

Title (en)

DEVICE FOR THE FORMATION OF AN INFLAMMABLE MIXTURE OF LIQUID FUEL AND COMBUSTION AIR

Publication

**EP 0066875 B1 19871028 (DE)**

Application

**EP 82104974 A 19820607**

Priority

DE 3122770 A 19810609

Abstract (en)

[origin: US4486362A] A process and an arrangement for the formation of an ignitable mixture from liquid fuel and combustion air, wherein preheated combustion air is conducted with a flow chamber along a surface which is moistened with fuel for take-up of fuel. In the process and arrangement, combustion air is conveyed into the flow chamber in the flow direction of the fuel which streams off the surface moistened by the fuel under the effect of gravity. Achieved hereby is an intensive contacting between the combustion air and the fuel. The fuel is dosed in excess so as to constantly afford a sufficient quantity of fuel for vaporization. During the through flow of the combustion air, there is formed, in the contact with the fuel, a saturated fuel-air mixture in conformance with the temperature of the preheated combustion air and the temperature of the fuel. Concurrently, care is taken that the trickling film of the fuel which is formed by gravitation as well as the drag effect exerted by the combustion air passing through the flow chamber can freely exit from the flow chamber at the foot of the surface moistened by fuel, to the extent in which the fuel is not taken up through vaporation by the combustion air in the flow chamber.

IPC 1-7

**F23K 5/00**

IPC 8 full level

**F23D 11/40** (2006.01); **F23K 5/00** (2006.01); **F23K 5/22** (2006.01)

CPC (source: EP US)

**F23K 5/22** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH FR GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0066875 A2 19821215**; **EP 0066875 A3 19840822**; **EP 0066875 B1 19871028**; AT E30463 T1 19871115; DE 3122770 A1 19821230; DE 3122770 C2 19850314; JP S585 A 19830105; US 4486362 A 19841204

DOCDB simple family (application)

**EP 82104974 A 19820607**; AT 82104974 T 19820607; DE 3122770 A 19810609; JP 9790982 A 19820609; US 38579982 A 19820607