

Title (en)
Reciprocating piston engine

Title (de)
Hubkolbenmaschine

Title (fr)
Machine a piston elevateur

Publication
EP 1553291 A3 20080312 (DE)

Application
EP 04405737 A 20041129

Priority
DE 10356373 A 20031203

Abstract (en)
[origin: EP1553291A2] The engine (1) has a control ring (16) engaged in the lateral recess formed on each piston (2) running in the direction of a secant, and adapted to a cross-sectional shape of the control ring. The lateral recess bounds a base wall of the piston. The control ring is arranged in controlling sliding contact via an inner control face with the base wall. The inward stroke of the pistons is controlled by the control ring. A cam (11) of an eccentric shaft controls the outward stroke of the pistons. The shaft extends through a casing body (4) of an engine casing which encloses the cylinders (3).

IPC 8 full level
F04B 1/053 (2006.01); **F04B 27/04** (2006.01)

CPC (source: EP US)
F04B 1/053 (2013.01 - EP US)

Citation (search report)

- [AD] DE 1453663 A1 19690313 - TEVES GMBH ALFRED
- [A] DE 19948445 A1 20010412 - CONTINENTAL TEVES AG & CO OHG [DE]
- [A] GB 1216763 A 19701223 - TEVES GMBH ALFRED [DE]
- [A] GB 2225614 A 19900606 - TEVES GMBH ALFRED [DE]

Cited by
WO2013139468A1; CN104334876A; DE102012005297A1; US9771930B2; DE102020211680A1; WO2022058321A1; EP1705437A1

Designated contracting state (EPC)
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AL HR LT LV MK YU

DOCDB simple family (publication)

EP 1553291 A2 20050713; EP 1553291 A3 20080312; EP 1553291 B1 20090311; AT E425358 T1 20090315; CN 1651720 A 20050810;
CN 1651720 B 20101013; DE 10356373 A1 20050707; DE 502004009129 D1 20090423; JP 2005163792 A 20050623; JP 4523394 B2 20100811;
US 2005120984 A1 20050609; US 7273004 B2 20070925

DOCDB simple family (application)

EP 04405737 A 20041129; AT 04405737 T 20041129; CN 200410082239 A 20041203; DE 10356373 A 20031203;
DE 502004009129 T 20041129; JP 2004351322 A 20041203; US 465504 A 20041203