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16 April 2009

(54) Title: METHOD AND INTERFACE FOR ADAPTIVE RADIATION THERAPY

114	118	122	126	130	134	138	142
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(57) Abstract: A system and method for developing and analyzing radiation therapy treatment plans and a computer-generated user interface for presenting data relating to a radiation therapy treatment plan. The user interface includes a list of fractions identified in the treatment plan, data identifying delivery status of the fraction, and data identifying a processing status of the fraction. The system includes a computer processor, a data store connected to the computer processor and storing information relating to at least one fraction of a radiation therapy treatment plan, which fraction has been delivered to a patient as part of the implementation of the radiation therapy treatment plan, and software, stored in a computer readable medium accessible by the computer processor, the software being operable to automatically process the information relating to the at least one fraction.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/28535

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC:        **A61B 5/00( 2006.01)**  
               **G06Q 50/00( 2006.01)**  
  
 USPC:       **705/2,3**  
 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)  
 U.S. : 705/2,3

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 practicable, search terms used)  
 Please See Continuation Sheet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,065,315 A (GARCIA) 12 November 1991 (12.11.1991), column 6 line 19 to column 7 lines 25	1-27
Y	US 4,815,446 A (MCINTOSH) 28 March 1989 (28.03.1989) column 2 lines 52-63	1-27
X	US 2005/0096515 A1 (GENG) 05 May 2005 (05.05.2005), page 6 paragraphs 0077-0084	28-36
A	US 6,661,870 B2 (KAPATOES et al) 09 December 2003 (09.12.2003), column 1 line 15-column 4 line 29	1-36

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

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"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		

Date of the actual completion of the international search 30 April 2008 (30.04.2008)	Date of mailing of the international search report <b>07 JUL 2008</b>
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Robert Morgan <i>[Signature]</i> Telephone No. (571) 272-3600
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**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/US06/28535

Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: radiation, therapy, treatment, fraction, schedule, status, reference, image, deformation, map