Title (en)

INTRALUMINAR ONCOTHERMIA CATHETER

Title (de)

INTRALUMINARER ONKOTHERMIE-KATHETER

Title (fr)

CATHÉTER D'ONCOTHERMIE INTRALUMINAIRE

Publication

EP 2379168 A1 20111026 (EN)

Application

EP 10705788 A 20100113

Priority

- EP 2010000236 W 20100113
- EP 09075026 A 20090116
- EP 10705788 A 20100113

Abstract (en)

[origin: EP2208506A1] The present invention relates to a radiofrequency hyperthermia device for the treatment of intraluminar or intracavitary lesions consisting of a catheter with an electrode and RF-independent highly isolated temperature sensing, a counter-electrode and a radiofrequency source connected to the electrode and counter-electrode. The electrode which is fixed to the catheter is a good heat-conductor metallic electrode making direct galvanic- and heat-contact with the wall of the lumen/cavity and the material of the catheter has a high relative dielectric constant µ r and a low dielectric loss tg´. The catheter is equipped by individual microchip, preferable mounted in its plug), which calibrates the catheter, guards its single use, collects the data and controls the proper use. The counter-electrode is positioned extracorporeal oppositely of the treated area so that the treated area is located between the electrode and the counter-electrode. The catheter is adjustable to different body lumens or body cavities such as urethra, rectum, esophagus, vagina, stomach, bladder, etc. and this radiofrequency hyperthermia device is useful for treatment of benign tumors or malignancies located within or close to these body lumens or body cavities by the use of radiofrequency (RF) fields in the range of 10 kHz to 45 MHz. The device could be remotely controlled by any web-browser installations independently its hardware solution (PDA, MDA, phone, PC, Mac, etc.)

IPC 8 full level

A61N 1/32 (2006.01); **A61N 1/40** (2006.01)

CPC (source: EP)

A61N 1/403 (2013.01); A61B 18/1492 (2013.01); A61B 18/16 (2013.01)

Citation (search report)

See references of WO 2010081730A1

Citation (examination)

- US 2004249343 A1 20041209 - CIOANTA IULIAN [US]
- EP 0115420 A2 19840808 - KUREHA CHEMICAL IND CO LTD [JP]
- US 5437664 A 19950801 - COHEN DONALD [US], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

EP 2208506 A1 20100721; EP 2379168 A1 20111026; WO 2010081730 A1 20100722

DOCDB simple family (application)

EP 09075026 A 20090116; EP 10705788 A 20100113; EP 2010000236 W 20100113