

Title (en)

Device for generating an atmospheric pressure plasma

Title (de)

Vorrichtung zur Erzeugung eines Atmosphärendruck-Plasmas

Title (fr)

Dispositif de production d'un plasma à pression atmosphérique

Publication

EP 2141968 A3 20140122 (DE)

Application

EP 09006430 A 20090513

Priority

DE 202008008980 U 20080704

Abstract (en)

[origin: EP2141968A2] The device has a piezo-element (10) arranged within a housing (1) in a region of a dielectric end cap (3). A frontal exhaust port (2) of the housing is formed by the end cap, and a gas inlet opening (4) is provided at a side of the housing turned away from the port. Alternating voltage is applied to the piezo-element, and the piezo-element is detachably fixed in the region of the end cap by a clipped connection (11) e.g. spring clip. A control board (8) with a phase regulating circuit is provided within the housing such that the piezo-element is controlled and regulated.

IPC 8 full level

H05H 1/24 (2006.01)

CPC (source: EP)

H05H 1/2475 (2013.01); **H05H 1/2481** (2021.05)

Citation (search report)

- [A] DE 102005032890 A1 20070118 - JE PLASMACONSULT GMBH [DE]
- [A] JP 2004237135 A 20040826 - NISSAN MOTOR
- [A] TERANISHI K ET AL: "A novel generation method of dielectric barrier discharge and ozone production using a piezoelectric transformer", JAPANESE JOURNAL OF APPLIED PHYSICS, THE JAPAN SOCIETY OF APPLIED PHYSICS, JAPAN SOCIETY OF APPLIED PHYSICS, TOKYO; JP, vol. 43, no. 9B, 1 September 2004 (2004-09-01), pages 6733 - 6739, XP002432140, ISSN: 0021-4922, DOI: 10.1143/JJAP.43.6733

Cited by

WO2011141263A1; CN102970913A; CN108604631A; CN105103319A; JP2016510483A; KR20180116329A; DE102019106767A1; DE102010027795A1; US10531552B2; US10856399B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 202008008980 U1 20080904; EP 2141968 A2 20100106; EP 2141968 A3 20140122; EP 2141968 B1 20160713; PL 2141968 T3 20170630

DOCDB simple family (application)

DE 202008008980 U 20080704; EP 09006430 A 20090513; PL 09006430 T 20090513