



(51) **International Patent Classification:**
H04L 1/18 (2006.01) *H04W 4/40* (2018.01)
H04L 5/00 (2006.01)

(21) **International Application Number:**
PCT/US2020/052664

(22) **International Filing Date:**
25 September 2020 (25.09.2020)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
62/909,718 02 October 2019 (02.10.2019) US
17/031,768 24 September 2020 (24.09.2020) US

(71) **Applicant: QUALCOMM INCORPORATED** [US/US];
ATTN: International IP Administration, 5775 Morehouse
Drive, San Diego, California 92121-1714 (US).

(72) **Inventors: CHENG, Hong**; 5775 Morehouse Drive, San
Diego, California 92121-1714 (US). **BAGHEL, Sud-
hir Kumar**; 5775 Morehouse Drive, San Diego, Cali-
fornia 92121-1714 (US). **GULATI, Kapil**; 5775 More-
house Drive, San Diego, California 92121-1714 (US).
VASSILOVSKI, Dan; 5775 Morehouse Drive, San Diego,

California 92121-1714 (US). **SARKIS, Gabi**; 5775 More-
house Drive, San Diego, California 92121-1714 (US).

(74) **Agent: KARREN, J. Scott**; Holland & Hart LLP, P.O. Box
11583, Salt Lake City, Utah 84147 (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, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN,
KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD,
ME, MG, MK, MN, 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, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, 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, LU, LV,
MC, 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).

(54) **Title: SIDELINK GROUPCAST CONFIGURATION TO SUPPORT FEEDBACK CONTROL**

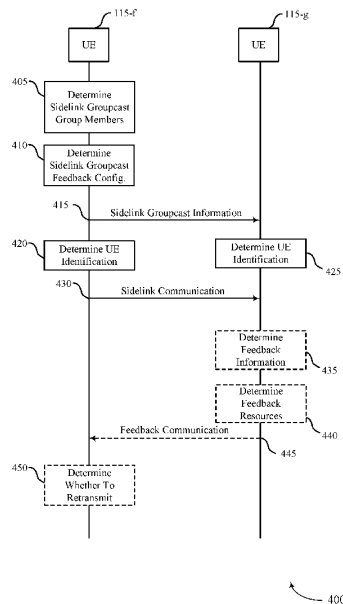


FIG. 4

(57) **Abstract:** Methods, systems, and devices for wireless communica-
tions are described, in which a user equipment (UE) may communicate
with one or more other UEs using sidelink communications. Multiple
UEs may form a sidelink communications group and provide for sidelink
groupcast communications in which an identification of a UE is deter-
mined based at least in part on a member identification of the UE within
the group. Each UE in the group may determine feedback resources for
acknowledgment feedback within the group based on a UE identification
and a size of the group.

Published:

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