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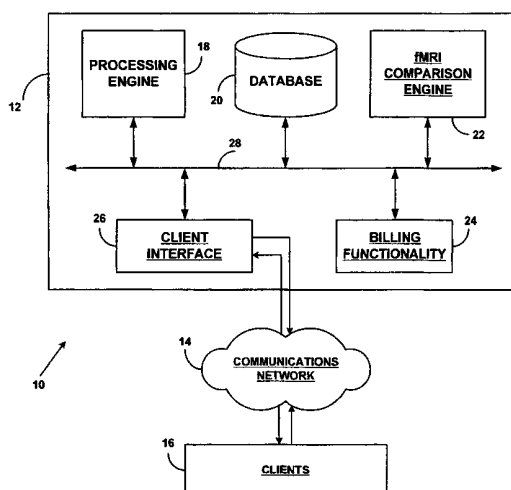
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- (71) Applicant: **EMORY UNIVERSITY** [US/US]; Office of Technology Transfer, 2009 Ridgewood Drive, Atlanta, GA 30322 (US). (88) Date of publication of the international search report: 8 November 2001
- (72) Inventor: **BERNS, Gregory, S.**; 7375 Princeton Way, Atlanta, GA 30328 (US). *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.*

(54) Title: **SYSTEMS AND METHODS FOR PROVIDING FUNCTIONAL MAGNETIC RESONANCE IMAGING DATA ANALYSIS SERVICES**



(57) Abstract: Systems and method for providing functional magnetic resonance imaging (fMRI) data analysis and comparison services are provided. The system comprises an interface, a processing engine, an fMRI comparison engine, a searchable database, and a billing functionality. The processing engine may be programmed to identify a plurality of spatially independent components related to the client data set by applying a blind source separation algorithm to the client data set. The searchable database may include information related to (i) a plurality of sets of independent components corresponding to a plurality of functional magnetic resonance image data sets and (ii) a set of fundamental independent components comprising common components which exist in a scientifically-significant portion of the plurality of sets of independent components. The billing functionality may be coupled to the interface and adapted to charge the client for delivering the information based on the comparison.

INTERNATIONAL SEARCH REPORT

Int. l. Application No
PCT/US 00/33159

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F19/00

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 G06F

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, INSPEC, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 487 110 A (TOKYO SHIBAURA ELECTRIC CO) 27 May 1992 (1992-05-27) abstract column 1 -column 2 ---	1,9,16, 23,31, 38,45, 53,60,63
A	US 5 878 746 A (LEMELSON JEROME H ET AL) 9 March 1999 (1999-03-09) abstract; figure 3 ----- -/--	1,9,16, 23,31, 38,45, 53,60,63

☒ 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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O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

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 invention

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.

Z document member of the same patent family

Date of the actual completion of the international search

22 March 2001

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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>ABRAMS S G: "Interactive MRI and CT image analysis with a microcomputer system"</p> <p>PROCEEDINGS OF THE ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (IEEE CAT. NO.88CH2566-8), NEW ORLEANS, LA, USA, 4-7 NOV. 1988,</p> <p>page 348 vol.1 XP002163623</p> <p>1988, New York, NY, USA, IEEE, USA</p> <p>the whole document</p> <p>-----</p>	<p>1,9,16,</p> <p>23,31,</p> <p>38,45,</p> <p>53,60,63</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/33159

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