

Title (en)
Ultrasonic pocket sprayer.

Title (de)
Ultraschall-Taschenzerstäubergerät.

Title (fr)
Pulvérisateur de poche à ultrasons.

Publication
EP 0258637 A1 19880309 (DE)

Application
EP 87111004 A 19870729

Priority
DE 3627222 A 19860811

Abstract (en)
[origin: US4877989A] An ultrasonic pocket-size atomizer comprises a housing including a first portion and a second portion detachably connected thereto. A vibration generation mechanism is mounted liquid-tight in the first portion of the housing for generating an oscillation with a frequency between 1 and 5 Mhz. The vibration generation mechanism includes a piezoelectric assembly and an electronic circuit operatively connected to the assembly for energizing the assembly and causing the assembly to vibrate. A power source including a storage battery is removably and rechargeably disposed in the first portion of the housing for supplying electric current to the electronic circuit. A cartridge is provided for containing liquid to be atomized, the cartridge being movably disposed in the second portion of the housing. An activation mechanism is provided for automatically activating the electronic circuit upon motion of the movable section of the cartridge, the activation mechanism including a magnet attached to the movable section of the cartridge so as to move therewith. The activation mechanism further includes a switch operatively connected to the electronic circuit and operable by the magnet upon a shift in the position thereof during motion of the movable section of the cartridge.

Abstract (de)
Ultraschall-Taschenzerstäubergerät, insbesondere zum Zerstäuben von Medikamenten für die Applikation bei Asthmatikern, mit einem im Unterteil (13) des Gehäuses flüssigkeitsdicht angebrachten piezoelektrischen Schwingssystem (1) mit einer Betriebsfrequenz von 1 bis 5 MHz und einer im Gehäuseoberteil (9) bewegbar gelagerten Kartusche (4) mit dem zu zerstäubenden Arzneimittel (5), die einen Magneten (11) im Gehäuseunterteil (13) bewegt und einer im Gehäuseunterteil (13) angeordneten Elektronikschaltung (3) und dem Akku (6).

IPC 1-7
B05B 17/06

IPC 8 full level
A61M 11/00 (2006.01); **B05B 17/06** (2006.01)

CPC (source: EP US)
B05B 17/0623 (2013.01 - EP US)

Citation (search report)
• [A] FR 2444504 A1 19800718 - BOSCH SIEMENS HAUSGERAETE [DE]
• [A] DE 2831553 A1 19800131 - SIEMENS AG
• [A] DE 2308584 A1 19740829 - SIEMENS AG
• [A] US 3896280 A 19750722 - BLAKE DOUGLAS O
• [A] FR 2431038 A1 19800208 - PLESSEY HANDEL INVESTMENT AG [CH], et al

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EP 87111004 A 19870729; AT 87111004 T 19870729; CA 543968 A 19870807; DE 3627222 A 19860811; DE 3763372 T 19870729; ES 87111004 T 19870729; JP 19723387 A 19870806; US 29684689 A 19890112