Title (en)

MINIATURIZABLE PLASMA SOURCE

Title (de)

MINIATURISIERBARE PLASMAQUELLE

Title (fr)

SOURCE DE PLASMA MINIATURISABLE

Publication

EP 2529601 B1 20150311 (DE)

Application

EP 11704740 A 20110128

Priority

- DE 102010001395 A 20100129
- EP 2011051234 W 20110128

Abstract (en)

[origin: WO2011092298A1] The invention relates to a plasma source comprising an oscillator, which has an active element and a resonator connected to the active element. The resonator comprises a hollow body, a gas inlet, a gas outlet arranged at a distal end of the hollow body about a longitudinal axis of the hollow body, and a coil arranged along the longitudinal axis of the hollow body, the coil having an effective length of one quarter of a wavelength at a resonant frequency of the resonator. A distal end of the coil is arranged relative to the gas outlet such that a plasma section can form between the distal end of the coil serving as a first plasma electrode and the gas outlet of the hollow body serving as a second plasma electrode. At a proximal end of the hollow body, the coil is lead out of the interior of the hollow body through an electrically contact-free feedthrough, and a proximal end of the coil contacts the outside of the hollow body. On a first contact region located between the proximal end of the coil and the feedthrough, the coil is coupled to a first port of the active element, and on a second contact region located between the proximal end of the coil and the feedthrough, it is coupled to a second port of the active element.

IPC 8 full level

H05H 1/46 (2006.01)

CPC (source: EP US)

H05H 1/46 (2013.01 - EP US); **H05H 1/4652** (2021.05 - EP); H05H 1/4652 (2021.05 - US); H05H 2240/10 (2013.01 - EP US); H05H 2245/60 (2021.05 - EP US)

Cited by

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DOCDB simple family (publication)

DE 102010001395 A1 20110804; **DE 102010001395 B4 20131114**; EP 2529601 A1 20121205; EP 2529601 B1 20150311; PL 2529601 T3 20150831; US 2012313524 A1 20121213; US 8796934 B2 20140805; WO 2011092298 A1 20110804

DOCDB simple family (application)

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