

Title (en)
RADIO FREQUENCY ABLATION CATHETER DEVICE

Title (de)
FUNKFREQUENZABLATIONS-KATHETERVORRICHTUNG

Title (fr)
DISPOSITIF DE CATHÉTER D'ABLATION PAR RADIOFRÉQUENCE

Publication
EP 2677953 A4 20141008 (EN)

Application
EP 12764009 A 20120330

Priority
• US 201161470383 P 20110331
• US 2012031582 W 20120330

Abstract (en)
[origin: WO2012135703A2] A cylindrically shaped wire frame bearing one or more circularly-configured RF electrodes can be contacted against the inner surface of the aorta, e.g., at the renal artery ostium, 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, e.g., over a guide wire, 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 The sheath is then withdrawn, allowing the wire frame to be expanded into its deployed position in which it conforms to the walls of the lumen, so as to thereby allow the electrodes to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. The circular RF elements can be positioned around the opening to the renal artery using an imaging catheter that is passed through the hole of the circular RF electrode and at least partially into the entrance of the renal artery, and a balloon can be placed through the imaging catheter into the proximal segment of the renal artery for improved positioning and stabilization. The sheath can also have a longitudinal cut out to allow the imaging catheter to protrude out of the wire frame and into the renal artery to position the device at the renal artery ostium, even while the wire frame is still in its collapsed, non-deployed configuration within the sheath. Once the device has been properly positioned, the sheath is withdrawn and the wire frame is expanded such that the RF electrodes are positioned against the renal artery ostium.

IPC 8 full level
A61B 18/14 (2006.01)

CPC (source: EP KR)
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Designated contracting state (EPC)
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