

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
04 November 2021 (04.11.2021)



(10) International Publication Number
WO 2021/222570 A1

- (51) **International Patent Classification:**
G06Q 20/34 (2012.01) *G06Q 20/32* (2012.01)
- (21) **International Application Number:**
PCT/US2021/029898
- (22) **International Filing Date:**
29 April 2021 (29.04.2021)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
16/863,401 30 April 2020 (30.04.2020) US
- (71) **Applicant: CAPITAL ONE SERVICES, LLC** [US/US];
1680 Capital One Drive, McLean, Virginia 22102 (US).
- (72) **Inventors: RULE, Jeffrey**; c/o Capital One Services, LLC,
1680 Capital One Drive, McLean, Virginia 22102 (US).
HART, Colin; c/o Capital One Services, LLC, 1680 Capital
One Drive, McLean, Virginia 22102 (US).

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).

Published:
— with international search report (Art. 21(3))

- (74) **Agent: CARR, Nick et al.**; Kacvinsky Daisak Bluni PLLC,
2601 Weston Parkway, Suite 103, Cary, North Carolina
27513 (US).
- (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,

(54) **Title:** ACCURATE IMAGES IN GRAPHICAL USER INTERFACES TO ENABLE DATA TRANSFER

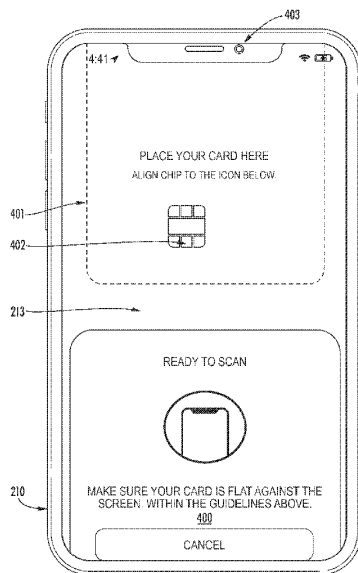


FIG. 4A

(57) **Abstract:** Systems, methods, and computer-readable media for providing accurate images of cards. An application executing on a mobile device may receive authentication credentials for an account, determine a card associated with the account, and determine a card manufacturer identifier (CMID) of the card. The application may receive, from a digital asset management system based on the CMID, a plurality of metadata attributes of the card and one or more images of the card. The application may determine, based on the metadata attributes and attributes of the mobile device, a first orientation of the card to enable near-field communication (NFC) data transfer between the card and the mobile device. The application may select a first image of the card. The application may generate a graphical user interface (GUI) including the first image and an indication specifying to tap the card to the mobile device according to the first orientation.

WO 2021/222570 A1