

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
07 October 2021 (07.10.2021)



(10) International Publication Number
WO 2021/202005 A3

(51) International Patent Classification:

G01V 9/00 (2006.01) B63B 35/00 (2006.01)
G01S 13/32 (2006.01) B63B 21/56 (2006.01)
G01S 13/89 (2006.01) G01S 7/04 (2006.01)
B63B 21/20 (2006.01)

(21) International Application Number:

PCT/US2021/018206

(22) International Filing Date:

16 February 2021 (16.02.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/978,021 18 February 2020 (18.02.2020) US
17/033,046 25 September 2020 (25.09.2020) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:

US 62/978,021 (CIP)
Filed on 18 February 2020 (18.02.2020)
US 17/033,046 (CON)
Filed on 25 September 2020 (25.09.2020)

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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,

(54) Title: CONTINUOUS-WAVE RADAR SYSTEM FOR DETECTING FERROUS AND NON-FERROUS METALS IN SALT-WATER ENVIRONMENTS

(57) Abstract: The present invention includes systems and methods for a continuous-wave (CW) radar system for detecting, geolocating, identifying, discriminating between, and mapping ferrous and non-ferrous metals in brackish and saltwater environments. The CW radar system generates multiple extremely low frequency (ELF) electromagnetic waves simultaneously and uses said waves to detect, locate, and classify objects of interest. These objects include all types of ferrous and non-ferrous metals, as well as changing material boundary layers (e.g., soil to water, sand to mud, rock to organic materials, water to air, etc.). The CW radar system is operable to detect objects of interest in near real-time.

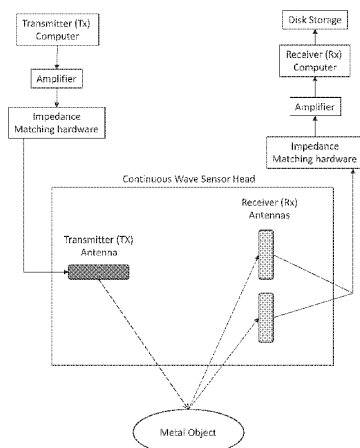


FIG. 1A

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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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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))*

(88) Date of publication of the international search report:

06 January 2022 (06.01.2022)