

Title (en)

Scroll compressor with dual pocket axial compliance

Title (de)

Spiralverdichter mit Doppelkammer zum axialen Ausgleich

Title (fr)

Compresseur à volutes avec chambre double de compensation axiale

Publication

EP 0534891 B1 19960417 (EN)

Application

EP 92630087 A 19920917

Priority

US 76369191 A 19910923

Abstract (en)

[origin: EP0534891A1] Improved axial compliance in a scroll compressor 10 between a fixed scroll 11 and an orbiting scroll 13 is achieved by providing at least one dynamic back pressure chamber 25 disposed behind the orbiting scroll 13. A pressurized fluid is bled from a selected one of compression pockets 19 through a port 21 formed in the orbiting scroll 13 into the dynamic back chamber 25 to provide varying on sub-cycle basis back pressure to reduce friction between the fixed and orbiting scrolls. A static back pressure chamber 27, also disposed behind the orbiting scroll 13, may be provided into which pressurized fluid is bled from a selected one of the compression pockets 19 to provide an additional back pressure on the scroll 13 which is substantially constant over the cycle. <IMAGE>

IPC 1-7

F04C 27/00; **F04C 18/02**

IPC 8 full level

F04C 18/02 (2006.01); **F04C 27/00** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP KR)

F04C 18/02 (2013.01 - KR); **F04C 27/005** (2013.01 - EP)

Cited by

EP1059448A3; AU2009272155B2; EP0865576A4; US11111921B2; US6428295B1; US11624366B1; US11994128B2; US10995754B2; US11359631B2; US11732713B2

Designated contracting state (EPC)

CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0534891 A1 19930331; **EP 0534891 B1 19960417**; AU 2529592 A 19930325; AU 650570 B2 19940623; BR 9203702 A 19930420; DE 69209955 D1 19960523; DE 69209955 T2 19961024; JP 3004483 B2 20000131; JP H05202865 A 19930810; KR 930006329 A 19930421; KR 960004246 B1 19960328; MX 9205379 A 19930730; TW 223674 B 19940511

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EP 92630087 A 19920917; AU 2529592 A 19920922; BR 9203702 A 19920923; DE 69209955 T 19920917; JP 25450292 A 19920924; KR 920017230 A 19920922; MX 9205379 A 19920922; TW 81107275 A 19920916