

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
04 April 2024 (04.04.2024)



(10) International Publication Number
WO 2024/073773 A1

(51) International Patent Classification:

G01R 31/08 (2006.01) H01B 7/18 (2006.01)
G01R 31/58 (2020.01) H01B 11/22 (2006.01)

(21) International Application Number:

PCT/US2023/075733

(22) International Filing Date:

02 October 2023 (02.10.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/412,270 30 September 2022 (30.09.2022) 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, 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,

(54) Title: SYSTEMS AND METHODS FOR OPERATING AN OVERHEAD ELECTRICAL LINE

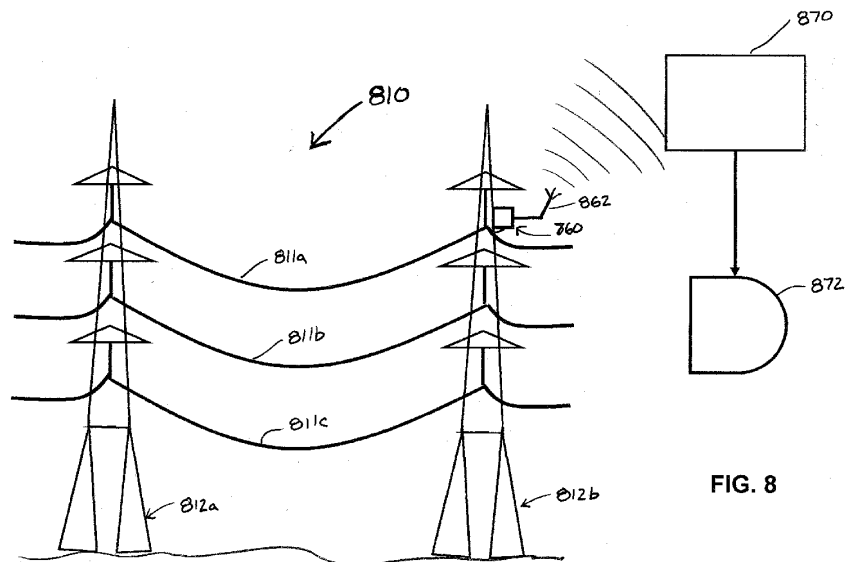


FIG. 8

(57) Abstract: Systems and methods for the determination of a health index associated with an overhead electrical cable having a fiber-reinforced composite strength member and an electrical conductor surrounding the fiber-reinforced composite strength member. Operational data is collected from the electrical cable during operation of the cable and that data is utilized to update the health index over time. The updated health index may be utilized to estimate the remaining useful lifetime of the overhead electrical cable on a continuous basis.

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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).

Declarations under Rule 4.17:

- *of inventorship (Rule 4.17(iv))*

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))*