



(51) International Patent Classification:

H04W 84/18 (2009.01) H04W 84/12 (2009.01)  
H04W 76/16 (2018.01) H04W 88/06 (2009.01)  
H04W 8/00 (2009.01)

(21) International Application Number:

PCT/US2022/039835

(22) International Filing Date:

09 August 2022 (09.08.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

17/484,373 24 September 2021 (24.09.2021) US

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

(72) Inventors: **NAIDU, Vamsi Krishna**; 5775 Morehouse  
Drive, San Diego, California 92121-1714 (US). **LNU, Pu-  
rushottam**; 5775 Morehouse Drive, San Diego, California  
92121-1714 (US). **SRIRAM, Madhvapathi**; 5775 More-  
house Drive, San Diego, California 92121-1714 (US).

(74) Agent: **HARRIS, Philip W.**; 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, 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, 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: QUICK ACCESS POINT START WITH OUT OF BAND CHANNEL SCAN OFFLOAD

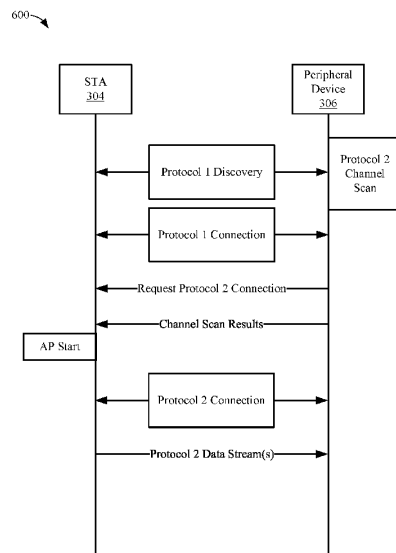


Figure 6

(57) Abstract: This disclosure provides systems, methods, and apparatus, including computer programs encoded on computer storage media, for establishing wireless connections between a first wireless communication device and a second wireless communication device. In some implementations, the first wireless communication device may establish a first connection with a second wireless communication device in accordance with a first communication protocol, perform a first channel scan of a first set of wireless channels responsive to establishing the first connection, the first channel scan being associated with a second wireless communication protocol, establish a second connection directly with the second wireless communication device in accordance with the second wireless communication protocol based on the first channel scan, and receive one or more data streams directly from the second wireless communication device in accordance with the second wireless communication protocol.

**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:**

06 July 2023 (06.07.2023)