



(51) **International Patent Classification:**
G06F 21/44 (2013.01) *H04W 8/24* (2009.01)
H04L 41/0853 (2022.01)

(21) **International Application Number:**
PCT/CA2021/051605

(22) **International Filing Date:**
12 November 2021 (12.11.2021)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
63/113,576 13 November 2020 (13.11.2020) US

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(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, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, 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, 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).

(54) **Title:** UNIVERSAL DEVICE IDENTIFIER SERVICE WITH ADJUSTED ATTRIBUTE DISTANCES

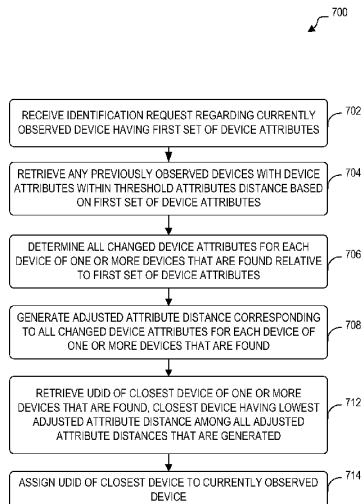


FIG. 7

(57) **Abstract:** A universal device identifier (UDID) service with adjusted attribute distances. In one embodiment, a server includes an electronic processor and a memory storing the UDID service. The electronic processor is configured to receive an identification request regarding a currently-observed device having a first set of device attributes, retrieve any previously-observed devices, determine whether one or more devices are found from retrieving the any of the previously-observed devices, determine all changed device attributes for each device of the one or more devices that are found relative to the first set of device attributes, generate an adjusted attribute distance corresponding to the all changed device attributes for the each device, retrieve a universal device identifier (UDID) of a closest device having a lowest adjusted attribute distance among all adjusted attribute distances that are generated, and assign the UDID of the closest device to the currently-observed device.

Published:

- with international search report (Art. 21(3))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE