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- (71) Applicant: VARIAN MEDICAL SYSTEMS, INC. [US/US]; 3100 Hansen Way, Palo Alto, CA 94304 (US).
- (72) Inventors: SMITH, David, Craig; C/o Varian Medical Systems, Inc., 3100 Hansen Way, Palo Alto, CA 94304 (US). ANDREWS, Gregory; C/o Varian Medical Systems, Inc., 3100 Hansen Way, Palo Alto, CA 94304 (US). BRIMHALL, Owen, D.; C/o Varian Medical Systems, Inc., 3100 Hansen Way, Palo Alto, CA 94304 (US). CHAMBERLAIN, Anson, Cole; C/o Varian Medical Systems, Inc., 3100 Hansen Way, Palo Alto, CA 94304 (US).
- (74) Agents: MASCHOFF, Eric, L. et al.; Maschoff Brennan, 1389 Center Drive, Suite 300, Park City, UT 84098 (US).
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[Continued on next page]

(54) Title: HIGH POWER X-RAY TUBE HOUSING

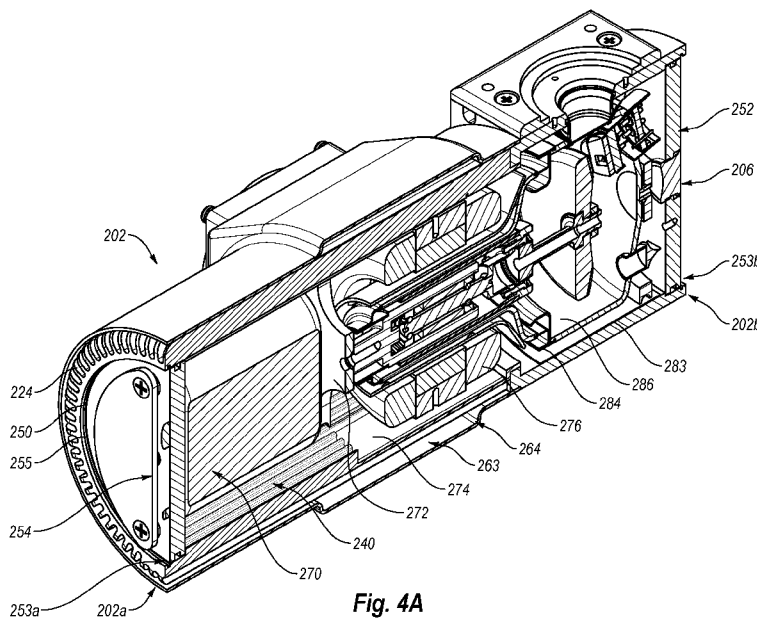


Fig. 4A

(57) Abstract: An x-ray housing can include: a finned housing member having a tubular body with an external fin array on a finned external surface and an internal fin array on a finned internal surface, the finned internal surface defining a finned housing lumen, the internal fin array and external fin array cooperatively forming a heat exchanger; and an apertured housing member having a tubular body with an x-ray window aperture extending therethrough from an external surface to an internal surface, the internal surface defining an apertured housing lumen, the finned housing member having an annular end integrally coupled with an annular end of the apertured housing member to form a tubular x-ray housing having an x-ray housing lumen.



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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - F28F 1/42 (2015.01) CPC - F28F 1/42 (2015.01) According to International Patent Classification (IPC) or to both national classification and IPC</p>																				
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) IPC(8) - F28F 1/42; H01J 35/10, 35/12 (2015.01) CPC - F28F 1/42; H01J 2235/1216, 2235/1283 (2015.01) (keyword delimited)</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 165/80.3, 104.19, 154, 155, 177, 179; 313/35; 361/689; 378/130, 141, 142</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PatBase, Google Scholar Search terms used: heat, exchanger, x-ray, tube, cool, fin, anode, cathode, pipe, fan, sink</p>																				
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</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 2007/0230663 A1 (ANNO) 04 October 2007 (04.10.2007) entire document</td> <td>1-10, 15-17</td> </tr> <tr> <td>Y</td> <td></td> <td>11-14, 18-21</td> </tr> <tr> <td>Y</td> <td>US 7,236,571 B1 (KENDALL et al) 26 June 2007 (26.06.2007) entire document</td> <td>11-14, 18-21</td> </tr> <tr> <td>A</td> <td>US 2009/0225951 A1 (WANDKE et al) 10 September 2009 (10.09.2009) entire document</td> <td>1-21</td> </tr> <tr> <td>A</td> <td>US 6,400,799 B1 (ANDREWS) 04 June 2002 (04.06.2002) entire document</td> <td>1-21</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 2007/0230663 A1 (ANNO) 04 October 2007 (04.10.2007) entire document	1-10, 15-17	Y		11-14, 18-21	Y	US 7,236,571 B1 (KENDALL et al) 26 June 2007 (26.06.2007) entire document	11-14, 18-21	A	US 2009/0225951 A1 (WANDKE et al) 10 September 2009 (10.09.2009) entire document	1-21	A	US 6,400,799 B1 (ANDREWS) 04 June 2002 (04.06.2002) entire document	1-21
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<p>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</p>		<p>Authorized officer: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>																		