

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 September 2006 (28.09.2006)

PCT

(10) International Publication Number
WO 2006/100662 A1

(51) International Patent Classification:
G01J 5/20 (2006.01)

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(21) International Application Number:
PCT/IL2006/000046

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

(22) International Filing Date: 12 January 2006 (12.01.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
167641 24 March 2005 (24.03.2005) IL

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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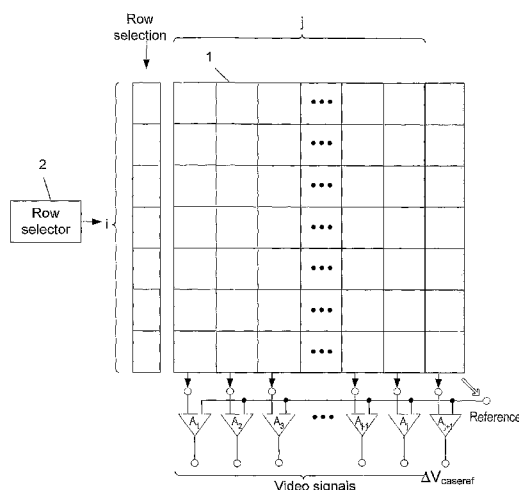
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Published:

— *with international search report*

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.

(54) Title: METHOD AND SYSTEM FOR MEASURING AND COMPENSATING FOR THE CASE TEMPERATURE VARIATIONS IN A BOLOMETER BASED SYSTEM



(57) Abstract: A focal plan array system of the bolometer type which comprises: (a) an array of $i \times j$ pixel detectors of the bolometer type for sensing scenery radiation; (b) a case which accommodates said array of detectors, said case having a front window that provides exposure to the sensing element of all the $i \times j$ pixel detectors to radiation coming from the scenery; (c) at least one blind detector of the bolometer type within the case in a column $j + 1$ for sensing case radiation, the sensing elements of said at least one detector are irradiated by one or more reference surfaces whose radiation is proportional to the case radiation; (d) reading circuitry for reading indication for the scenery radiation as sensed by each of the $i \times j$ detectors of the array, and for reading indication for the case radiation as sensed by said at least one blind detector; and (e) compensation circuitry for compensating each of said scenery radiation indications of each detector for the effects resulted from the case radiation, based on the case radiation indication as sensed by said at least one blind detector.

WO 2006/100662 A1