

Title (en)
SUBMARINE VEHICLE FOR DREDGING AND LIFTING MINERALS AT A GREAT DEPTH

Publication
EP 0018891 B1 19830316 (FR)

Application
EP 80400553 A 19800423

Priority
FR 7910776 A 19790427

Abstract (en)
[origin: US4357764A] A submarine vehicle for collecting and raising materials resting on the sea bed at great depths, of the type comprising a load-bearing structure, collecting elements for the materials, storage silos for storing the materials collected and/or the ballast material, transfer means between said collecting elements and said silos, and main propellers for advancing the vehicle on the sea bed, said vehicle being characterized in that said load-bearing structure is made of a buoyancy material, said structure being in the form of a ring having a longitudinal plane of symmetry and defining the stem, stern and sides of said vehicle, and defining between them a free central space, the outer surface of said structure forming the hull of said vehicle, said storage silos being arranged in the free central space and fixed to said load-bearing structure, said collecting elements being arranged in front of and below said stem, said main propellers also being fixed to the lower surface of said load-bearing structure.

IPC 1-7
E21C 45/00; **E02F 5/00**; **E02F 7/00**; **B63C 11/40**; **B63B 3/13**

IPC 8 full level
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Cited by
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EP 0018891 A1 19801112; **EP 0018891 B1 19830316**; CA 1156689 A 19831108; DE 3062322 D1 19830421; FR 2455162 A1 19801121; FR 2455162 B1 19830506; JP S5634892 A 19810407; JP S6242119 B2 19870907; NO 154894 B 19860929; NO 154894 C 19870107; NO 801097 L 19801028; US 4357764 A 19821109

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