(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 14 June 2007 (14.06.2007)

(10) International Publication Number WO 2007/067671 A3

- (51) International Patent Classification: G01T 1/29 (2006.01) G01V 5/00 (2006.01)
- (21) International Application Number:

PCT/US2006/046641

(22) International Filing Date:

6 December 2006 (06.12.2006)

(25) Filing Language:

English

- (26) Publication Language:

English

(30) Priority Data: 11/295,954

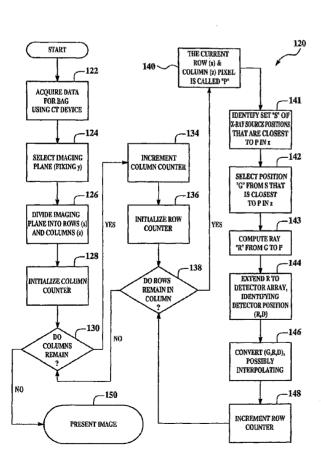
7 December 2005 (07.12.2005) US

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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.
- (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,

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR PROVIDING AN ORTHOGRAPHIC PROJECTION FROM HELICAL SCAN **DATA**



(57) Abstract: An apparatus and method for providing a projection image directly from data acquired by a CT scanner, the method comprising: acquiring an amount of data, wherein the amount of data is generated by an x-ray source that projects a fan beam of x-rays toward a detector array on an opposite side of a gantry of the CT scanner as the object is passed through an opening in the gantry; selecting an imaging plane; dividing the imaging plane into a plurality of rows and columns, thus creating a grid of points corresponding to the imaging plane; determining, for each point in the grid, a data point from the acquired data corresponding to an x-ray source position wherein a ray from the x-ray source to the grid point is closest to a perpendicular orientation with respect to the imaging plane, and a detector position where the ray intersects the detector array,; and presenting a projection image corresponding to the selected imaging plane.

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RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

— with international search report

- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 2 August 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.

INTERNATIONAL SEARCH REPORT

International application No PCT/US2006/046641

A. CLASSIFICATION OF SUBJECT MATTER INV. G01T1/29 G01V5/00 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) GO1T A61B GO6T GO1V Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, INSPEC, COMPENDEX C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with Indication, where appropriate, of the relevant passages Relevant to claim No. Χ EP 1 530 164 A (GE MED SYS GLOBAL TECH CO 1 - 31LLC [US]) 11 May 2005 (2005-05-11) figures column 10, line 3 - line 15 column 10, line 22 - column 11, line 1 column 11, line 47 - line 48 column 12, line 1 - line 6column 12, line 22 - line 24 column 12, line 37 - column 13, line 2 column 13, line 13 - line 25 A DE 102 07 623 A1 (SIEMENS AG [DE]) 3,11,12, 6 November 2003 (2003-11-06) figures 11-13 page 9, line 44 - line 65 Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the *A* document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled *P* document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 31 May 2007 06/06/2007 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Eberle, Katja

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Information on patent family members

International application No
PCT/US2006/046641

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Form PCT/ISA/210 (patent family annex) (April 2005)