

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
09 June 2022 (09.06.2022)



(10) International Publication Number
WO 2022/117057 A1

- (51) **International Patent Classification:**
H04W 84/12 (2009.01) *H04W 72/04* (2009.01)
- (21) **International Application Number:**
PCT/CN2021/135181
- (22) **International Filing Date:**
02 December 2021 (02.12.2021)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
10202012038U 02 December 2020 (02.12.2020) SG
- (71) **Applicant:** GUANGDONG OPPO MOBILE
TELECOMMUNICATIONS CORP., LTD. [CN/CN];
No.18, Haibin Road, Wusha, Chang'an, Dongguan, Guang-
dong 523860 (CN).
- (72) **Inventor:** HUANG, Lei; #25-01 Samsung Hub, 3 Church
Street, Singapore 049483 (SG).
- (74) **Agent:** ESSEN PATENT & TRADEMARK AGENCY;
2208, Building 1, Block1, 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,
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:** METHODS AND APPARATUSES FOR SOLICITING TRIGGER-BASED PHYSICAL LAYER PROTOCOL DATA
UNIT TRANSMISSION IN WIRELESS LOCAL AREA NETWORK

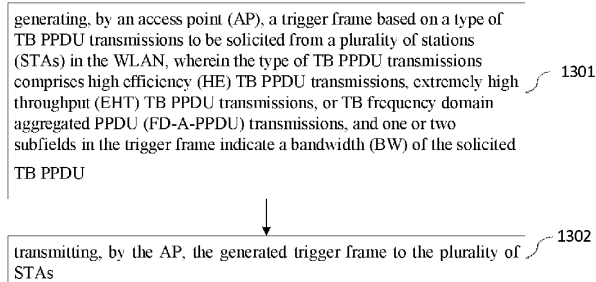


Figure 10

(57) **Abstract:** Embodiments of the invention provide methods and apparatuses for soliciting a trigger-based (TB) physical layer protocol data unit (PPDU) transmission in wireless local area network (WLAN). The method for soliciting a TB PPDU transmission comprises generating, by an access point (AP), a trigger frame based on a type of TB PPDU transmissions to be solicited from a plurality of stations (STAs) in the WLAN, wherein the type of TB PPDU transmissions comprises high efficiency (HE) TB PPDU transmissions, extremely high throughput (EHT) TB PPDU transmissions, or TB frequency domain aggregated PPDU (FD-A-PPDU) transmissions, and one or two subfields in the trigger frame indicate a bandwidth (BW) of the solicited TB PPDU, and transmitting, by the AP, the generated trigger frame to the plurality of STAs. With the methods and apparatuses proposed by embodiments of the invention, the generated trigger frame may be used to indicate the BW of the solicited TB PPDU in the WLAN.

[Continued on next page]

WO 2022/117057 A1

Published:

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