

Title (en)
INTEGRATED VALVE CYLINDER

Publication
EP 0275242 A3 19890222 (EN)

Application
EP 88850003 A 19880112

Priority
SE 8700087 A 19870113

Abstract (en)
[origin: EP0275242A2] The disclosure relates to an integrated cylinder valve intended for use primarily in gas therapy and to be permanently connected to a gas cylinder and surrounded by a protective cup (10) fixedly mounted to the cylinder, the valve comprising a valve housing with connection socket (6) for the gas cylinder, there being disposed, in the socket, a residual gas valve for preventing gas below a certain pressure from departing from the cylinder, and a non-return valve for preventing gas from passing into the cylinder. The integrated cylinder valve further includes a regulator (1) disposed in the valve housing and operative to reduce the cylinder pressure to suitable working pressure, a shut-off valve (3) for the gas, a quick coupling device (5) for connection of a consumption conduit, and a device (7) for connection of a gas replenishment conduit to the cylinder, and a device (4) for indicating the gas content in the cylinder. The outlet of the regulator is directly connected to the shut-off valve (3) and is provided with means, disposed between the diaphragm (f) and regulator cone (e) designed to reduce the increase in the secondary pressure on reduction of the primary pressure of the regulator. The diaphragm (f) of the regulator is provided, in its central region, with a safety valve (a, b) operative to open at a predetermined level of the secondary pressure. The shut-off valve (3) connected to the outlet of the regulator is arranged to assume a distinct open and closed position and to be held in each respective end piston by the secondary pressure of the regulator, the valve position (i) being actuable by means of a reciprocal device.

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Citation (search report)
• [A] FR 2399610 A1 19790302 - VIEYRES GABRIEL [FR]
• [A] GB 191401902 A 19150819 - PARKER JOSEPH
• [A] GB 514366 A 19391106 - OTTO HEINRICH DRAEGER
• [A] US 2308124 A 19430112 - STETTNER LUDWIG W
• [A] EP 0150143 A2 19850731 - CLESSE MANDET SA [FR]
• [A] US 4586634 A 19860506 - MINTER MARK A [US], et al

Cited by
CN104295552A; EP1126202A3; DE102009005794A1; DE102009005794B4; EP1013986A1; EP1209408A3; EP0908807A1; US5227064A; EP1174784A1; FR2812093A1; AU2016239671B2; EP1026438A1; EP0747796A1; FR2735209A1; US5975121A; CN1076809C; FR2719133A1; CN102966846A; US6766829B2; WO2016156519A1; US6314986B1; US6527009B2; US6648021B2; WO03019056A1; FR2828922A1; US8056580B2; US8061682B2; US8402997B2; EP0916891B2

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