

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
17 October 2024 (17.10.2024)



(10) International Publication Number
WO 2024/212567 A1

(51) International Patent Classification:
H04W 74/00 (2009.01)

(21) International Application Number:
PCT/CN2023/138579

(22) International Filing Date:
13 December 2023 (13.12.2023)

(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) Inventor: **LIU, Bingchao**; 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,

(54) Title: PRACH PREAMBLE TRANSMISSION TRIGGERED BY CELL SWITCH COMMAND

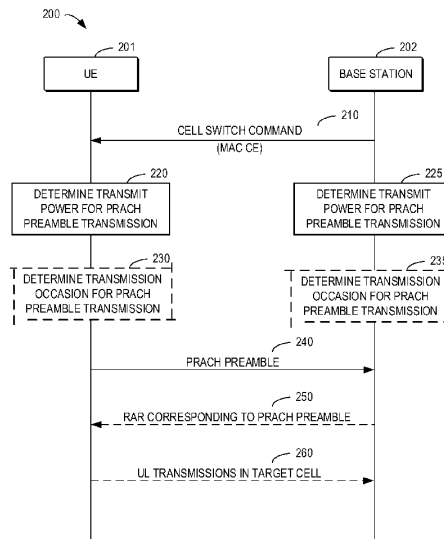


FIG. 2

(57) Abstract: Example embodiments of the present disclosure relate to user equipment, a base station, methods, apparatuses, and computer readable medium for PRACH preamble transmission triggered by a cell switch command. In the solution, a UE may receive a cell switch command in a MAC CE from a BS, and the cell switch command may indicate to the UE to switch towards a target cell and the cell switch command may include an index of a first SSB and a first TCI state for the target cell. The UE may determine transmit power for a PRACH preamble transmission based on the cell switch command and then transmit a PRACH preamble to the base station. As such, a PRACH procedure can be triggered by the CSC MAC CE, and a transmission of a PRACH preamble triggered by the MAC CE can be supported for LTM.

[Continued on next page]

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).

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)*