

Title (en)

A piston air or gas compressor, preferably for filling divers' breathing air cylinders.

Title (de)

Kolbenverdichter zum Füllen von Taucheratemluftzylinder.

Title (fr)

Compresseur à piston pour le remplissage des cylindres à air destinés à l'aspiration des plongeurs.

Publication

EP 0000611 A1 19790207 (EN)

Application

EP 78200115 A 19780720

Priority

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Abstract (en)

A piston compressor preferably for producing compressed air at high pressure for the filling of divers' breathing air cylinders, comprising a cylinder and a plunger type piston provided with sealing rings at both ends thereof, these respective piston ends operating in cylinder bore portions of unequal diameters, the cylinder having stationary sealing rings located between these two bore portions for sealingly engaging the piston wall and thus divide the ring cylindrical space between the sealing rings of the opposed piston ends into two individual compression chambers usable as consecutive compression stages. A first compressing stage of large volume can be provided between the piston top and the cylinder end, and the compressor may thus operate as a three stage compressor with the use of a simple and robust cylinder and piston arrangement.

IPC 1-7

F04B 25/02; **F04B 39/04**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- DE 13273 C
- FR 349378 A 19050526 - CHARLES GUILLAUME ELWELL [FR]
- US 2486598 A 19491101 - HOCKENS GRANT E
- DE 2658793 A1 19770714 - COMMW SCIENT IND RES ORG
- [A] GB 190910278 A 19100303 - STONE LOUIS GEORGE [GB]

Cited by

US5769615A; US5540562A; EP0308767A1; CH673508A5; US4920862A; EP2652330B1

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