

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
26 October 2023 (26.10.2023)



(10) International Publication Number
WO 2023/205260 A1

(51) International Patent Classification:

H01Q 9/04 (2006.01) H01Q 21/00 (2006.01)
H01Q 1/12 (2006.01) H01Q 21/24 (2006.01)
H01Q 19/10 (2006.01)

(21) International Application Number:

PCT/US2023/019134

(22) International Filing Date:

19 April 2023 (19.04.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/332,886 20 April 2022 (20.04.2022) US

(71) Applicant: ATTACHE HOLDINGS LLC [US/US]; 270 W Pines Court, Montgomery, Texas 77256 (US).

(72) Inventors: DAVIS, Alan Wesley; 8835 Heatherly Drive, Houston, Texas 77083 (US). MAHONY, John Francis; 270 W Pines Court, Montgomery, Texas 77356 (US).

(74) Agent: CHON, Jaeyoung; 20251 Century Blvd Ste 140, Germantown, Maryland 20874 (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, 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, 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))

(54) Title: IMPROVED RFID ANTENNA

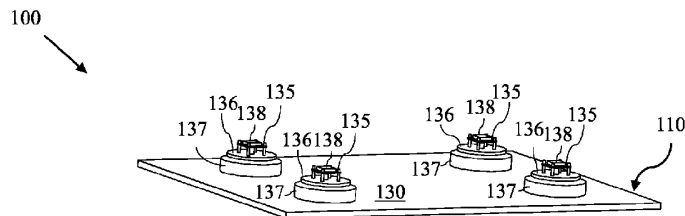


FIG. 1

(57) Abstract: The present invention provides an improved RFID Antenna. The improved RFID antenna comprises an antenna grid panel; a plurality of antennas having a square shape structure with a ceramic material attached in front of the square shape structure; a plurality of reflectors positioned behind each of the antennas; a base positioned behind the plurality of reflectors, the base is attached to the antenna grid panel; a plurality of antenna shafts; and the plurality of reflectors connected to the each of the antennas by an antenna shaft which extends from the base through the center of each reflector.



WO 2023/205260 A1