

Title (en)

Rotary positive displacement control system and apparatus

Title (de)

Steuerungssystem und -vorrichtung für eine Rotationsverdrängung

Title (fr)

Système et appareil de commande de déplacement positif rotatif

Publication

**EP 1887184 A3 20090805 (EN)**

Application

**EP 07113270 A 20070726**

Priority

- CN 200610104010 A 20060731
- US 58594206 A 20061025

Abstract (en)

[origin: EP1887184A2] A rotary positive displacement control system and apparatus includes a transmission assembly, at least a compression assembly and buffer assembly, and an expansion assembly, the buffer assembly disposed between the compression and expansion assembly. The compression assembly includes multiple compression rotors with lobes intermeshing with each other, and the expansion assembly including expansion rotors with lobes intermeshing with each other. An intake and exhaust port respectively located at the compression assembly and expansion assembly. The buffer assembly has a buffer chamber being able to efficiently lead compressed gases to the expansion assembly; meanwhile, residual gases can be discharged from a first and second exhaust slots both disposed on the expansion assembly. The buffer chamber can adjust air compression ratio during process of compression to completely mix vortices and fuel generated from a high-pressure air stream; after explosions and expansion, power output is transmitted through transmission shafts directly.

IPC 8 full level

**F01C 1/08** (2006.01); **F01C 11/00** (2006.01); **F02B 53/08** (2006.01)

CPC (source: EP)

**F01C 11/004** (2013.01); **F01C 1/123** (2013.01)

Citation (search report)

- [X] WO 9616251 A1 19960530 - KALOC MILAN [CZ], et al
- [X] DE 20107293 U1 20020221 - STEINFURTH EUGEN [DE]
- [X] EP 0860585 A2 19980826 - BREUTNER GEORG HEINRICH [DE]
- [X] DE 19527277 A1 19960801 - LIPINSKI JOSEF [DE]

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Designated contracting state (EPC)

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DOCDB simple family (publication)

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