

Title (en)  
Plasma generating spark plug with integrated inductance

Title (de)  
Plasma generierende Zündkerze mit eingebauter Spule

Title (fr)  
Bougie de génération de plasma à inductance intégrée

Publication  
**EP 2273632 B1 20140226 (FR)**

Application  
**EP 10012339 A 20040913**

Priority  
• EP 04292188 A 20040913  
• FR 0310766 A 20030912

Abstract (en)  
[origin: EP2273632A2] The system has a generator with a class E amplifier for enabling an inductor-capacitor (LC) series structure to resonate at a frequency greater than 1 mega hertz with a terminal voltage of a capacitor greater than 5 kilovolt. A series resonator is connected at an output of the generator. The quality factor of the resonator ranges between 40 and 200. A head of a spark plug has two electrodes separated by an insulator for generating plasma during application of the radiofrequency excitation. A switch (51) i.e. MOSFET, controls commutation of resonator terminals.

IPC 8 full level  
**H01T 13/44** (2006.01); **F02P 23/04** (2006.01)

CPC (source: EP)  
**F02P 23/045** (2013.01); **H01T 13/44** (2013.01); **F02P 3/01** (2013.01)

Cited by  
US2018363618A1; US11181090B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**EP 1515408 A2 20050316; EP 1515408 A3 20061115; EP 1515408 B1 20101124**; AT E489751 T1 20101215; DE 602004030195 D1 20110105; EP 2273632 A2 20110112; EP 2273632 A3 20130313; EP 2273632 B1 20140226; ES 2354155 T3 20110310; ES 2455742 T3 20140416; FR 2859830 A1 20050318; FR 2859830 B1 20140221

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**EP 04292188 A 20040913**; AT 04292188 T 20040913; DE 602004030195 T 20040913; EP 10012339 A 20040913; ES 04292188 T 20040913; ES 10012339 T 20040913; FR 0310766 A 20030912