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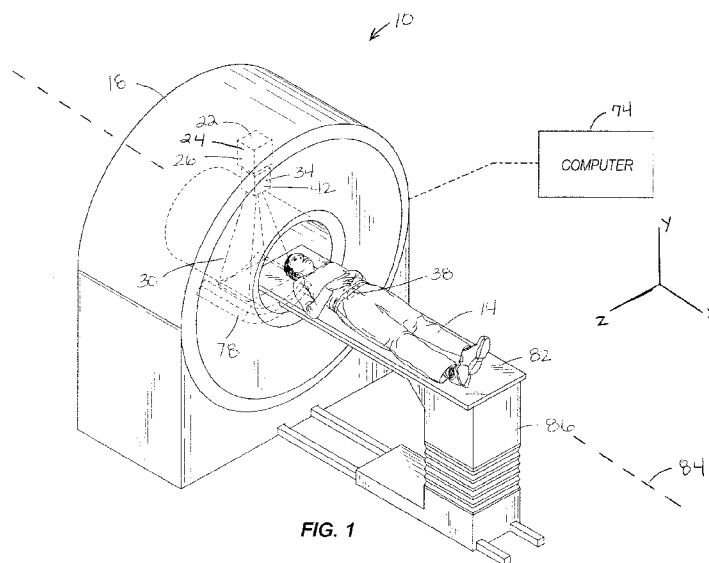


FIG. 1

(57) Abstract: A system and method of identifying anatomical structures in a patient. The method includes the acts of acquiring an image of the patient, the image including a set of image elements; segmenting the image to categorize each image elements according to its substance; computing the probability that the categorization of each image element is correct; resegmenting the image starting with image elements that have a high probability and progressing to image elements with lower probabilities; aligning at least one of the image elements with an anatomical atlas; and fitting the anatomical atlas to the segmented image.



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A. CLASSIFICATION OF SUBJECT MATTER*A61B 6/00(2006.01)i, A61B 5/055(2006.01)i, A61N 5/00(2006.01)i, G05F 1/00(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)

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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 since 1975.

Japanese utility models and applications for utility models since 1975.

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

eKOMPASS (KIPO internal) & keywords : "segmentation", "tissue", "organ", "anatomy" and "atlas"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0127790 A1 (LAU, D. W. et al.) 7 June 2007 See abstract, paragraphs 58-68, claims 1-24, and figures 1-6.	1-32
A	US 2003-0139659 A1 (DALE, A. et al.) 24 July 2003 See abstract, claims 1-62, and figures 1-12.	1-32
A	US 2007-0165920 A1 (GERING, D. T. et al.) 19 July 2007 See abstract, claims 1-20, and figures 1-8.	1-32
A	US 2007-0081712 A1 (HUANG, X. et al.) 12 April 2007 See abstract, claims 1-30, and figures 1-19.	1-32

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

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