

Title (en)

PISTON COMPRESSOR PRODUCING AN INTERNAL COOLING AIR FLOW IN THE CRANKCASE

Title (de)

KOLBENKOMPRESSOR MIT EINEM INTERNEN KÜHLLUFTSTROM IM KURBELGEHÄUSE

Title (fr)

COMPRESSEUR A PISTON PRODUISANT UN FLUX D'AIR DE REFROIDISSEMENT INTERNE DANS LE CARTER DE VILEBREQUIN

Publication

**EP 1789681 B1 20090729 (DE)**

Application

**EP 05778871 A 20050831**

Priority

- EP 2005009367 W 20050831
- DE 102004042944 A 20040902

Abstract (en)

[origin: US8308447B2] A compressor piston including a piston in a cylinder; a connecting rod connecting the piston to a crankshaft in a crankcase by a roller bearing; and an air inlet line and an air outlet line in a cylinder head. A tube connection between the air inlet line and the crankcase transports cooling air from the inlet line to the crankcase. The tube connection is exterior the cylinder. An inlet valve is connected to the tube connection which opens when the pressure in the crankcase is less than the pressure in the air inlet line; and an outlet valve is connected to the crankcase which opens when the pressure in the crankcase exceeds a predetermined value.

IPC 8 full level

**F04B 39/06** (2006.01); **F04B 39/10** (2006.01)

CPC (source: EP US)

**F04B 39/06** (2013.01 - EP US); **F04B 39/10** (2013.01 - EP US); **F04B 39/121** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006024510 A1 20060309**; AT E438036 T1 20090815; BR PI0514877 A 20080624; BR PI0514877 B1 20180313; CA 2578843 A1 20060309; CN 100501160 C 20090617; CN 101010511 A 20070801; DE 102004042944 A1 20060323; DE 102004042944 B4 20090910; DE 502005007800 D1 20090910; EP 1789681 A1 20070530; EP 1789681 B1 20090729; HK 1110374 A1 20080711; MX 2007002495 A 20071010; RU 2007111955 A 20081010; RU 2362051 C2 20090720; US 2007292289 A1 20071220; US 8308447 B2 20121113

DOCDB simple family (application)

**EP 2005009367 W 20050831**; AT 05778871 T 20050831; BR PI0514877 A 20050831; CA 2578843 A 20050831; CN 200580029580 A 20050831; DE 102004042944 A 20040902; DE 502005007800 T 20050831; EP 05778871 A 20050831; HK 08100737 A 20080121; MX 2007002495 A 20050831; RU 2007111955 A 20050831; US 57452905 A 20050831