

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
11 May 2023 (11.05.2023)



(10) International Publication Number
WO 2023/079262 A1

(51) International Patent Classification:

H04L 9/00 (2022.01) H04W 12/069 (2021.01)
H04L 9/32 (2006.01) H04W 12/40 (2021.01)
H04L 9/40 (2022.01)

(21) International Application Number:

PCT/GB2022/052629

(22) International Filing Date:

17 October 2022 (17.10.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2115815.9 03 November 2021 (03.11.2021) GB

(71) Applicant: **VODAFONE GROUP SERVICES LIMITED** [GB/GB]; Vodafone House, The Connection, Newbury
Berkshire RG14 2FN (GB).

(72) Inventor: **POSCHKE, Nils**; Vodafone Group Services
Limited, c/o Group Legal (Patents), One Kingdom Street,

Paddington Central, London Greater London W2 6BY
(GB).

(74) Agent: **BOULT WADE TENNANT LLP**; Salisbury
Square House, 8 Salisbury Square, London Greater London
EC4Y 8AP (GB).

(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, 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, SD, SL, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,

(54) Title: AUTHENTICATING A DEVICE

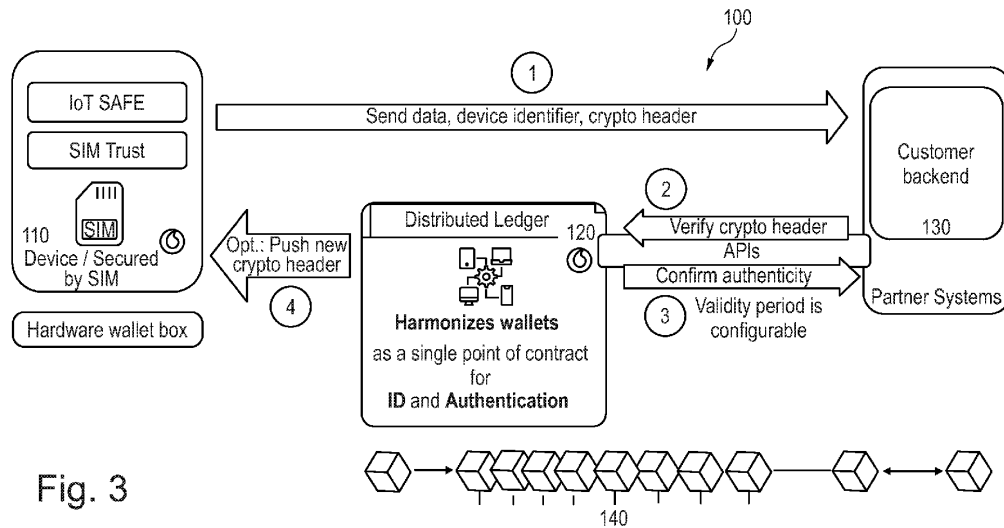


Fig. 3

(57) Abstract: Method and system for authenticating a device, comprising receiving, at a node of a distributed ledger, from the device an authentication request, the authentication request including data indicating one or more steps of an authentication method. Authenticating the device across a plurality of nodes of the distributed ledger, wherein each of the plurality of nodes follows the one or more steps indicated by the data received from the device.

[Continued on next page]

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))