo** [IT/US]; 5775 Morehouse Drive, San Diego, California 92121 (US). **TSIRTISIS, Georgios** [GB/US]; 5775 Morehouse Drive, San Diego, California 92121 (US).

(22) International Filing Date:

5 February 2009 (05.02.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/026,712	6 February 2008 (06.02.2008)	US
61/026,981	7 February 2008 (07.02.2008)	US
61/036,585	14 March 2008 (14.03.2008)	US
12/365,592	4 February 2009 (04.02.2009)	US

(74) Agent: **JUNEAU, Darrell, Scott**; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, California 92121 (US).

(71) Applicant (for all designated States except US): **QUALCOMM Incorporated** [US/US]; Attn: International Ip

(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, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,

[Continued on next page]

(54) Title: POLICY CONTROL FOR ENCAPSULATED DATA FLOWS

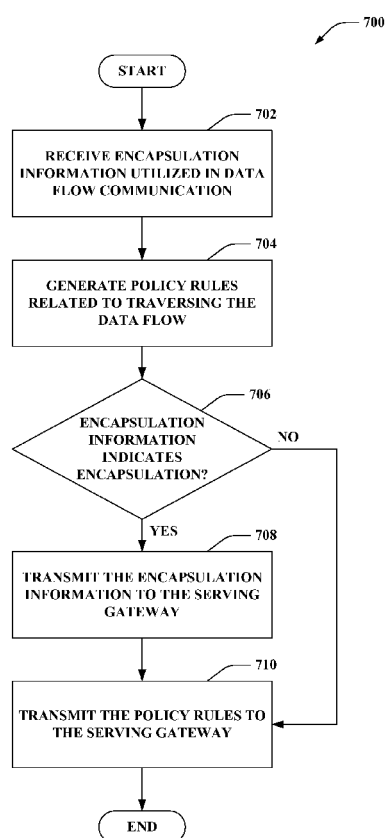


FIG. 7

(57) Abstract: Systems and methodologies are described that facilitate communicating encapsulation information for a related mobility protocol type utilized in communicating over a data flow with reduced specific implementation on the policy server to support different mobility protocol types. In this regard, encapsulation information can be transmitted to the policy server from a network gateway such that the policy server can forward the encapsulation information to a serving gateway along with policy rules related to a data flow type. The serving gateway can utilize the encapsulation information to detect and interpret the encapsulated data flow according to the policy rules. In this regard, the serving gateway can provide support (e.g., quality of service support) for the flow. The encapsulation information can relate to a mobility protocol type, an encapsulation header, an indication that encapsulation is required, parameters regarding locating an encapsulation header in a message, and/or the like.



HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

21 January 2010