



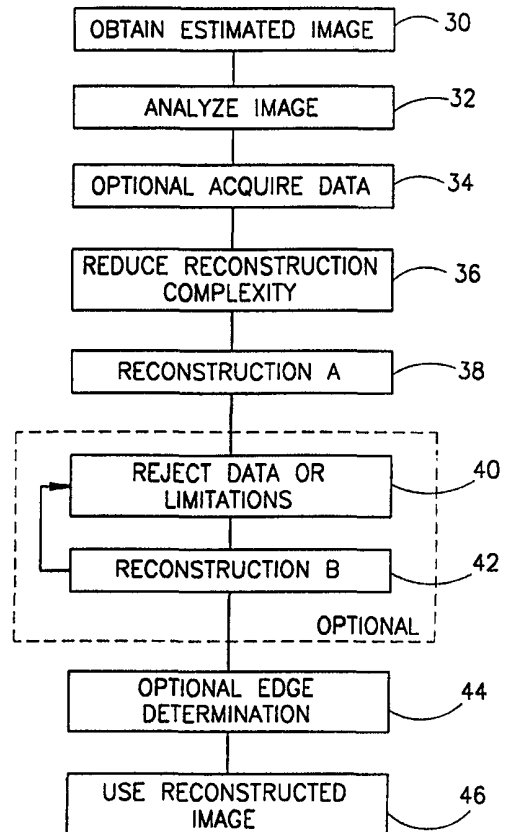
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁷ : G06T 11/00</p>	<p>A3</p>	<p>(11) International Publication Number: WO 00/25268 (43) International Publication Date: 4 May 2000 (04.05.00)</p>
<p>(21) International Application Number: PCT/IL99/00320 (22) International Filing Date: 14 June 1999 (14.06.99) (30) Priority Data: 126761 26 October 1998 (26.10.98) IL (71) Applicant (for all designated States except US): ROMIDOT, LTD. [IL/IL]; P.O. Box 329, 71103 Lod (IL). (72) Inventors; and (75) Inventors/Applicants (for US only): ROBINSON, Avraham [IL/IL]; Shivat Zion Street 14, 75321 Rishon Lezion (IL). ROYTVARF, Alex [IL/IL]; Tiomkin Street 6/11, 75257 Rishon Lezion (IL). (74) Agents: FENSTER, Paul et al.; Fenster & Company Patent Attorneys, Ltd., P.O. Box 10256, 49002 Petach Tikva (IL).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p> <p>(88) Date of publication of the international search report: 20 July 2000 (20.07.00)</p>

(54) Title: COMPUTERIZED TOMOGRAPHY FOR NON-DESTRUCTIVE TESTING

(57) Abstract

A method of CT image reconstruction in which different values for at least one reconstruction parameter are used for at least two different portions of the image. Preferably the at least one reconstruction parameter comprises pixel size.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IL 99/00320

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06T11/00

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)

IPC 7 G06T

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 835 690 A (GANGAROSA RAYMOND E ET AL) 30 May 1989 (1989-05-30) abstract; figure 2	1,2, 6-10,15, 18,20, 21, 23-27, 29,33,35
Y	FR 2 634 923 A (GEN ELECTRIC) 2 February 1990 (1990-02-02) claims 1,5	1,2, 6-10,15, 18,20, 21, 23-27,35

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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- *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
- *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 documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

24 March 2000

Date of mailing of the international search report

20.04.00

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IL 99/00320

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Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	<p>US 4 920 491 A (EBERHARD JEFFREY W ET AL) 24 April 1990 (1990-04-24)</p> <p>abstract; claim 1</p>	<p>36,37, 43, 51-56, 58,69, 70,80, 81,85, 89,97, 98,104, 105, 110-113, 125-137, 141</p>
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A	<p>US 5 442 672 A (BJORKHOLM PAUL J ET AL) 15 August 1995 (1995-08-15) column 11, line 31 - line 36; claim 1</p>	<p>148-151</p>
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A	<p>HEBDEN J C: "Imaging through scattering media using characteristics of the temporal distribution of transmitted laser pulses" OPTICS AND LASER TECHNOLOGY, NL, ELSEVIER SCIENCE PUBLISHERS BV., AMSTERDAM, vol. 27, no. 4, 1 August 1995 (1995-08-01), pages 263-268, XP004026217 ISSN: 0030-3992 page 265, left-hand column, line 55 -page 266, left-hand column, line 23</p>	191-193
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International application No.
PCT/IL 99/00320

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-151

Region of interest iterative image reconstruction with a priori information

2. Claims: 152-154

method for generating relaxation coefficients for an iterative ART reconstruction

3. Claims: 155-156

backprojection CT image reconstruction with hierarchical data structure.

4. Claims: 157-174

industrial inspection system

5. Claims: 175-177

CT for industrial imaging with manipulator

6. Claims: 178-190

Method for manufacturing quality assurance

7. Claims: 191-196

Method of tomographic reconstruction applying discretization to the reconstructed images

8. Claims: 197-203

tomographic reconstruction with identification of object's subcomponents.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IL 99/00320

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