

Title (en)  
HULL PANEL HAVING A LARGE-SIZED HATCH

Title (de)  
RUMPFANEEL MIT GROSSER LUKE

Title (fr)  
PANNEAU DE COQUE AVEC TRAPPE DE GRANDE DIMENSION

Publication  
**EP 3280637 A1 20180214 (FR)**

Application  
**EP 16714773 A 20160315**

Priority  
• FR 1500697 A 20150407  
• EP 2016055546 W 20160315

Abstract (en)  
[origin: WO2016162176A1] The invention relates to a hull (12) panel (16) of a submersible module (10), comprising an outer skin (18) and structural elements (20, 21) secured to the skin. The skin comprises an opening (30), at least one (21) of the structural elements being interrupted by the opening so as to be divided into two parts (50, 2). The panel comprises a lateral reinforcement (34) secured to one edge of the opening. The panel has at least one stringer (60) substantially disposed along a main axis (Y), said stringer extending transversely through the opening (30), each of the ends (70, 72) of said stringer being fixed removably to an inner surface (78, 80) of the lateral reinforcement. The stringers thus absorb the forces between the two parts of the structural element, through the opening.

IPC 8 full level  
**B63B 3/13** (2006.01)

CPC (source: EP KR)  
**B63B 3/13** (2013.01 - EP KR); **B63B 3/54** (2013.01 - KR); **B63B 19/12** (2013.01 - KR); **B63B 19/14** (2013.01 - KR); **B63B 19/16** (2013.01 - KR); **B63B 73/40** (2020.01 - KR); **B63B 73/49** (2020.01 - KR); **B63G 8/001** (2013.01 - KR); **B63B 2019/245** (2013.01 - KR)

Citation (search report)  
See references of WO 2016162176A1

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)  
**WO 2016162176 A1 20161013**; BR 112017021632 A2 20191112; BR 112017021632 A8 20220531; BR 112017021632 B1 20230418; EP 3280637 A1 20180214; EP 3280637 B1 20190403; ES 2733461 T3 20191129; FR 3034745 A1 20161014; FR 3034745 B1 20170428; JP 2018510809 A 20180419; JP 6714015 B2 20200624; KR 102514393 B1 20230324; KR 20170134654 A 20171206; PL 3280637 T3 20190930; TR 201909521 T4 20190722

DOCDB simple family (application)  
**EP 2016055546 W 20160315**; BR 112017021632 A 20160315; EP 16714773 A 20160315; ES 16714773 T 20160315; FR 1500697 A 20150407; JP 2017552816 A 20160315; KR 20177031980 A 20160315; PL 16714773 T 20160315; TR 201909521 T 20160315