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**Declarations under Rule 4.17:**

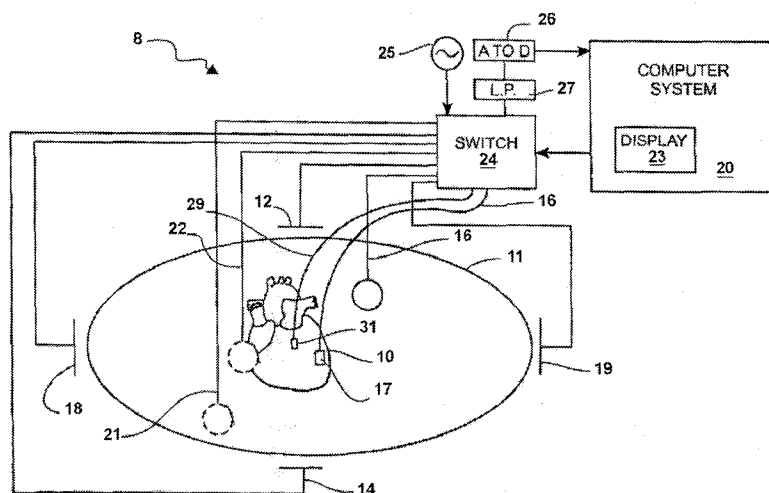
- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR COMPLEX GEOMETRY MODELING OF ANATOMY USING MULTIPLE SURFACE MODELS



(57) Abstract: Disclosed herein are methods and systems for creating a complex model of the human anatomy (11). The anatomy may be modeled using multiple geometries. Generally, a plurality of line-of-sight models may be combined into a composite model. Multiple clouds (50) of points (40) may be used to create surface models which may then be merged into a common volume. The resulting composite model may include portions that are not within a line of sight of a mean center point of the composite model. The surface models may be modeled using polygons, including for example, triangles. Disclosed herein are also ways in which electrophysiology data and/or other information may be mapped from a measurement point to a point on the composite model.

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<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  IPC(8) - A61B 5/04 (2007.10)                  USPC - 600/523                  According to International Patent Classification (IPC) or to both national classification and IPC</p>																	
<p><b>B. FIELDS SEARCHED</b></p> <p>Minimum documentation searched (classification system followed by classification symbols)                  IPC(8) - A61B 5/04 (2007.10)                  USPC - 600/523</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)                  MicroPatent</p>																	
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>US 6,301,496 B1 (REISFELD) 09 October 2001 (09.10.2001) entire document</td> <td>1-9, 11-23</td> </tr> <tr> <td>--</td> <td></td> <td>-----</td> </tr> <tr> <td>Y</td> <td></td> <td>10</td> </tr> <tr> <td>Y</td> <td>US 2004/0082870 A1 (RUDY et al) 29 April 2004 (29.04.2004) entire document</td> <td>10</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 6,301,496 B1 (REISFELD) 09 October 2001 (09.10.2001) entire document	1-9, 11-23	--		-----	Y		10	Y	US 2004/0082870 A1 (RUDY et al) 29 April 2004 (29.04.2004) entire document	10
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p>																	
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<p>Date of the actual completion of the international search</p> <p>16 December 2007</p>		<p>Date of mailing of the international search report</p> <p><b>30 JAN 2008</b></p>															
<p>Name and mailing address of the ISA/US</p> <p>Mail Stop PCT, Attn: ISA/US, Commissioner for Patents                  P.O. Box 1450, Alexandria, Virginia 22313-1450                  Facsimile No. 571-273-3201</p>		<p>Authorized officer:</p> <p>Blaine R. Copenheaver</p> <p>PCT Helpdesk: 571-272-4300                  PCT OSP: 571-272-7774</p>															