

Title (en)
DEVICE AND METHOD FOR ELECTROSTATICALLY SPRAYING A LIQUID, FUEL INJECTOR COMPRISING SAID DEVICE, AND USES OF SAME

Title (de)
VORRICHTUNG UND VERFAHREN ZUM ELEKTROSTATISCHEN SPRÜHEN EINER FLÜSSIGKEIT, EINSPRITZVENTIL MIT DIESER VORRICHTUNG UND IHRE VERWENDUNG

Title (fr)
DISPOSITIF ET PROCÉDÉ DE PROJECTION ÉLECTROSTATIQUE D'UN LIQUIDE, INJECTEUR DE CARBURANT INCORPORANT CE DISPOSITIF ET UTILISATIONS DE CE DERNIER

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Application
EP 10765678 A 20100927

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Abstract (en)
[origin: WO2011039695A1] The invention relates to a device and a method for spraying, especially in the form of a layer of a liquid that can be electrically insulating at least by electrostatic forces, said device being designed to spray said liquid or to control oscillations therein by generating beats. The invention especially relates to a fuel injector for the combustion chamber of a heat engine comprising said device. Said spray device (1) comprises a nozzle that forms a channel (14) for supplying liquid to at least one opening (15) for spraying said liquid outside the device, and comprises, close to said opening, a first and a second electrode (7 and 12) arranged in such a way as to inject electric charges into the liquid. According to the invention, the edge (15) of the opening comprises, on one side of the channel, at least one projecting end (7a) of the first electrode (7) that projects into said channel and is to be brought into contact with the liquid, and on another side of the channel, an electrically insulating nozzle body (8) in which the second electrode (12) is embedded adjacently to the first electrode, in such a way that the intensity of the electrostatic field in the or each projecting end is maximised.

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