

Title (en)
Improvements in and relating to breathing apparatus.

Title (de)
Atemschutzgeräte.

Title (fr)
Appareils respiratoires.

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Application
EP 87302680 A 19870327

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Abstract (en)
Breathing apparatus for use in contaminated atmospheres and for ensuring the maintenance of a positive pressure over the face of the wearer at all times, comprises a face mask (1) for covering at least the nose and mouth of the wearer and having an inlet (2) and an outlet (3). The outlet (3) is provided with a biased outlet valve (4) which opens only when a preset differential pressure is achieved within the face mask. The inlet (2) is connected in parallel to two breathable gas supply systems. One system comprises a pump and filter assembly (6, 9) for supplying filtered ambient air to the face mask. The other comprises a controllable valve assembly (13) for controlling supply of compressed air from a cylinder to the face mask. The controllable valve assembly is controlled by a pressure sensitive control (19, 20) such that, under normal operating conditions, the controllable valve (13) remains closed, air to the face mask being provided solely by the pump and filter assembly. However, if the pressure within the face mask (1) relative to ambient pressure at any time drops below a preset minimum which is above ambient pressure, e.g. because of extreme breathing conditions of the wearer or because of reduction in the supply of air by the pump and filter assembly (6, 9), the controllable valve (13) will open to supply air from the compressed air cylinder to the face mask to ensure that the pressure of air within the face mask is maintained at or above the preset minimum at all times.

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• [Y] US 2284054 A 19420526 - SIEGWART HERMANN
• [Y] FR 814750 A 19370628
• [A] EP 0094757 A2 19831123 - RACAL SAFETY LTD [GB]
• [A] GB 1587812 A 19810408 - SECR DEFENCE
• [AP] DE 3512644 A1 19861016 - BARTELS & RIEGER [DE]
• [A] US 3202150 A 19650824 - MILLER ARTHUR E

Cited by
DE102016009486B4; EP0736309A1; CN112618984A; US5372130A; CN107405508A; EP0464234A1; US5318019A; EP2292291A3; WO2016157159A1; US7380551B2; US7543584B2; EP3915644A1; US2021369996A1; US11998771B2; US7647927B2; US8113198B2; US10130831B2; WO2008068545A1; WO02066105A1; US8622057B2; US11291869B2

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