

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
08 March 2018 (08.03.2018)



(10) International Publication Number
WO 2018/045016 A8

(51) International Patent Classification:

G01F 1/56 (2006.01) *G01F 1/76* (2006.01)
G01F 1/68 (2006.01) *G01F 15/00* (2006.01)
G01F 1/684 (2006.01) *G01F 15/14* (2006.01)
G01F 1/692 (2006.01)

(21) International Application Number:

PCT/US2017/049352

(22) International Filing Date:

30 August 2017 (30.08.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/381,992 31 August 2016 (31.08.2016) US

(71) Applicant: **ATREX ENERGY, INC.** [US/US]; 19 Walpole Park South, Walpole, MA 02081 (US).

(72) Inventors: **PEARSON, Kenneth, E.**; 2188 Sleepy Hollow Drive, Shingle Springs, CA 95682 (US). **LITKA, Anthony, F.**; 1288 Main Street, Hanover, MA 02339 (US). **MacGREGOR, Duncan, D.**; 3471 Ponderosa Road, Shingle Springs,

CA 95682 (US). **GETCHEL, Paul, A.**; 4921 Woodsman Loop, Placerville, CA 95668 (US).

(74) Agent: **LEBOVICI, Victor, B.** et al.; Preti Flaherty Beliveau & Pachios LLP, 60 State Street, Suite 1100, Boston, MA 02109 (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, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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,

(54) Title: GAS FLOW SENSOR HOUSING AND ASSEMBLY PROVIDING REDUCED TURBULENCE

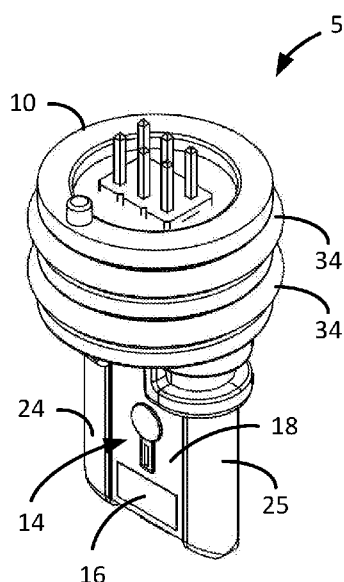


FIG. 1

(57) Abstract: A gas flow sensor housing and assembly including a gas flow sensor for measuring gas flow is disclosed. The housing includes a gas flow sensor mounting portion having a recess configured for mounting the gas flow sensor therein. The sensor includes a gas flow sensing element mounted to a substrate which is within the recess so as to avoid turbulence in the vicinity of the sensing element resulting from impingement of gas flow on a blunt or rough edge of the substrate. The gas flow sensor mounting portion includes opposed first and second edge portions, at least one of which is smoothly contoured to reduce turbulence in the vicinity of the sensing element. A method for measuring gas flow is also disclosed that employs the disclosed housing and sensor assembly.

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))*

(48) Date of publication of this corrected version:

17 May 2018 (17.05.2018)

(15) Information about Correction:

see Notice of 17 May 2018 (17.05.2018)