

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
27 April 2023 (27.04.2023)



(10) International Publication Number
WO 2023/069012 A2

(51) International Patent Classification:
Not classified

(21) International Application Number:
PCT/SG2022/050699

(22) International Filing Date:
28 September 2022 (28.09.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10202111654V 20 October 2021 (20.10.2021) SG

(71) Applicant: PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA [US/US]; 2050 W 190th Street Suite 450, Torrance, California 90504 (US).

(72) Inventors: DING, Yanyi; c/o Panasonic R&D Center Singapore, 202 Bedok South Avenue 1 #02-11, Singapore 469332 (SG). URABE, Yoshio; c/o Panasonic Intellectual Property Management Co., Ltd., 1-61, Shiromi 2-chome, Chuo-ku, Osaka-shi, Osaka 540-6207 (JP). CHITRAKAR,

Rojan; c/o Panasonic R&D Center Singapore, 202 Bedok South Avenue 1 #02-11, Singapore 469332 (SG).

(74) Agent: SPRUSON & FERGUSON (ASIA) PTE LTD; P.O. Box 1531, Robinson Road Post Office, Singapore 903031 (SG).

(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,

(54) Title: COMMUNICATION APPARATUS AND COMMUNICATION METHOD FOR PREAMBLE OF ALIGNED PPDU

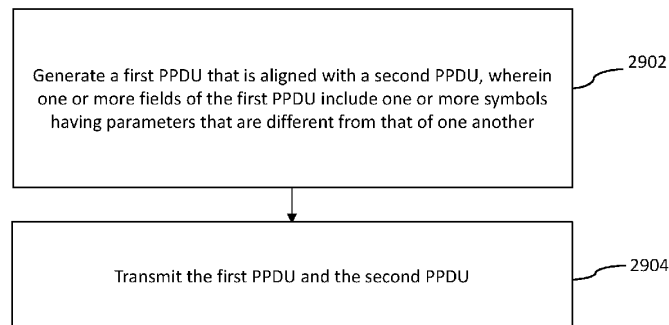


Figure 29

(57) Abstract: Communication devices and methods for preamble of aligned PPDU are provided. One exemplary embodiment provides a first communication apparatus comprising: circuitry, which in operation, generates a first Physical Protocol Data Unit (PPDU) that is aligned with a second PPDU, wherein one or more fields of the first PPDU include one or more symbols having parameters that are different from that of one another; and a first transmitter, which in operation, transmits the first PPDU to a second communication apparatus.

[Continued on next page]

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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*