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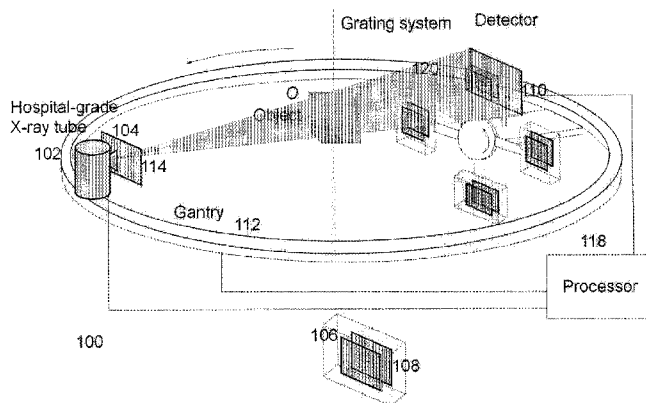
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(54) **Title:** METHODS AND APPARATUS FOR DIFFERENTIAL PHASE-CONTRAST FAN BEAM CT, CONE-BEAM CT AND HYBRID CONE-BEAM CT

Figure 1A



(57) **Abstract:** A device for imaging an object, such as for breast imaging, includes a gantry frame having mounted thereon an x-ray source, a source grating, a holder or other place for the object to be imaged, a phase grating, an analyzer grating, and an x-ray detector. The device images objects by differential-phase-contrast cone-beam computed tomography. A hybrid system includes sources and detectors for both conventional and differential-phase-contrast computed tomography.

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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2010/025924****A. CLASSIFICATION OF SUBJECT MATTER***A61B 6/03(2006.01)i, G06T 17/00(2006.01)i*

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

A61B 6/03; A61B 5/05; G01N 23/04; G21K 1/12; H05G 1/60

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords: CT, tomography, DPC, grating

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005-0286680 A1 (ATSUSHI MOMOSE) 29 December 2005 See claims 1-4, and figures 1-10	1-62
A	US 2007-0183559 A1 (ECKHARD HEMPEL) 09 August 2007 See claims 1-20, and figures 1-8	1-62
A	US 2006-0094950 A1 (RUOLA NING) 04 May 2006 See claims 1-74, and figures 1-15	1-62

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

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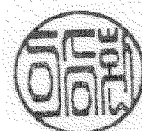
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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2010/025924**

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