

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

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
30 May 2024 (30.05.2024)



(10) International Publication Number  
**WO 2024/109130 A1**

(51) International Patent Classification:  
**H04W 24/10** (2009.01)

(21) International Application Number:  
PCT/CN2023/108985

(22) International Filing Date:  
24 July 2023 (24.07.2023)

(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) Inventors: **YANG, Shuigen**; Lenovo HQ East, Building  
No. 1, No. 10 Xibeiwang East Road, Haidian District,  
Beijing 100094 (CN). **DAI, Mingzeng**; Lenovo HQ East,  
Building No. 1, No. 10 Xibeiwang East Road, Haidian Dis-

trict, Beijing 100094 (CN). **ZHANG, Congchi**; 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,

(54) Title: SUPPORT OF MULTI-CELL KPM REPORTING

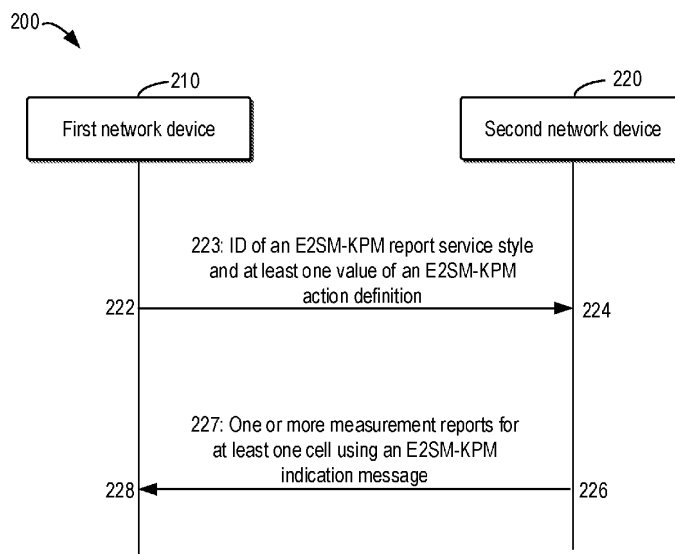


FIG. 2

(57) Abstract: Various aspects of the present disclosure relate to multi-cell KPM reporting. In one aspect of the solution of the present disclosure, a first network device transmits, to a second network device, an identifier (ID) of an E2 service model key performance measurement (E2SM-KPM) report service style and at least one value of an E2SM-KPM action definition, wherein the E2SM-KPM report service style and the E2SM-KPM action definition are for multi-cell KPM reporting. The first network device receives, from the second network device, one or more measurement reports for at least one cell using an E2SM-KPM indication message, wherein the E2SM-KPM indication message is for multi-cell KPM reporting. In this way, the solutions of the present disclosure can support multi-cell KPM reporting, and the signaling load for reporting can be reduced, and the efficiency of reporting is greatly improved.

[Continued on next page]

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).

**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)