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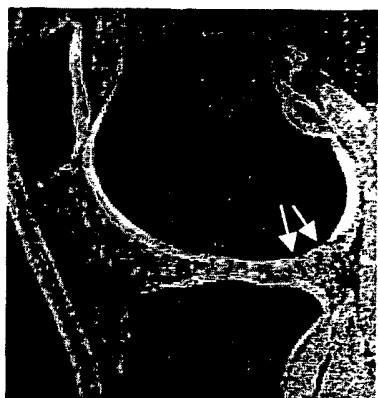
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(54) Title: TECHNIQUE FOR MANIPULATING MEDICAL IMAGES



(57) Abstract: The invention and the embodiments described in this invention provide new techniques for manipulating digital images and is particularly useful for extracting tissues (i.e., assigning tissue boundary locations) from medical images. These techniques can be applied to diagnosing arthritis and for monitoring disease progression or response to therapeutic intervention. The invention provides for means to extract the articular cartilage from medical images for analysis purposes.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06T5/00

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)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>STAMMBERGER T ET AL: "Determination of 3D cartilage thickness data from MR imaging: computational method and reproducibility in the living" MAGNETIC RESONANCE IN MEDICINE, ACADEMIC PRESS, DULUTH, MN, US, vol. 41, no. 3, March 1999 (1999-03), pages 529-536, XP002161461 ISSN: 0740-3194 cited in the application abstract page 530, paragraphs MATERIALS,AND,METHODS --- -/--</p>	1-15

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
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INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>ZOHARA A. COHEN ET AL.: "Knee cartilage topography, thickness, and contact areas from MRI: in-vitro calibration and in-vivo measurements" OSTEOARTHRITIS AND CARTILAGE, 'Online! vol. 7, 1999, pages 95-109, XP002216548 Retrieved from the Internet: <URL:http://citeseer.nj.nec.com/477079.htm > 'retrieved on 2002-10-11! abstract page 97, left-hand column, line 8 -right-hand column, line 21 -----</p>	1-15
A	<p>ANDRIACCHI THOMAS P ET AL: "Methods for evaluating the progression of osteoarthritis" JOURNAL OF REHABILITATION RESEARCH AND DEVELOPMENT, THE SERVICE, WASHINGTON, DC, US, vol. 37, no. 2, March 2000 (2000-03), pages 163-170, XP002188111 ISSN: 0748-7711 page 167, left-hand column, line 45 - line 55 -----</p>	1-15
A	<p>HONGYI LI ET AL: "A boundary optimisation algorithm for delineating brain objects from CT-scans" NUCLEAR SCIENCE SYMPOSIUM AND MEDICAL IMAGING CONFERENCE, 1993., 1993 IEEE CONFERENCE RECORD. SAN FRANCISCO, CA, USA 31 OCT.-6 NOV. 1993, NEW YORK, NY, USA, IEEE, 31 October 1993 (1993-10-31), pages 1553-1557, XP010119366 ISBN: 0-7803-1487-5 page 1553, paragraph II page 1554, paragraph III -----</p>	1-15