

Title (en)
Spark-plug and plasma generation

Title (de)
Zündkerze und Plasmaerzeugung

Title (fr)
Bougie d'allumage et génération de plasma

Publication
EP 1515594 A2 20050316 (FR)

Application
EP 04292189 A 20040913

Priority
FR 0310767 A 20030912

Abstract (en)
The plug has a series resonator with a resonance frequency higher than 1MHz and having a capacitor (111) whose terminals are connected to two electrodes (103, 106) for plasma generation. One electrode forms a spark plug shell and another electrode behaves as an anode. A radiofrequency excitation is applied to the plug and an insulating sleeve (100) separates free ends of the electrodes. Independent claims are also included for the following: (a) a plasma generation system including a spark plug; and (b) a plasma generation method.

Abstract (fr)
L'invention propose un système de génération de plasma(1), comprenant: - deux électrodes (103, 106); - un matériau diélectrique (100) séparant les électrodes; - un générateur de tension (102), connecté aux électrodes appliquant sélectivement une tension alternative présentant une fréquence supérieure à 1 MHz et une amplitude entre crêtes supérieure à 5kV entre les électrodes. L'invention porte aussi sur un procédé associé et permet notamment de générer aisément un plasma de volume ou un plasma ramifié.

IPC 1-7
H05H 1/24; H01T 13/52

IPC 8 full level
H01T 13/50 (2006.01); **H01T 13/52** (2006.01); **H05H 1/24** (2006.01)

CPC (source: EP US)
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Citation (applicant)
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• FR 9909473 A 19990721
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• US 4841925 A 19890627 - WARD MICHAEL A V [US]

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