

Title (en)

Method for the reduction of deposits on valves in gas suction devices

Title (de)

Verfahren zur Reduzierung von Ablagerungen an Klappen in Gasansaugsystemen

Title (fr)

Procédé de réduction de dépôts sur les vannes dans les systèmes d'admission de gaz

Publication

EP 1321649 A1 20030625 (DE)

Application

EP 01130762 A 20011222

Priority

EP 01130762 A 20011222

Abstract (en)

Process for controlling one or more flaps (6, 10) in air intake systems (9) of reciprocating internal combustion engines (1) comprises operating the flaps during operation of the engine in a region from 0 (fully closed) to 90 degrees (fully opened), opening the flaps in a direction of rotation, and closing the flaps in the opposite direction. The flaps are opened from 0 degrees for a short time against the direction of rotation. <??>Preferred Features: The flaps are periodically opened against the direction of rotation. The flaps are opened shortly before starting the engine or before and/or shortly after switching off the engine.

Abstract (de)

Bei Hubkolbenbrennkraftmaschinen kann es im Laufe des Betriebes zu Ablagerungen vor Klappen im Luftansaugsystem kommen. Diese Ablagerungen verringern den Querschnitt der Luftansaugsysteme insbesondere bei nur geringen Öffnungswinkeln der Klappen. Durch kurzzeitiges Öffnen der Klappen entgegen der im Betrieb üblichen Bewegungsrichtung läßt sich ein Aufbau von Ablagerungen verhindern oder zumindest deutlich verringern. <IMAGE>

IPC 1-7

F02D 9/10; **F02D 11/10**

IPC 8 full level

F02D 9/10 (2006.01); **F02D 11/10** (2006.01); **F02D 9/02** (2006.01)

CPC (source: EP)

F02D 9/1095 (2013.01); **F02D 11/10** (2013.01); **F02D 2009/0247** (2013.01); **F02D 2009/025** (2013.01); **F02D 2009/0277** (2013.01); **F02D 2011/108** (2013.01)

Citation (applicant)

- DE 19638503 A1 19970327 - HITACHI LTD [JP], et al
- DE 19925202 A1 19991216 - AISAN IND [JP], et al

Citation (search report)

- [X] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 20 10 July 2001 (2001-07-10)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 20 10 July 2001 (2001-07-10)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 06 22 September 2000 (2000-09-22)

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CN104763545A; US8402941B2; WO2008099282A3

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