



- (51) **International Patent Classification:**
H04W 52/02 (2009.01)
- (21) **International Application Number:**
PCT/CN2024/076401
- (22) **International Filing Date:**
06 February 2024 (06.02.2024)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (71) **Applicant:** **LENOVO (BEIJING) LIMITED** [CN/CN]; 6 Shangdi West Road, Haidian District, Beijing 100085 (CN).
- (72) **Inventors:** **YAN, Zhi**; Lenovo HQ East, Building No. 1, No. 10 Xibeiwang East Road, Haidian District, Beijing 100094 (CN). **LEI, Haipeng**; Lenovo HQ East, Building No. 1, No. 10 Xibeiwang East Road, Haidian District, Beijing 100094 (CN). **SUN, Zhennian**; Lenovo HQ East, Building No. 1, No. 10 Xibeiwang East Road, Haidian District, Beijing 100094 (CN). **YU, Xiaodong**; Lenovo HQ East, Building No. 1, No. 10 Xibeiwang East Road, Haidian District, Beijing 100094 (CN).
- (74) **Agent:** **KING & WOOD MALLESONS**; 20th Floor, East Tower, World Financial Centre, No. 1 Dongsanhuan Zhonglu, Chaoyang District, Beijing 100020 (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, 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, MG, MK, MN, MU, 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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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:** LOW POWER WUS DESIGN

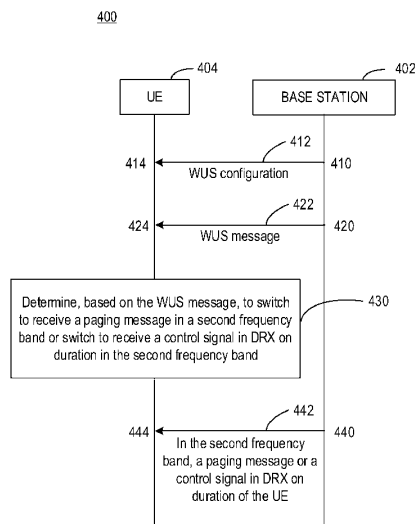


FIG. 4

(57) **Abstract:** Various aspects of the present disclosure relate to a user equipment, a base station, processors, and methods for low power wake up signal (LP-WUS) design. In an aspect, a user equipment (UE) receives, from a base station, a wake-up signal (WUS) configuration in system information or UE-specific radio resource control (RRC) signaling. The UE monitoring a WUS message in one or more WUS resources in a first frequency band. The UE determines, based on the WUS message, to switch to receive a paging message in a second frequency band or switch to receive a control signal in discontinuous reception (DRX) on duration in the second frequency band.

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))
- upon request of the applicant, before the expiration of the time limit referred to in Article 21(2)(a)