

Title (en)

MEDICAL DEVICE AND METHOD FOR TRANSMYOCARDIAL REVASCULARIZATION

Title (de)

VORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG VERZWEIGTER KANÄLE DURCH DAS MYOKARD

Title (fr)

DISPOSITIF A USAGE MEDICAL POUR REVASCULARISATION TRANSMYOCARDIQUE ET METHODE AFFERENTE

Publication

**EP 1011776 A2 20000628 (EN)**

Application

**EP 99928563 A 19990611**

Priority

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Abstract (en)

[origin: WO0002612A2] A medical device and method for transmyocardial revascularization. The device features a catheter delivered needle for piercing heart tissue; an RF energy source coupled to the needle; and a controller to control the RF energy source so that a predetermined temperature is reached in the tissue adjacent the device. The controller may also limit the time for which the RF energy is delivered. The needle used is cylindrical and has a piercing length of between approx. 3 to 9 mm and a maximum piercing diameter of between approx. 0.5 to 1.5 mm. In a further embodiment the device features an ultrasonic sensor for sensing the distance from the catheter distal end to a surface of the heart. Additionally the device may feature the ability to deliver a pharmacological agent including physiologic mediators, e.g. growth factors of their respective RNA, DNA or cDNA to the outer surface of the needle. Also disclosed is a method of TMR in a body organ through the use of needle delivered RF energy.

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