

Title (en)
APPARATUS FOR WORKING UNDER WATER

Publication
EP 0084811 B1 19871209 (DE)

Application
EP 83100231 A 19830113

Priority
DE 3202106 A 19820123

Abstract (en)
[origin: CA1207603A] The underwater operating unit shown in Fig. 1 comprises a hollow body which is specially reinforced, against bending moments and compressive forces acting upon it, by means of flow-ducts (for drive-elements) passing longitudinally therethrough and by permanently incorporated, multi-purpose pressure chambers. Unit is held by, and supplied through, a holding- and supply-cable. A main grab, adjustable to widely varying gripping diameters and located at front-end, is adapted to cling to pipes, wrecks, and the like so firmly that the unit itself, and the booms extending therefrom (tool-arm, auxiliary grab, platform), may be subjected to heavy loading as a fixed work-base both for hand-tools operated by divers and for entirely remotecontrolled, un-manned manipulators, in spite of the small dimensions. Control-elements and drive-elements allow unit to be used both as a vehicle, as a mobile unit, as a hoist, as a machine tool, and as a power-base for auxiliary equipment used in underwater operations, also in confined pipestructures and cavities, in a particularly efficient and safe manner, and to be rapidly and reliably adapted to varying operation conditions by the use of replaceable, modular pieces of auxiliary equipment etc.

IPC 1-7
B63C 11/40

IPC 8 full level
B63C 11/40 (2006.01); **E02B 17/00** (2006.01); **E21B 41/04** (2006.01)

CPC (source: EP US)
B63C 11/40 (2013.01 - EP US); **E21B 41/04** (2013.01 - EP US)

Citation (examination)
DE-Z. "Meerestechnik", Heft 6/1981 Seite 176, 177, Bild 4

Cited by
CN107264749A; CN107096738A; CN102079373A; CN103863539A; CN106976535A

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EP 0084811 A2 19830803; **EP 0084811 A3 19841024**; **EP 0084811 B1 19871209**; CA 1207603 A 19860715; DE 3202106 A1 19830929; DE 3202106 C2 19841011; DE 3374852 D1 19880121; JP S58127818 A 19830730; US 4620819 A 19861104

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