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(54) Piston type compressor

(57) 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.

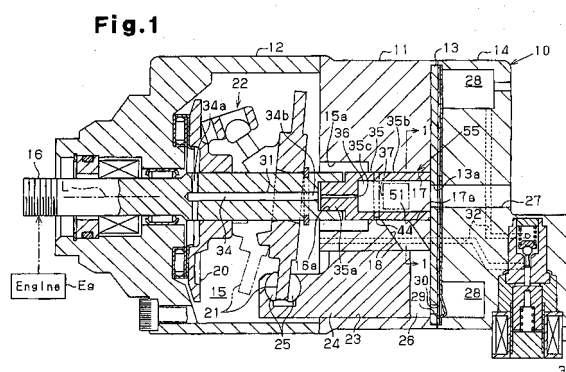


Fig. 1



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| | | | TECHNICAL FIELDS SEARCHED (Int.Cl.7) |
| | | | F04B |
| The present search report has been drawn up for all claims | | | |
| Place of search MUNICH | | Date of completion of the search 6 September 2004 | Examiner Grüchtel, F |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p> | | | |

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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