

Title (en)  
Spark-plug and plasma generation

Title (de)  
Zündkerze und Plasmaerzeugung

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

Publication  
**EP 1515594 B1 20170329 (FR)**

Application  
**EP 04292189 A 20040913**

Priority  
FR 0310767 A 20030912

Abstract (en)  
[origin: EP1515594A2] 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.

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

CPC (source: EP US)  
**H01T 13/50** (2013.01 - EP); **H01T 13/52** (2013.01 - EP); **H05H 1/2406** (2013.01 - EP US); **H05H 1/52** (2013.01 - EP)

Citation (examination)  
FR 2366719 A1 19780428 - TOKAI TRW & CO [JP]

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DE102011053169A1; JP2010535976A; DE102010045168A1; DE102015120254A1; US2017025825A1; FR2893989A1; US10263397B2; DE102010044845B3; DE102010055570B3; CN102619667A; DE102011053169B4; CN103261675A; CN103444024A; CN102396123A; DE102012100841B3; CN103967684A; DE102013101060B4; EP2012001A1; DE102009059649B4; EP2337173A3; DE102012110657B3; DE102010022334B3; CN102332683A; DE102012108251B4; CN102518541A; FR2919901A1; EP1918565A3; DE102010045168B4; DE102015120254B4; WO2006054009A1; WO2007060362A1; WO2008017601A1; US9484719B2; US8656897B2; DE102010015343A1; US8614540B2; US9062648B2; US7741761B2; US8767372B2; WO2009024713A1; EP2337173A2; DE102009059649A1; US8863730B2; US9574540B2; DE102012108251A1; US8550048B2; US8742652B2; US9366221B2; US8006546B2; DE202014101756U1; US8844490B2; US8869765B2; US9941672B2; JP2009519404A; EP2745362B1; EP2745362B2

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 PL PT RO SE SI SK TR

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**EP 1515594 A2 20050316; EP 1515594 A3 20110622; EP 1515594 B1 20170329**; FR 2859869 A1 20050318; FR 2859869 B1 20060120

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