

Title (en)

METHOD AND DEVICE FOR PRODUCING SHOCK WAVES FOR TECHNICAL AND SPECIALLY MEDICO-TECHNICAL APPLICATIONS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON STOSSWELLEN FÜR TECHNISCHE, VORZUGSWEISE MEDIZINTECHNISCHE ANWENDUNGEN

Title (fr)

PROCEDE ET DISPOSITIF DE PRODUCTION D'ONDES DE CHOC POUR APPLICATIONS TECHNIQUES, DE PREFERENCE MEDICO-TECHNIQUES

Publication

EP 0954847 B1 20010718 (DE)

Application

EP 98907846 A 19980121

Priority

- DE 9800184 W 19980121
- DE 19702593 A 19970124

Abstract (en)

[origin: DE19702593A1] Intensive pressure waves can be used as shock waves for medico-technical applications, specially for lithotripsy and/or pain therapy. To this end, sound waves with high energy density are produced by pressure pulsations. According to the invention, the pressure waves are produced by briefly heating a conductive electrolyte, wherein an electrical impulse is used for direct and substantially loss-free conversion of electrical energy in order to heat the electrolyte. A pertaining device to carry out said method is characterized by an arrangement of two electrodes (1, 2, 7, 8, 21, 22) which contain one electrolyte (3) and are controlled by an output pulse generator (5), wherein the sound waves are decoupled by suitable means into a sound propagating medium (4).

IPC 1-7

G10K 15/06

IPC 8 full level

A61B 17/22 (2006.01); **A61B 17/225** (2006.01); **A61B 18/00** (2006.01); **G10K 15/06** (2006.01)

CPC (source: EP US)

G10K 15/06 (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

DE 19702593 A1 19980730; DE 19702593 C2 20000706; DE 59801035 D1 20010823; EP 0954847 A2 19991110; EP 0954847 B1 20010718; JP 2001509045 A 20010710; US 6383152 B1 20020507; WO 9833171 A2 19980730; WO 9833171 A3 19981112

DOCDB simple family (application)

DE 19702593 A 19970124; DE 59801035 T 19980121; DE 9800184 W 19980121; EP 98907846 A 19980121; JP 53148698 A 19980121; US 36094599 A 19990726