

Title (en)  
Underwater breathing apparatus.

Title (de)  
Unterwasseratmungsgerät.

Title (fr)  
Dispositif sous-marin respiratoire.

Publication  
**EP 0437948 A1 19910724 (EN)**

Application  
**EP 90313674 A 19901214**

Priority  
US 45212989 A 19891215

Abstract (en)  
An underwater breathing apparatus is provided for delivering air to a submerged diver. A manual pump (17) supplies air under pressure to a reservoir bag (12) for delivery to a diver through an air hose (24,29,31). Alternatively, the reservoir bag can be further connected by an air hose to a floatable variable-pressure reservoir bag (28) that delivers air through an air hose (29,31) to a submerged diver. In order to constantly maintain the air pressure in the reservoir bag in a preselected range, a pressure gauge (40) is provided for the pump operator, who then pumps selectively to maintain the proper air pressure. The diver wears a breathing means having a flow restrictor/shut-off valve, a one-way inlet valve (32), and a one-way exhaust valve (34) for exhalation. Additionally, an electric pump may be used either to replace the manual pump or as a back-up thereto. <IMAGE>

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**B63C 11/20**

IPC 8 full level  
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CPC (source: EP)  
**B63C 11/14** (2013.01); **B63C 11/202** (2013.01); **B63C 2011/2272** (2013.01)

Citation (search report)  
• [X] FR 2593136 A1 19870724 - BOUCHERON PAUL [FR]  
• [X] US 3050055 A 19620821 - VAUTIN ROBERT G  
• [A] FR 2119265 A5 19720804 - INST FRANCAIS DU PETROLE  
• [A] FR 16281 E 19121224 - MAURICE FERNEZ [FR]  
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