

Title (en)

APPARATUS AND METHOD FOR CHARGING AND DISCHARGING A CAPACITOR

Title (de)

VORRICHTUNG UND VERFAHREN ZUM LADEN UND ENTLADEN EINES KONDENSATORS

Title (fr)

APPAREIL ET PROCEDE DE CHARGE ET DE DECHARGE D'UN CONDENSATEUR

Publication

**EP 1563597 A1 20050817 (EN)**

Application

**EP 03794442 A 20030717**

Priority

- US 0322289 W 20030717
- US 40827702 P 20020905

Abstract (en)

[origin: WO2004023635A1] An apparatus for electrically stimulating a smart material includes a controllable power source for charging the smart material and/or switching circuitry for discharging the smart material. The controllable power source includes a regulated DC to DC converter having controllable drive circuitry associated therewith. The drive circuitry can be self-oscillating through associated feedback means. The switching circuitry can be responsive to one or more control signals.

IPC 1-7

**H02M 3/338**; H01L 41/04

IPC 8 full level

**H01L 41/04** (2006.01); **H02M 3/28** (2006.01); **H02M 3/335** (2006.01); **H02M 3/338** (2006.01)

CPC (source: EP)

**H02M 3/33507** (2013.01); **H02M 3/3353** (2013.01); **H02M 3/33576** (2013.01); **H02M 3/3387** (2013.01); **H10N 30/802** (2023.02)

Citation (search report)

See references of WO 2004023635A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2004023635 A1 20040318**; AU 2003259143 A1 20040329; CA 2494873 A1 20040318; CA 2494873 C 20091027; CN 1679226 A 20051005; EP 1563597 A1 20050817; JP 2005538671 A 20051215; JP 4274373 B2 20090603

DOCDB simple family (application)

**US 0322289 W 20030717**; AU 2003259143 A 20030717; CA 2494873 A 20030717; CN 03820974 A 20030717; EP 03794442 A 20030717; JP 2004534247 A 20030717