

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 June 2007 (07.06.2007)

PCT

(10) International Publication Number
WO 2007/065004 A3

(51) International Patent Classification:
G08B 1/08 (2006.01)

(21) International Application Number:
PCT/US2006/046255

(22) International Filing Date:
30 November 2006 (30.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/291,574 1 December 2005 (01.12.2005) US
60/759,331 17 January 2006 (17.01.2006) US
60/759,332 17 January 2006 (17.01.2006) US
60/759,373 17 January 2006 (17.01.2006) US
60/759,375 17 January 2006 (17.01.2006) US
11/363,594 27 February 2006 (27.02.2006) US

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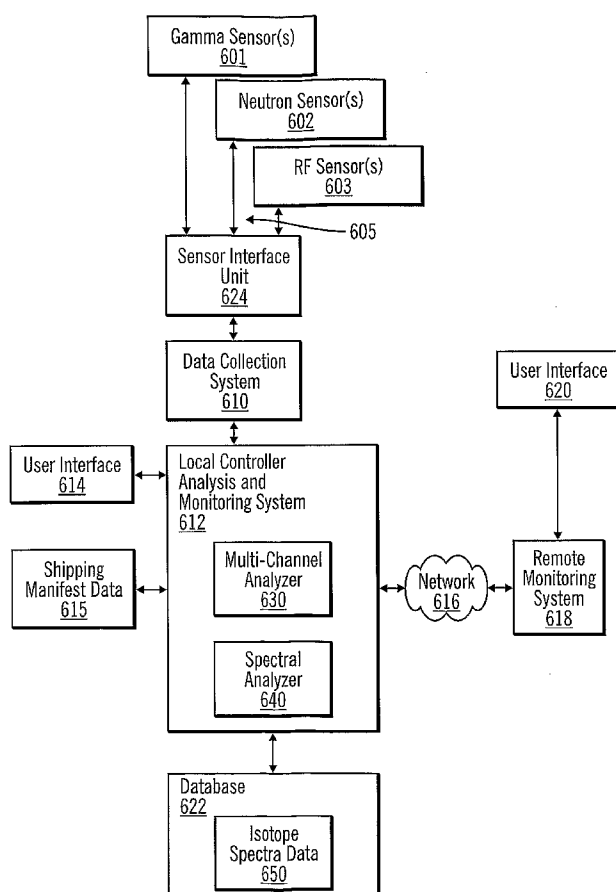
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KM, KN, KP, KR,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

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(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),

[Continued on next page]

(54) Title: CONTAINER VERIFICATION SYSTEM FOR NON-INVASIVE DETECTION OF CONTENTS



(57) Abstract: A radiation, explosives, and special materials, detection and identification system includes a housing supporting one or more gamma sensors and one or more solid-state neutron sensors proximate to container contents under examination. The system collects radiation data from the sensors and compares the collected data to one or more stored spectral images representing one or more isotopes to identify one or more isotopes present. The identified one or more isotopes present are corresponded to possible materials or goods that they represent. The possible materials or goods are compared with the manifest relating to the container to confirm the identity of materials or goods contained in the container or to detect and/or identify unauthorized materials or goods in the container. A battery powered sensor arrangement is also disclosed.



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).

Published:

— with international search report

(88) Date of publication of the international search report:
21 December 2007

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.