



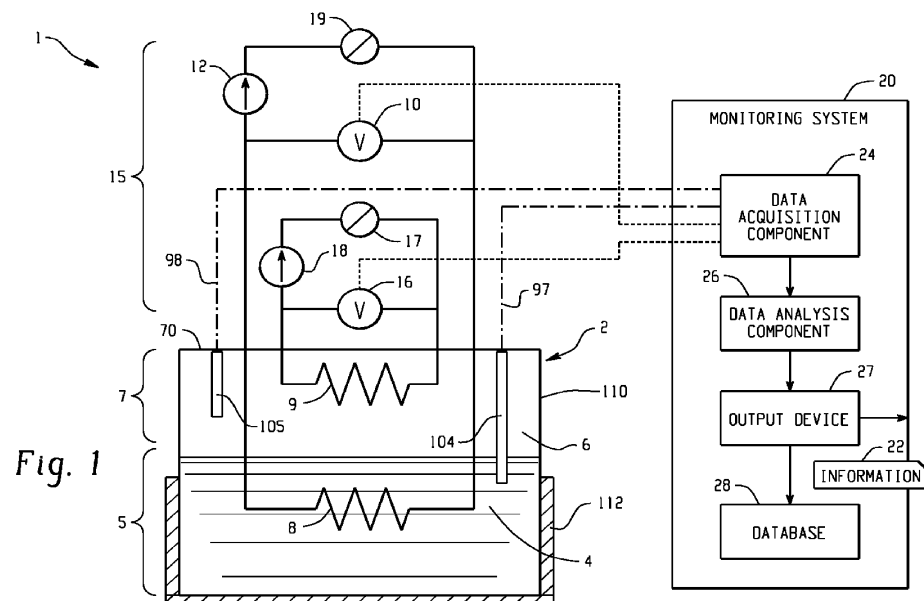
- (51) International Patent Classification:
G01N 17/02 (2006.01) *G01N 17/04* (2006.01)
- (21) International Application Number:
PCT/US2021/015518
- (22) International Filing Date:
28 January 2021 (28.01.2021)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
62/968,711 31 January 2020 (31.01.2020) US
- (71) Applicant: **THE LUBRIZOL CORPORATION**
[US/US]; 29400 Lakeland Boulevard, Wickliffe, OH
44092-2298 (US).
- (72) Inventors: **HUNT, Gregory, James**; P.O. Box 88, Belper,
Derby DE56 1QN (GB). **GAHAGAN, Michael, Peter**;
P.O. Box 88, Belper, Derby DE56 1QN (GB). **PEPLOW,**

Mitchell, Andrew; P.O. Box 88, Belper, Derby DE56 1QN
(GB). **PRENGAMAN, Christopher, Paul**; 29400 Lake-
land Boulevard, Wickliffe, OH 44092-2298 (US). **RIMAN,**
Ronny; 41 Tidal Rd., Deer Park, TX 77536 (US).

(74) Agent: **SKERRY, Ann, M.**; Fay Sharpe LLP, The Halle
Building, 5th Floor, 1228 Euclid Avenue, Cleveland, OH
44115-1843 (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,
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.

(54) Title: DEVICE AND TESTING APPARATUS FOR LIQUID AND VAPOR WIRE EXPOSURE TESTING



(57) Abstract: A testing device (1) include a scaffold (30, 230) for supporting conductive wires. The scaffold is placed in housing in which liquid and vapor phases of a fluid are provided, such that a first of the conductive wires extends into the liquid and a second of the conductive wires remains in the vapor throughout a test. The scaffold may include a plurality of lower support members and a plurality of upper wire support members, each of the support members including a plurality of routing supports (51, 53, 61, 63, 251, 253, 261, 263) to wrap a respective one of the test wires (8, 9) around. The device allows measurements to be made contemporaneously for the test wires.

(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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*