

Title (en)
Piston type compressor

Title (de)
Kolbenkompressor

Title (fr)
Compresseur à pistons

Publication
EP 1445489 A3 20041027 (EN)

Application
EP 04002553 A 20040205

Priority
JP 2003030890 A 20030207

Abstract (en)
[origin: EP1445489A2] A piston type compressor has introducing passages, each extending from one of compression chambers, and a cylindrical rotary valve located between a suction pressure zone and the introducing passages. An opening of each of the introducing passages has an advanced area a part of that is inclined relative to an axial direction and a circumferential direction of the rotary valve. The rotary valve has a residual gas bypass passage. The residual gas bypass passage connects a high pressure introducing passage through the introducing passages, which communicates with the high pressure compression chamber after the discharge stroke ends, to a low pressure introducing passage, which communicates with the low pressure compression chamber. When a high pressure opening of the residual gas bypass passage starts to be connected with the opening of one of the introducing passages, an advanced area of the high pressure opening of the residual gas bypass passage extends along the advanced area of the opening of the introducing passage. <IMAGE>

IPC 1-7
F04B 49/03; **F04B 27/10**

IPC 8 full level
F04B 27/08 (2006.01); **F04B 27/10** (2006.01)

CPC (source: EP US)
F04B 27/1018 (2013.01 - EP US)

Citation (search report)
• [AD] US 5501579 A 19960326 - KIMURA KAZUYA [JP], et al
• [A] DE 4333633 A1 19940407 - TOYODA AUTOMATIC LOOM WORKS [JP]
• [A] US 5232349 A 19930803 - KIMURA KAZUYA [JP], et al
• [A] US 5380165 A 19950110 - KIMURA KAZUYA [JP], et al

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1445489 A2 20040811; **EP 1445489 A3 20041027**; JP 2004239210 A 20040826; US 2004179951 A1 20040916

DOCDB simple family (application)
EP 04002553 A 20040205; JP 2003030890 A 20030207; US 77369404 A 20040205