

Title (en)

DECOMPRESSOR FOR 4-STROKE CYCLE INTERNAL COMBUSTION ENGINES

Title (de)

DEKOMPRESSOR FÜR VIERTAKT-VERBRENNUNGSMOTOREN

Title (fr)

DECOMPRESSEUR POUR MOTEURS A COMBUSTION INTERNE A QUATRE TEMPS

Publication

**EP 1447530 A4 20080409 (EN)**

Application

**EP 02700715 A 20020222**

Priority

- JP 0201616 W 20020222
- JP 2001086780 A 20010326

Abstract (en)

[origin: EP1447530A1] In a 4 stroke cycle internal combustion engine 1 having intake and exhaust valves 9, 10 opened and closed by respective intake and exhaust cams 27, 28 made integral with a camshaft 13, the engine comprises a decompression cam 38 fitted on the camshaft 13 so as to rotate freely, a one-way clutch 29 fitted on the camshaft 13 capable of transmitting reverse rotation torque to the decompression cam 38 only when the camshaft 13 rotates in reverse, a torque limiter 40 inserted between the decompression cam 38 and the one-way clutch 29, and decompression cam stoppers 42, 43 provided on a fixed portion engaging with an engaging section 41 formed on the decompression cam 38 for stopping rotation of the decompression cam 38 at respective positions in normal rotational direction and reverse rotational direction. A lift of a cam section 38a of the decompression cam 38 is higher than a base circle of the exhaust cam 28 and lower than a maximum lift of a cam section 28a of the exhaust cam 28. The exhaust valve 10 is not opened by the decompression cam when the camshaft 13 rotates normally and the decompression cam stopper 43 engages with the engaging section. A decompression device that is simple in construction, small-sized and of low-cost is provided. <IMAGE>

IPC 8 full level

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CPC (source: EP KR)

**F01L 1/022** (2013.01 - EP); **F01L 13/08** (2013.01 - EP KR); **F01L 13/085** (2013.01 - EP); **F02N 19/004** (2013.01 - EP);  
**F01L 2301/00** (2020.05 - EP)

Citation (search report)

- [A] JP S62261610 A 19871113 - HONDA MOTOR CO LTD
- [A] JP S6444307 U 19890316
- [A] JP S63162911 A 19880706 - HONDA MOTOR CO LTD
- [A] GB 2190142 A 19871111 - HONDA MOTOR CO LTD
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- [A] EP 1046813 A1 20001025 - HONDA MOTOR CO LTD [JP]
- See references of WO 02077422A1

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BR 0204676 B1 20110125; CN 1263943 C 20060712; CN 1460146 A 20031203; DE 60230541 D1 20090205; ES 2317988 T3 20090501;  
IL 152766 A0 20030624; JP 2002285812 A 20021003; JP 4338333 B2 20091007; KR 100813746 B1 20080313; KR 20030041864 A 20030527;  
MY 135269 A 20080331; TR 200202556 T1 20030521; TW 515863 B 20030101; WO 02077422 A1 20021003

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MY PI20021052 A 20020325; TR 200202556 T 20020222; TW 91103950 A 20020304