Title (en)

DUCTED FUEL INJECTION WITH IGNITION ASSIST

Title (de)

KANALISIERTE KRAFTSTOFFEINSPRITZUNG MIT ZÜNDUNGSASSISTENT

Title (fr)

INJECTION DE CARBURANT CANALISÉE AVEC ASSISTANCE À L'ALLUMAGE

Publication

EP 3433485 A1 20190130 (EN)

Application

EP 17770736 A 20170112

Priority

- US 201662311753 P 20160322
- US 201615364002 A 20161129
- US 2017013187 W 20170112

Abstract (en)

[origin: WO2017164964A1] Various technologies presented herein relate to enhancing mixing inside a combustion chamber to form one or more locally premixed mixtures comprising fuel and charge-gas to enable minimal, or no, generation of soot and/or other undesired emissions during ignition and subsequent combustion of the locally premixed mixtures. To enable sufficient mixing of the fuel and charge-gas, a jet of fuel can be directed to pass through a bore of a duct causing charge-gas to be drawn into the bore creating turbulence to mix the fuel and the drawn charge-gas. The duct can be located proximate to an opening in a tip of a fuel injector. An ignition assist component can be located downstream of the duct to facilitate ignition of the fuel/charge-gas mixture.

IPC 8 full level

F02P 23/00 (2006.01); **F02P 23/02** (2006.01); **F02P 23/04** (2006.01)

CPC (source: EP KR)

F02B 23/0651 (2013.01 - EP); **F02B 23/0657** (2013.01 - EP); **F02B 23/101** (2013.01 - EP); **F02M 57/06** (2013.01 - EP); **F02M 61/166** (2013.01 - EP); **F02M 61/1806** (2013.01 - EP); **F02P 15/006** (2013.01 - EP); **F02P 23/02** (2013.01 - KR); **F02P 23/04** (2013.01 - EP KR); F02B 19/18 (2013.01 - EP); F02M 2200/90 (2013.01 - EP); F02P 13/00 (2013.01 - EP); Y02T 10/12 (2013.01 - EP)

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Designated extension state (EPC)

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DOCDB simple family (publication)

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