Title (en)

ARRANGEMENT FOR FIRING SPARK GAPS

Title (de)

ANORDNUNG ZUR ZÜNDUNG VON FUNKENSTRECKEN

Title (fr)

ENSEMBLE D'AMORÇAGE D'ÉCLATEURS

Publication

EP 3834260 A1 20210616 (DE)

Application

EP 19768780 A 20190911

Priority

- DE 102018125528 A 20181015
- DE 102019101448 A 20190121
- EP 2019074205 W 20190911

Abstract (en)

[origin: WO2020078622A1] The invention relates to an arrangement for firing spark gaps with a trigger electrode which is located on or in one of the main electrodes and is insulated with respect to this main electrode, wherein the trigger electrode can be electrically connected to a further main electrode via at least one voltage-switching or voltage-monitoring element, and there is an air gap between the trigger electrode and the further main electrode, wherein the trigger electrode forms a sandwich structure together with an insulating layer and a layer made of a material with lower conductivity than the material of one of the main electrodes. Furthermore, the insulating layer is embodied as a thin film or layer of coating agent and the layer is composed of the material with the lower conductivity is in contact with one of the main electrodes or rests on said electrode. According to the invention, in order to conduct away energetically weak overvoltage events without triggering the spark gap formed between the main electrodes, the insulating layer of the sandwich structure is interrupted outside the firing region and/or an electrical component which influences the triggering behaviour is connected between the trigger electrode and the associated main electrode.

IPC 8 full level

H01T 2/02 (2006.01); **H01T 1/16** (2006.01); **H01T 4/10** (2006.01)

CPC (source: EP KR US)

H01T 1/16 (2013.01 - KR); **H01T 2/02** (2013.01 - EP KR US); **H01T 4/10** (2013.01 - EP KR US); **H01T 15/00** (2013.01 - EP KR); H01T 1/16 (2013.01 - EP)

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

DOCDB simple family (publication)

DE 102019101448 B3 20200123; AU 2019362453 A1 20210429; AU 2019362453 B2 20230216; CN 112868151 A 20210528; EP 3834260 A1 20210616; EP 3834260 B1 20240110; EP 3834260 C0 20240110; JP 2022515695 A 20220222; JP 7268145 B2 20230502; KR 102691276 B1 20240805; KR 20210076006 A 20210623; US 12015249 B2 20240618; US 2021351572 A1 20211111; WO 2020078622 A1 20200423

DOCDB simple family (application)

DE 102019101448 A 20190121; AU 2019362453 A 20190911; CN 201980067820 A 20190911; EP 19768780 A 20190911; EP 2019074205 W 20190911; JP 2021516735 A 20190911; KR 20217011286 A 20190911; US 201917278323 A 20190911