

Title (en)
EXHAUST GAS CLEANING SYSTEM FOR DIESEL ENGINES

Publication
EP 0307414 B1 19900509 (DE)

Application
EP 87903847 A 19870531

Priority
• LU 86448 A 19860530
• LU 86671 A 19861118

Abstract (en)
[origin: WO8707324A1] Exhaust gas cleaning system for diesel engines, with a filter unit to separate soot from the exhaust gases and with a regenerating device for the filter unit. The filter unit is provided with filter tubes (2) which on one side are closed. In this way, the exhaust gases can be fed in at the other side and penetrate the filter partition walls. During this, the soot is deposited on the inner surface of the filter tubes (2). A burner (11) is provided to produce the combustion gases for the soot, whereby the combustion gases are, as a result of suitable arrangements, made to impinge on only one sector of the filter unit at a time. The inlet (15) and outlet (17) of the exhaust gases are so selected that the cleaned exhaust gases flow around the filter tubes (2), which are subjected to regeneration. The flow direction of the exhaust gases can also be reversed, so that the exhaust gases first flow around the filter tubes (2) and reach, via the partition walls, the interior, and flow from there via the tube openings to the outlet. During this, the soot is deposited on the outside of the filter tubes.

IPC 1-7
F01N 3/02

IPC 8 full level
F01N 3/021 (2006.01); **F01N 3/022** (2006.01); **F01N 3/025** (2006.01); **F01N 3/035** (2006.01); **F01N 3/28** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP US)
F01N 3/0214 (2013.01 - EP US); **F01N 3/022** (2013.01 - EP US); **F01N 3/025** (2013.01 - EP US); **F01N 3/035** (2013.01 - EP US);
F01N 3/2882 (2013.01 - EP US); **F01N 2250/02** (2013.01 - EP US); **F01N 2330/06** (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US);
Y10S 55/30 (2013.01 - EP US)

Citation (examination)
• PATENT ABSTRACTS OF JAPAN vol. 008, no. 197 (M - 324)<1634> 11 September 1984 (1984-09-11)
• PATENT ABSTRACTS OF JAPAN vol. 008, no. 166 (M - 314)<1603> 2 August 1984 (1984-08-02)
• PATENT ABSTRACTS OF JAPAN vol. 009, no. 124 (M - 383)<1847> 29 May 1985 (1985-05-29)

Cited by
DE4415507A1; DE3922019A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 8707324 A1 19871203; AU 7517387 A 19871222; EP 0307414 A1 19890322; EP 0307414 B1 19900509; US 4925463 A 19900515

DOCDB simple family (application)
DE 8700245 W 19870531; AU 7517387 A 19870531; EP 87903847 A 19870531; US 31486889 A 19890130