

Title (en)

CORONA IGNITION WITH SELF-TUNING POWER AMPLIFIER

Title (de)

KORONAZÜNDUNG MIT SELBSTEINSTELLENDEN LEISTUNGSVERSTÄRKER

Title (fr)

ALLUMAGE À EFFET CORONA DOTÉ D'AMPLIFICATEUR DE PUISSANCE AUTORÉGLABLE

Publication

EP 3497319 A1 20190619 (EN)

Application

EP 17754912 A 20170808

Priority

- US 201615230927 A 20160808
- US 2017045820 W 20170808

Abstract (en)

[origin: WO2018031504A1] A power amplifier circuit for a corona ignition system is provided. The circuit includes an inductor and capacitor connected to one end of a secondary winding of an RF transformer. The other end of the secondary winding is connected to a current sensor which is connected to ground. The transformer also has a primary winding with one end connected to a voltage supply and the other end attached to a pair of switches. The windings are wound around a core. Current flowing from the DC voltage supply to the switches causes a magnetic flux in the core. A voltage is generated on the secondary winding by the current that flows through the igniter. This voltage is fed back to the switches, controlling on and off timing. Voltage is provided to the corona igniter or pulled from the igniter when the current traveling into or from the igniter is at zero.

IPC 8 full level

F02P 23/04 (2006.01); **F02P 3/01** (2006.01); **F02P 9/00** (2006.01); **F23Q 3/00** (2006.01); **H01T 13/50** (2006.01); **H01T 19/00** (2006.01)

CPC (source: EP KR)

F02P 3/01 (2013.01 - KR); **F02P 9/007** (2013.01 - KR); **F02P 23/04** (2013.01 - EP KR); **H01T 13/50** (2013.01 - EP KR); **H01T 19/00** (2013.01 - EP KR); **F02P 3/01** (2013.01 - EP); **F02P 9/007** (2013.01 - EP)

Citation (search report)

See references of WO 2018031504A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

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DOCDB simple family (application)

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