

Title (en)
Exhaust braking device for a 4-stroke internal piston combustion engine

Title (de)
Motorstaubremsvorrichtung einer 4-Takt-Hubkolbenbrennkraftmaschine

Title (fr)
Dispositif de frein moteur pour un moteur à combustion interne à 4 temps

Publication
EP 1526257 A3 20081022 (DE)

Application
EP 04023313 A 20040930

Priority
DE 10349641 A 20031024

Abstract (en)
[origin: EP1526257A2] The parking brake device (11) within the engine has only one of the two exhaust valves (2, 3) allocated to each cylinder (1), with the other being controlled in the conventional manner. The device includes a control piston (30) built into the valve bridge (20) and controlled by a compression spring (32) pressing it in the direction of the exhaust valve.

IPC 8 full level
F01L 13/06 (2006.01); **F01N 5/04** (2006.01); **F01L 1/26** (2006.01); **F01N 13/08** (2010.01); **F02D 9/06** (2006.01); **F02D 13/02** (2006.01)

CPC (source: EP US)
F01L 13/065 (2013.01 - EP US); **F01L 1/146** (2013.01 - EP US); **F01L 1/181** (2013.01 - EP US); **F01L 1/26** (2013.01 - EP US);
F01L 2820/02 (2013.01 - EP US)

Citation (search report)

- [DA] EP 0736672 B1 19980408 - STEYR NUTZFAHRZEUGE [AT]
- [A] US 2002174654 A1 20021128 - YANG ZHOU [US]
- [A] EP 1156193 A1 20011121 - HINO JIDOSHA KABUSHIKI KAISHA [JP], et al
- [A] WO 0242612 A1 20020530 - SCANIA CV ABP [SE], et al
- [A] JP H09317421 A 19971209 - JIDOSHA BUHIN KOGYO KK
- [A] EP 1219792 A2 20020703 - CATERPILLAR INC [US]

Cited by
EP2143896A1; EP2305967A1; EP2305968A1; EP2143895A1; CN112065524A; EP2444602A1; EP2803826A1; AT511048A1; AT511048B1; US10526926B2; DE102008061412A1; DE102009048143A1; US8161936B2; DE102009048104A1; US8240288B2; EP2679787A1; DE102012012875A1; DE102008032774A1; EP2143894A1; DE102008032775A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL HR LT LV MK

DOCDB simple family (publication)
EP 1526257 A2 20050427; **EP 1526257 A3 20081022**; **EP 1526257 B1 20090812**; AT E439506 T1 20090815; CN 100376767 C 20080326; CN 1609414 A 20050427; DE 10349641 A1 20050519; DE 502004009879 D1 20090924; JP 2005127329 A 20050519; JP 4541831 B2 20100908; PL 1526257 T3 20100129; RU 2004131034 A 20060410; RU 2301370 C2 20070620; US 2005087170 A1 20050428; US 7013867 B2 20060321

DOCDB simple family (application)
EP 04023313 A 20040930; AT 04023313 T 20040930; CN 200310123153 A 20031115; DE 10349641 A 20031024; DE 502004009879 T 20040930; JP 2004310220 A 20041025; PL 04023313 T 20040930; RU 2004131034 A 20041022; US 97154804 A 20041022