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(54) Title: RADIO FREQUENCY ABLATION CATHETER DEVICE

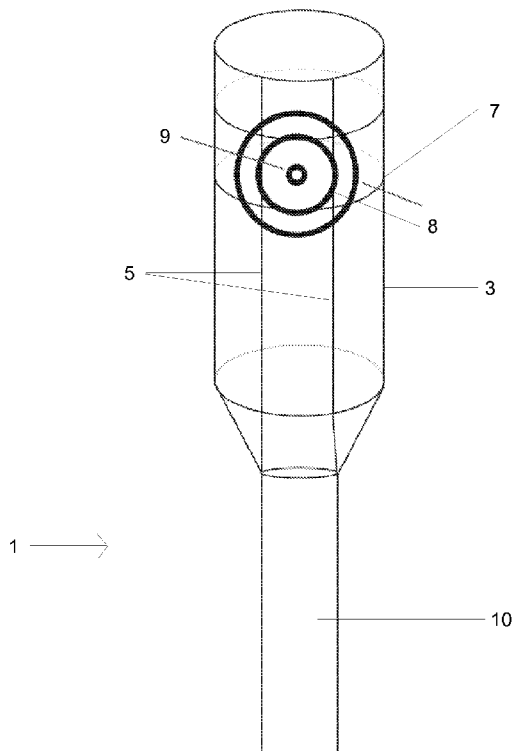


FIG. 1

(57) Abstract: A wire frame bearing one or more circularly-configured RF electrodes can be contacted against the inner surface of the aorta such that the circular electrodes ablate the nerve activity circumferentially around the renal artery ostium. The wire frame has a shape memory and can be positioned in a collapsed, non-deployed position at the end of a catheter and encapsulated within a sheath and then advanced longitudinally through the blood vessel to the relevant location within the body lumen. The sheath is then withdrawn, allowing the wire frame to be expanded into its deployed position in which it conforms to the walls of the lumen, so as to thereby allow the electrodes to contact the lumen wall to perform the ablation.





SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST (PGPB,USPT,EPAB,JPAB), Google (Patents, Scholar); Keywords: ablat\$4, renal\$4, nerv\$4, wire, filament, strut, frame\$6, cage, scaffold\$4, radiofrequency, RF, electrode, circle, circular\$4, annular, ring, rapid\$4, deliver\$4, exchang\$4, rx, catheter, memory, nickel, niti, nitinol, sheath, sleeve, balloon, position\$4, anchor\$4, concentric\$4, coa

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 2005/0222563 A1 (McDaniels et al.) 06 October 2005 (06.10.2005) para [0015], [0067]-[0069]; Fig. 9-10	1, 3-5 ----- 2, 11, 12a, 12b
X ----- Y	US 2005/0288730 A1 (Deem et al.) 29 December 2005 (29.12.2005) para [0030]-[0032], [0040], [0041], [0081], [0082], [0095], [0096], [0102], [0105], [0016]; Fig. 8, 13	1, 6-9, 13, 15-17 ----- 10, 14
Y	US 2009/0030445 A1 (Boyle et al.) 29 January 2009 (29.01.2009) para [0016], [0017]	2, 11
Y	US 2004/0186468 A1 (Edwards) 23 September 2004 (23.09.2004) para [0058], [0060], [0066], [0067], [0133]; claim 9; Fig. 1	10, 14
Y	US 2010/0256629 A1 (Wylie et al.) 07 October 2010 (07.10.2010), para [0058]-[0060]; Fig. 5-7	12a
Y	US 2009/0012518 A1 (Utley et al.) 08 January 2009 (08.01.2009) para [0075], [0133]; Fig. 49A	12b
A	US 7,209,783 B2 (Fellows et al.) 24 April 2007 (24.04.2007) Entire document	1-17
A	WO 1999/016350 A1 (Panescu et al.) 08 April 1999 (08.04.1999) Entire document	1-17
A	US 7,873,417 B2 (Demarais et al) 18 January 2011 (18.01.2011) Entire document.	1-17

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