

24/11/04

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

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
11 December 2003 (11.12.2003)

PCT

(10) International Publication Number
WO 2003/102527 A3

(51) International Patent Classification⁷: **G01L 9/12**

(21) International Application Number:
PCT/US2003/016911

(22) International Filing Date: 29 May 2003 (29.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/063,991 31 May 2002 (31.05.2002) US

(71) Applicant (for all designated States except US): **MYKRO-LIS CORPORATION** [US/US]; 129 Concord Road, Billerica, MA 01821-4600 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ALBERT, David, M.** [US/US]; 106 Clearmeadow, Allen, TX 75002 (US).

ARRANT, Edwin, K. [US/US]; 4316 Angelina Drive, Plano, TX 75074 (US). **EDWARDS, Marvin, B.** [US/US]; 633 Harrison Drive, Coppell, TX 75019 (US).

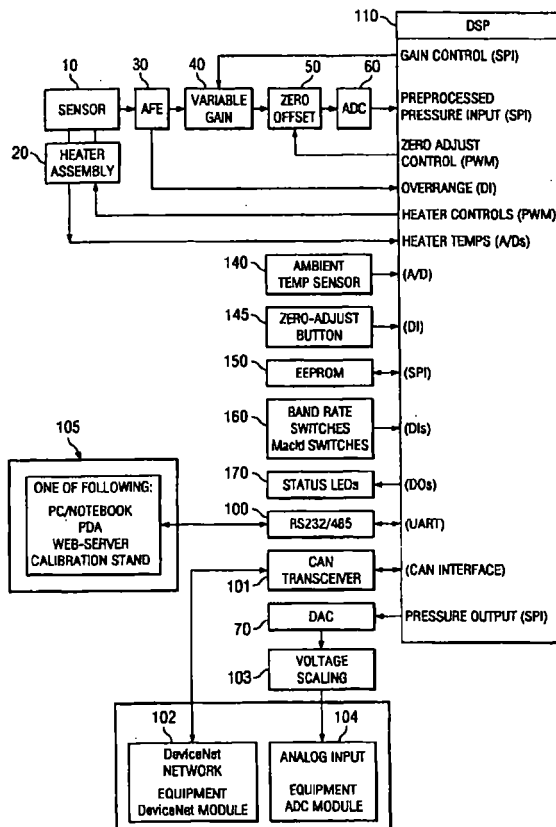
(74) Agent: **BERRIER, Mark, L.**; Gray Cary Ware & Freidenrich LLP, 1221 S. MoPac Expressway, Suite 400, Austin, TX 78746-6875 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: DIGITALLY CONTROLLED SENSOR SYSTEM



(57) Abstract: Systems and methods for digitally controlling sensors, one embodiment being a digital controller for a capacitance diaphragm gauge which is embedded in a digital signal processor (DSP). The digital controller receives digitized input from a sensor AFE (30) via a variable gain module, a zero offset module and an analog-to-digital converter. The controller automatically calibrates the received input by adjusting the variable gain and zero offset modules.



162162



ACTION

WO 2003/102527 A3

European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Declaration under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian*

Published:

— *with international search report*

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

18 March 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.