

Title (en)
Compressor apparatus

Title (de)
Verdichtungsgerät

Title (fr)
Appareil de compression

Publication
EP 1288503 A1 20030305 (EN)

Application
EP 01307041 A 20010817

Priority
EP 01307041 A 20010817

Abstract (en)
A compressor apparatus includes a compressor (100) with an intake pipe (102) and a discharge pipe (103), a plurality of branch pipes (104) that extend from and that are in fluid communication with the discharge pipe (103), and a plurality of chambers (131, 231, 331, 431, 531, 631) that are in fluid communication with the branch pipes (104), respectively. Each of the chambers (131, 231, 331, 431, 531, 631) is in fluid communication with the intake pipe (102) via a return flow pipe unit (20). A plurality of pressure sensors (141, 241) are disposed respectively at the chambers (131, 231, 331, 431, 531, 631), and are set respectively at different discharge pressures. When the fluid pressure in one of the chambers (131, 231, 331, 431, 531, 631) reaches the corresponding discharge pressure, the fluid flows from the one of the chambers (131, 231, 331, 431, 531, 631) into the intake pipe (102) via the corresponding return flow pipe unit (20) so as to return to the compressor (100) for performing further compression of the fluid. Each of the branch pipes (104) and the return flow pipe units (20) is equipped with a control valve unit (121, 211, 232) that is controlled by a control unit (7) so that the fluid can flow through the chambers (131, 231, 331, 431, 531, 631) in a sequence that increases in the magnitude of the discharge pressures. <IMAGE>

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CPC (source: EP)
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Citation (search report)
• [A] US 4480654 A 19841106 - FIREY JOSEPH C [US]
• [A] WO 0019105 A1 20000406 - HONEYWELL INC [US], et al
• [A] EP 0381562 A1 19900808 - NODET GOUGIS [FR]

Designated contracting state (EPC)
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