

Title (en)
VARIABLE COMPRESSION PISTON ASSEMBLY

Title (de)
KOLBENZUORDNUNG MIT VARIABLER KOMPRESSION

Title (fr)
ENSEMBLE DE PISTONS A COMPRESSION VARIABLE

Publication
EP 1015744 A4 20040303 (EN)

Application
EP 98948218 A 19980915

Priority
• US 9819164 W 19980915
• US 92904297 A 19970915

Abstract (en)
[origin: WO9914471A1] A variable compression piston assembly (300) includes a plurality of pistons, e.g., double ended pistons (330, 332), a rotating member, e.g., a flywheel (322) or a zero-stroke pivot member, coupled to the transition arm (310) and configured for movement relative to the transition arm (310) along the axis of rotation of the rotating member (322). The movement of the rotating member (322) relative to the transition arm (310) changes the compression ratio of the piston assembly (330, 332). The transition arm (310) is coupled to each of the double ended pistons (330, 332) at approximately a center of each piston (330, 332). The movement of the rotating member (322) relative to the transition arm (310) changes the compression ratio and displacement of each double ended piston (330, 332).

IPC 1-7
F02B 75/04; **F02B 75/26**; **F01B 3/00**; **F01B 3/10**; **F04B 1/14**; **F04B 1/22**; **F04B 1/32**; **F16F 15/26**; **F16H 23/06**; **F16H 23/08**

IPC 8 full level
F02B 75/04 (2006.01); **F01B 1/08** (2006.01); **F01B 3/00** (2006.01); **F01B 9/04** (2006.01); **F01B 31/14** (2006.01); **F02B 75/26** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP KR US)
F02B 75/04 (2013.01 - KR); **F02B 75/26** (2013.01 - EP US); **F02B 2075/025** (2013.01 - EP US)

Citation (search report)
• [XA] DE 1451926 A1 19700305 - PATTAS DR ING KONSTANTIN
• [X] US 5007385 A 19910416 - KITAGUCHI HIROMASA [JP]
• [A] FR 1416219 A 19651029
• [A] US 5553582 A 19960910 - SPEAS DANNY E [US]
• [A] US 4174684 A 19791120 - HALLMANN ECKHARD P [US], et al
• See also references of WO 9914471A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9914471 A1 19990325; AT E397149 T1 20080615; CA 2300111 A1 19990325; CA 2300111 C 20090526; CN 1214180 C 20050810; CN 1336982 A 20020220; DE 69839565 D1 20080710; EP 1015744 A1 20000705; EP 1015744 A4 20040303; EP 1015744 B1 20080528; JP 2001516837 A 20011002; JP 4260363 B2 20090430; KR 100599138 B1 20060712; KR 20010023889 A 20010326; RU 2219358 C2 20031220; US 6019073 A 20000201

DOCDB simple family (application)
US 9819164 W 19980915; AT 98948218 T 19980915; CA 2300111 A 19980915; CN 98809064 A 19980915; DE 69839565 T 19980915; EP 98948218 A 19980915; JP 2000511989 A 19980915; KR 20007002573 A 20000310; RU 2000109597 A 19980915; US 92904297 A 19970915