



(51) International Patent Classification:
G06F 21/62 (2013.01)

(21) International Application Number:
PCT/CN2024/077189

(22) International Filing Date:
14 February 2024 (14.02.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/CN2024/073963
25 January 2024 (25.01.2024) CN

(71) Applicant: **QUALCOMM INCORPORATED** [US/US];
Attn: International IP Administration, 5775 Morehouse Drive,
San Diego, California 92121-1714 (US).

(72) Inventors; and

(71) Applicants (for WS only): **VUONG, Hung** [US/US]; 5775
Morehouse Drive, San Diego, California 92121-1714 (US).

GUO, Can [CN/CN]; 5775 Morehouse Drive, San Diego,
California 92121-1714 (US).

(74) Agent: **NTD PATENT & TRADEMARK AGENCY LTD.**; 10th Floor, Tower C, Beijing Global Trade Center,
36 North Third Ring Road East, Dongcheng District, Bei-
jing 100013 (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,

(54) Title: EXECUTING VENDOR-SPECIFIC COMMAND AT MEMORY DEVICE USING REPLAY PROTECTED MEMORY
BLOCK (RPMB) DATA FRAME

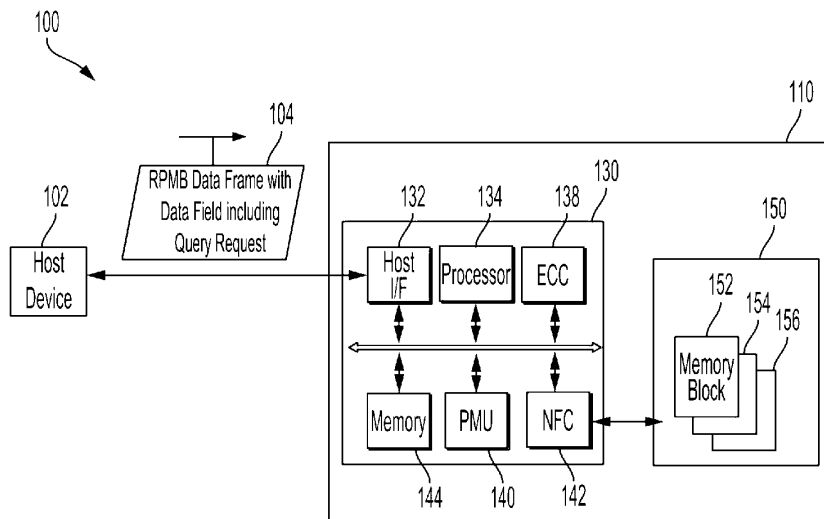


FIG. 1

(57) Abstract: In some aspects, an apparatus includes a processing system including one or more processors and one or more memories coupled to the one or more processors. The processing system is configured to send, to a memory device, a replay protected memory device block (RPMB) data frame that includes a data field. The data field includes a vendor-specific command to be executed by the memory device. The processing system is further configured to receive, from the memory device, a response to the vendor-specific command.

[Continued on next page]

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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

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