

Title (en)

Improved fuel staging process for low NOx operations

Title (de)

Verbesserte gestufte Brennstoffversorgung für Betrieb mit niedrigem NOx-Ausstoß

Title (fr)

Alimentation en carburant étagée pour utilisations à faibles émissions de NOx

Publication

**EP 1531303 B1 20110323 (EN)**

Application

**EP 04026942 A 20041112**

Priority

US 71323203 A 20031114

Abstract (en)

[origin: EP1531303A1] A method for diluting a fuel to reduce NOx uses a fuel dilution device, which includes: a first conduit having an inlet and an outlet, the first conduit adapted to transmit a stream of a fuel entering the inlet and exiting the outlet at a first thermodynamic state and a first fuel index; and a second conduit having an intake and an outtake, the second conduit adapted to transmit a stream of a fluid entering the intake and exiting the outtake at a second/different thermodynamic state and a second fuel index different from the first fuel index by at least about 0.1, whereby a potential for mixing exists between the two streams exiting the outlet and the outtake, and at least some of the fuel mixes with at least some of the fluid near the outlet and the outtake, thereby generating a diluted fuel stream having an intermediate fuel index. <IMAGE>

IPC 8 full level

**F23C 6/04** (2006.01); **F23L 7/00** (2006.01); **F23C 99/00** (2006.01); **F23D 14/24** (2006.01); **F23D 14/58** (2006.01); **F23D 17/00** (2006.01); **F23D 99/00** (2010.01); **F23K 5/00** (2006.01); **F23N 1/00** (2006.01); **F23R 3/28** (2006.01)

CPC (source: EP KR)

**F23C 6/04** (2013.01 - KR); **F23K 5/007** (2013.01 - EP); **F23L 7/00** (2013.01 - EP); **F23R 3/28** (2013.01 - KR); **F23C 2202/20** (2013.01 - EP); **F23K 2900/05004** (2013.01 - EP); **F23L 2900/07002** (2013.01 - EP); **F23L 2900/07009** (2013.01 - EP)

Citation (examination)

EP 1443271 A1 20040804 - AIR PROD & CHEM [US]

Cited by

DE102004037620C5; CN104067049A; WO2007048429A1; US9134025B2; US9664381B2

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**EP 1531303 A1 20050518**; **EP 1531303 B1 20110323**; AT E503152 T1 20110415; CA 2487146 A1 20050514; CA 2487146 C 20090120; CN 100356104 C 20071219; CN 1616884 A 20050518; DE 602004031916 D1 20110505; ES 2360589 T3 20110607; JP 2005147656 A 20050609; JP 4299225 B2 20090722; KR 100738863 B1 20070716; KR 20050046606 A 20050518; SG 112091 A1 20050629

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