

Title (en)

Displacement control structure of variable displacement type compressor

Title (de)

Struktur eines Verdrängungskontrollsysteams für einen variablen Verdrängungskompressor

Title (fr)

Structure d'un système de contrôle de capacité pour un compresseur à capacité variable

Publication

**EP 1028253 A3 20010103 (EN)**

Application

**EP 00102697 A 20000209**

Priority

JP 3289399 A 19990210

Abstract (en)

[origin: EP1028253A2] A variable displacement compressor includes a bleed passage (31) for connecting a crank chamber (15) to a suction chamber (24) and a supply passage (32) for connecting the crank chamber (15) to a discharge chamber (25). The supply passage (32) includes a fixed restriction (33). A buffer chamber (34) is located in the supply passage (32) between the fixed restriction (33) and the crank chamber (15). A first valve element (44) selectively opens and closes the supply passage (32) between the buffer chamber (34) and the crank chamber (15). A solenoid (42) actuates the first valve element (44) in response to a current. A second valve element (48) opens and closes the bleed passage (31). When the first valve element (44) closes the supply passage (32), the second valve element (48) opens the bleed passage (31). When the first valve element (44) is open, the second valve element (48) operates in accordance with the difference between the pressure in the crank chamber (15) and the pressure in the suction chamber. In this compressor, the displacement can be changed rapidly, the efficiency of the compressor is relatively high, and the pressure in the crank chamber (15) is limited. <IMAGE>

IPC 1-7

**F04B 27/18**

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CPC (source: EP)

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Citation (search report)

- [XY] US 5332365 A 19940726 - TAGUCHI YUKIHIKO [JP]
- [YA] DE 19733099 A1 19980212 - TOYODA AUTOMATIC LOOM WORKS [JP]
- [Y] EP 0864749 A2 19980916 - TOYODA AUTOMATIC LOOM WORKS [JP], et al
- [Y] EP 0498552 A1 19920812 - SANDEN CORP [JP]
- [A] US 5282329 A 19940201 - TERANISHI TOSHIHIRO [JP]

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