



- (51) **International Patent Classification:**
G01N 23/20 (2006.01) G01N 23/201 (2006.01)
G01N 23/203 (2006.01)
- (21) **International Application Number:**
PCT/US2014/012330
- (22) **International Filing Date:**
21 January 2014 (21.01.2014)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/755,030 22 January 2013 (22.01.2013) US
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- (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, IR, IS, JP, KE, KG, 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, 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, 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).

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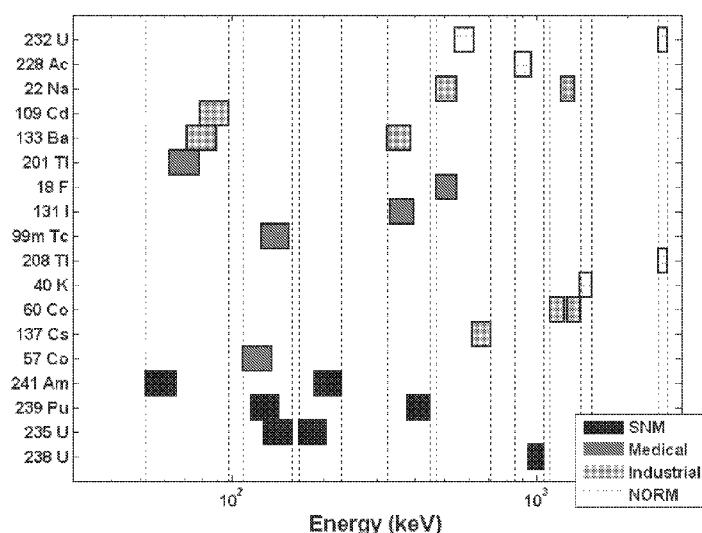
(54) **Title:** SPECTRAL-SEGMENTATION COMPUTATION IN RADIATION DETECTORS

Figure 5

(57) **Abstract:** A method of detecting a radiation source using: a network of at least one detector, each detector being capable of detecting photons in a predetermined energy range; and a computer including: a processor; an input device; an output device; and a memory, the memory including a predetermined list of a plurality of photopeaks, the list including for each photopeak an associated central energy, an associated energy width, and an associated isotope from which the photopeak originates; the computer being capable of receiving by the input device and storing in the memory data collected at each of the detectors; the method comprising: defining a plurality of energy bins within the predetermined energy range, such that each of the plurality of photopeaks on the predetermined list is associated with exactly one energy bin, and at least one energy bin is associated with an energy range within the predetermined energy range.

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

4 December 2014

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