

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year)	04.02.2014
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Applicant's or agent's file reference 13S1039PCT	FOR FURTHER ACTION See paragraph 2 below
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International application No. PCT/JP2013/083445	International filing date (day/month/year) 13.12.2013	Priority date (day/month/year) 13.12.2012
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International Patent Classification (IPC) or both national classification and IPC
A61B6/03 (2006.01) i

Applicant
KABUSHIKI KAISHA TOSHIBA

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Date of completion of this opinion	Authorized officer
Facsimile No.		Telephone No.

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Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - the international application in the language in which it was filed
 - a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2. This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
 - a. (means)
 - on paper
 - in electronic form
 - b. (time)
 - in the international application as filed
 - together with the international application in electronic form
 - subsequently to this Authority for the purposes of search
4. In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement	Novelty (N)	Claims <u>1-18</u>	YES
		Claims _____	NO
	Inventive step (IS)	Claims _____	YES
		Claims <u>1-18</u>	NO
	Industrial applicability (IA)	Claims <u>1-18</u>	YES
		Claims _____	NO

2. Citations and explanations:

Document 1: JP 2006-305204 A (J. MORITA MANUFACTURING CORP.) 09 November 2006, paragraphs [0045]-[0047], [0054] (Family: none)

Document 2: JP 2007-195970 A (SIEMENS AKTIENGESELLSCHAFT) 09 August 2007, paragraphs [0021]-[0023] & US 2007/0237295 A1 & DE 102006003609 A & CN 101006928 A

The invention as in claims 1, 8-9 and 17-18 does not involve an inventive step in the light of document 1 cited in the ISR. Document 1 (see, in particular, paragraphs [0045]-[0047] and [0054]) discloses the invention of a computer tomography (CT) image display device, wherein a large reconstruction region is first coarsely reconstructed by setting a large voxel size to select a region of interest, and in order to reduce an image processing load when enlarging/reducing the CT image, a coarser image than an original image is displayed in the middle of enlargement/reduction, and a similarly fine image to the original image is displayed in the final stage of enlargement/reduction, and then a

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small voxel size is set only for the region of interest in the image to reconstruct the region in more detail. Comparing the invention as in claim 1 and the invention disclosed in document 1, both differ from each other in that document 1 discloses the feature wherein "a coarser image than an original image is displayed" "in the middle of enlargement/reduction", but does not explicitly mention that "a part of a first image is enlarged and displayed". However, a person skilled in the art could have easily conceived of displaying by simply enlarging/reducing the pixels of an original image as the method for enlargement/reduction which is low in processing load in order to reduce "an image processing load in the middle of enlargement/reduction" in the invention disclosed in document 1.

The invention as in claims 2-5 and 10-14 does not involve an inventive step in the light of document 1. The conditions under which and the range in which "a voxel size is set small to perform reconstruction in more detail" in the invention disclosed in document 1 is a matter that should be designed, as appropriate, by a person skilled in the art; and no remarkable effect can be found in configuring the CT image display device as described in claims 2-5 and 10-14.

The invention as in claims 6-7 and 15-16 does not involve an inventive step in the light of document 1 and document 2 cited in the ISR. Document 2 (paragraphs [0021]-[0023]) discloses the feature wherein a high-resolution calculation is performed while the display of a low-resolution overview image is observed in a waiting

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Box No. V

**Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

time, whereby the displacement and enlarged display of a region can be quickly performed.