

Title (en)
PREVENTING REUSE OF SURGICAL DEVICES

Title (de)
VERHINDERUNG DES WIEDERGEBRAUCHS CHIRURGISCHER VORRICHTUNGEN

Title (fr)
DISPOSITIFS CHIRURGICAUX A USAGE UNIQUE

Publication
EP 0921762 A1 19990616 (EN)

Application
EP 98907606 A 19980224

Priority
• US 9803580 W 19980224
• US 80827397 A 19970228

Abstract (en)
[origin: WO9837819A1] A single use ultrasonic surgical device (150) in accordance with the present invention includes a transmission component (86) adapted to receive ultrasonic vibration from a transducer assembly (82) and to transmit the ultrasonic vibration from a first end to a second end. A hub (172) is coupled to the transmission component and includes a temperature sensitive material that distorts when exposed to heat. An ultrasonic surgical device (150) in accordance with the present invention includes a transducer assembly (82) adapted to vibrate at an ultrasonic frequency in response to electrical energy. A transmission rod (86) is adapted to receive ultrasonic vibration from the transducer assembly and to transmit the ultrasonic vibration from a first end to a second end of the transmission rod. A sheath (170) surrounds at least a portion of the transmission rod and includes a temperature sensitive material that distorts when exposed to heat. An end effector (88) is adapted to receive the ultrasonic vibration from the transmission rod (86) and to transmit the ultrasonic vibration from a first end to a second end of the end effector. The second end of the end effector is disposed near an antinode and the first end of the end effector coupled to the second end of the transmission rod. In an alternative arrangement, the sterilization of the instrument (550) inhibits the ultrasonic transmission capabilities of the instrument to prevent reuse.

IPC 1-7
A61B 17/32

IPC 8 full level
A61B 18/00 (2006.01); **A61B 17/32** (2006.01); **A61B 17/00** (2006.01); **A61B 19/00** (2006.01)

CPC (source: EP US)
A61B 17/320068 (2013.01 - EP US); **A61B 2017/0046** (2013.01 - EP); **A61B 2017/320088** (2013.01 - EP); **A61B 2090/0814** (2016.02 - EP)

Citation (search report)
See references of WO 9837819A1

Designated contracting state (EPC)
DE ES FR GB IT NL

DOCDB simple family (publication)
WO 9837819 A1 19980903; AU 6336998 A 19980918; CA 2252798 A1 19980903; EP 0921762 A1 19990616; JP 2000509636 A 20000802

DOCDB simple family (application)
US 9803580 W 19980224; AU 6336998 A 19980224; CA 2252798 A 19980224; EP 98907606 A 19980224; JP 53777098 A 19980224