

Title (en)

BREATHING APPARATUS FOR SCUBA DIVING WITH SEMI-CLOSED CIRCUIT GAS RECYCLING

Title (de)

ATEMGERÄT FÜR DAS GERÄTETAUCHEN MIT HALBGESCHLOSSENEM KREISLAUFGAS-RECYCLING

Title (fr)

APPAREIL RESPIRATOIRE DE PLONGÉE SOUS-MARINE À RECYCLAGE DE GAZ EN CIRCUIT SEMI-FERMÉ

Publication

EP 3784562 A1 20210303 (FR)

Application

EP 19718725 A 20190424

Priority

- FR 1853577 A 20180424
- EP 2019060464 W 20190424

Abstract (en)

[origin: WO2019206963A1] The subject matter of the invention is a breathing apparatus (1) for scuba diving with semi-closed circuit gas recycling comprising a breathing loop (2). The breathing loop (2) comprises a breathing bag (3), intended to be supplied by at least one gas tank (4), and a recycling chamber (61). The gas tank is connected to at least one input of the breathing bag by a first pipe (11) and a second pipe (12) respectively comprising a demand regulator (110) and a fixed nozzle (120) configured to respectively deliver a first supply and a second supply of gas to the breathing bag (3). Advantageously, the apparatus comprises a third pipe (13) comprising a gas flow regulator (130) configured to deliver, at a variable mass flow, a third supply of gas to the breathing bag (3), and at least one diving condition sensor configured to measure a physiological parameter of the diver or the depth. The appliance is advantageously configured to vary the variable mass flow as a function of data from the sensor for optimising the gas consumption.

IPC 8 full level

B63C 11/24 (2006.01)

CPC (source: EP US)

B63C 11/186 (2013.01 - US); **B63C 11/24** (2013.01 - EP US); **B63C 11/12** (2013.01 - US); **B63C 11/2209** (2013.01 - US)

Citation (search report)

See references of WO 2019206963A1

Designated contracting state (EPC)

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