

Title (en)
Submarine

Title (de)
Unterseeboot

Title (fr)
Submersible

Publication
EP 2669180 A1 20131204 (DE)

Application
EP 13167104 A 20130508

Priority
DE 102012209171 A 20120531

Abstract (en)
The submarine has a transport apparatus (8) releasably and externally fixed on a cylindrical bottom structure (2) in a region below an upper deck (6) by using a form-fit closure unit. The form-fit closure unit is operatively connected with an actuator device, which is manually controllable from the upper deck. The transport apparatus is arranged in a region at a long side of the bottom structure. A structure (4) forming the upper deck is passed into the region at the long side of the bottom structure.

Abstract (de)
Ein Unterseeboot weist mindestens eine Transportvorrichtung (8) auf, die an dem Bootskörper (2) des Unterseeboots außenseitig in einem Bereich unterhalb eines Oberdecks (6) mittels Formschlussmitteln lösbar festgelegt ist. Diese Formschlussmittel sind mit einer Betätigungseinrichtung wirkungsverbunden, welche von dem Oberdeck (6) des Unterseeboots aus manuell steuerbar ist.

IPC 8 full level
B63G 8/00 (2006.01); **B63G 8/41** (2006.01)

CPC (source: EP KR)
B63G 8/00 (2013.01 - EP KR); **B63G 8/41** (2013.01 - EP)

Citation (applicant)
EP 1783046 A2 20070509 - HOWALDTSWERKE DEUTSCHE WERFT [DE]

Citation (search report)
• [XD] EP 1783046 A2 20070509 - HOWALDTSWERKE DEUTSCHE WERFT [DE]
• [A] US 4306413 A 19811222 - MIDDLETON FREDERIC H
• [A] US 2379517 A 19450703 - HADDEN EDWARD L

Cited by
DE102017110701A1; CN103921918A; CN113242977A; DE102017110701B4

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2669180 A1 20131204; **EP 2669180 B1 20190313**; DE 102012209171 A1 20131205; ES 2723182 T3 20190822;
KR 101540621 B1 20150730; KR 20130135131 A 20131210

DOCDB simple family (application)
EP 13167104 A 20130508; DE 102012209171 A 20120531; ES 13167104 T 20130508; KR 20130061620 A 20130530