

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
02 June 2022 (02.06.2022)



(10) International Publication Number
WO 2022/111734 A1

(51) **International Patent Classification:**
H04W 16/06 (2009.01) *H04W 72/04* (2009.01)

(21) **International Application Number:**
PCT/CN2021/134531

(22) **International Filing Date:**
30 November 2021 (30.11.2021)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
PCT/CN2020/132724
30 November 2020 (30.11.2020) CN
10202103621T 08 April 2021 (08.04.2021) SG

(71) **Applicant:** GUANGDONG OPPO MOBILE
TELECOMMUNICATIONS CORP., LTD. [CN/CN];
No. 18, Haibin Road, Wusha, Chang'an, Dongguan, Guang-
dong 523860 (CN).

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).

Published:
— with international search report (Art. 21(3))

(72) **Inventor:** HUANG, Lei; #25-01 Samsung Hub, 3 Church
Street, 049483 (SG).

(74) **Agent:** ESSEN PATENT & TRADEMARK AGENCY;
2208, Building 1, Block I, Dachong Business Center (phase
II), No.9680, Shennan Avenue, Dachong Community, Yue-
hai Street, Nanshan District, ShenZhen, Guangdong 518057
(CN).

(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,

(54) **Title:** ACCESS POINT, STATION, AND WIRELESS COMMUNICATION METHOD

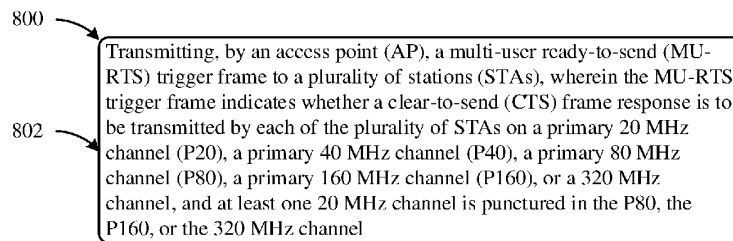


FIG. 5

(57) **Abstract:** An access point (AP), a station (STA), and a wireless communication method are disclosed. The wireless communication method includes transmitting, by an AP, a multi-user ready-to-send (MU-RTS) trigger frame to a plurality of STAs, wherein the MU-RTS trigger frame indicates whether a clear-to-send (CTS) frame response is to be transmitted by each of the plurality of STAs on a primary 20 MHz channel (P20), a primary 40 MHz channel (P40), a primary 80 MHz channel (P80), a primary 160 MHz channel (P160), or a 320 MHz channel, and at least one 20 MHz channel is punctured in the P80, the P160, or the 320 MHz channel. This can solve issues in the prior art, improve transmit opportunity (TXOP) protection, provide a MU-RTS trigger/CTS frame exchange procedure for TXOP protection in an efficient manner, achieve extremely high throughput, provide good communication performance, and/or provide high reliability.



WO 2022/111734 A1