



- (51) International Patent Classification:
G01P 15/125 (2006.01) *B81B 7/02* (2006.01)
- (21) International Application Number:
PCT/FI2013/050024
- (22) International Filing Date:
11 January 2013 (11.01.2013)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
20125034 12 January 2012 (12.01.2012) FI
- (71) Applicant: MURATA ELECTRONICS OY [FI/FI];
Myllynkivenkuja 6, FI-01621 Vantaa (FI).
- (72) Inventors: RYTKÖNEN, Ville-Pekka; Antintie 26, FI-01820 Klaukkala (FI). ROSCHIER, Leif; Suvantopolku 7 A 4, FI-01600 Vantaa (FI). BLOMQVIST, Anssi; Saarenmaankatu 4 a 13, FI-00980 Helsinki (FI).
- (74) Agent: BORENIUS & CO OY AB; Itämerenkatu 5, FI-00180 Helsinki (FI).
- (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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, 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, 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, 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,

[Continued on next page]

(54) Title: ACCELERATOR SENSOR STRUCTURE AND USE THEREOF

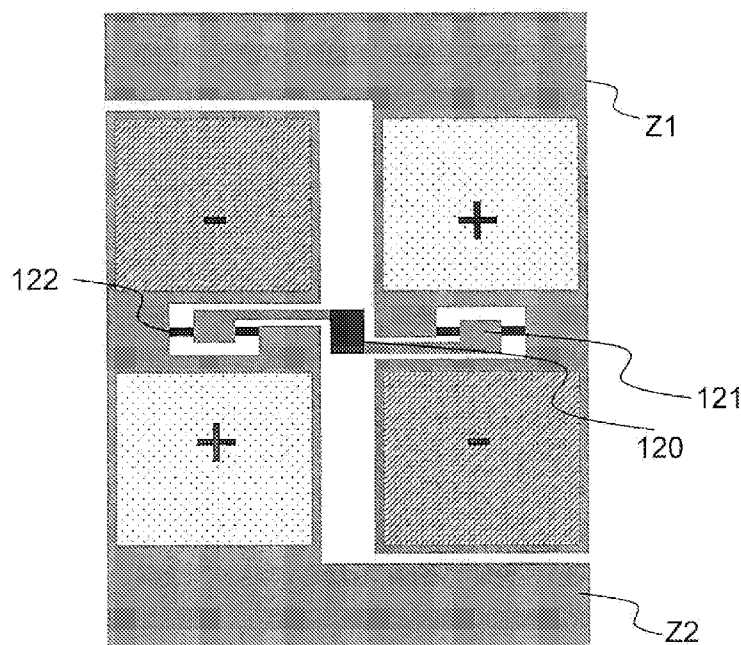


Figure 12

(57) Abstract: A MEMS-sensor structure comprising first means and second means coupled for double differential detection and positioned symmetrically to provide quantities for the double differential detection in a phase shift. If the sensor deforms, due to a specifically symmetric positioning of the first and second means, the effect of the displacement is at least partly eliminated.



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, ML, MR, NE, SN, TD, TG).

— *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))*

Published:

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