

Title (en)

METHOD AND DEVICE FOR CHANGING THE MOLECULAR COMPOSITION OF LIQUID HYDROCARBON FUEL

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ÄNDERN DER MOLEKULAREN ZUSAMMENSETZUNG VON FLÜSSIGEM KOHLENWASSERSTOFF-BRENNSTOFF

Title (fr)

PROCÉDÉ ET DISPOSITIF DE MODIFICATION DE LA COMPOSITION MOLÉCULAIRE D'UN CARBURANT HYDROCARBURE LIQUIDE

Publication

EP 2610475 A1 20130703 (EN)

Application

EP 10856487 A 20100826

Priority

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Abstract (en)

The invention relates to engine building, in particular to technologies for producing liquid fuel of improved quality. The invention makes it possible to improve the chemical structure of the fuel and to increase the combustion heat thereof. The method for changing the structure of the molecular composition of liquid hydrocarbon fuel under the action of an electric field comprises placing the fuel between electrodes to which an electric potential is fed. The parameters of the alternating electric field and the fuel mass in the treatment zone are determined according to an empirical equation. The device comprises a body with electrodes for acting with an electric field on the stream of fuel in a treatment chamber. The body is one of the electrodes, and the other internal electrode is placed in the treatment chamber and is arranged coaxially with respect to the body. The electrode power source is in the form of an alternating voltage generator. The internal electrode is hollow. An additional electrode which is electrically connected to the body is placed coaxially within the internal electrode.

IPC 8 full level

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