

Title (en)  
Submarine

Title (de)  
Unterseeboot

Title (fr)  
Submersible

Publication  
**EP 2463195 A1 20120613 (DE)**

Application  
**EP 11192581 A 20111208**

Priority  
DE 102010054124 A 20101210

Abstract (en)  
The submarine has an inline-thruster (10) formed as a drive device and movable from a storage position in an intermediate space between a pressure body (2) of the submarine and a shell plate (4) into a linear end position outside of the shell plate. The inline-thruster is rotatable by a rotary drive in a plane normal to its linear moving direction in the end position, and a linear drive is arranged outside of the body and movably coupled with the rotary drive. The inline-thruster is rotatable by the rotary drive in an angle in a range of 360 degree around an axis in a driving direction.

Abstract (de)  
Ein Unterseeboot weist einen Inline-Thruster (10) als Antriebsvorrichtung auf. Der Inline-Thruster (10) ist von einer Lagerungsposition in einem Zwischenraum zwischen einem Druckkörper (2) des Unterseeboots und einer den Druckkörper (2) umgebenden Außenhaut (4) mit einem außerhalb des Druckkörpers (2) angeordneten Linearantrieb in eine lineare Endposition außerhalb der Außenhaut (4) verfahrbar ist und in der Endposition in einer Ebene normal zu seiner linearen Verfahrrichtung mit einem Drehantrieb drehbar.

IPC 8 full level  
**B63G 8/08** (2006.01); **B63H 5/125** (2006.01); **B63H 5/18** (2006.01)

CPC (source: EP KR)  
**B63G 8/08** (2013.01 - EP KR); **B63H 1/16** (2013.01 - EP); **B63H 5/125** (2013.01 - EP KR); **B63H 5/1252** (2013.01 - EP);  
**B63H 5/18** (2013.01 - EP); **B63H 5/20** (2013.01 - EP); **B63H 23/02** (2013.01 - KR); **B63H 2001/165** (2013.01 - EP);  
**B63H 2005/1258** (2013.01 - EP)

Citation (applicant)  
DE 102009019539 B3 20101125 - HOWALDTSWERKE DEUTSCHE WERFT [DE]

Citation (search report)  
• [IY] US 3030910 A 19620424 - ALSAGER LESLIE E  
• [YA] US 6056610 A 20000502 - FONTANILLE GUY [FR]  
• [YA] US 2001029133 A1 20011011 - BREEMS MARTINUS VAN [US]  
• [I] EP 1959163 A2 20080820 - ROLLS ROYCE PLC [GB]

Cited by  
CN103448890A; ITRE20120075A1; EP2727816A1; FR3119833A1; EP2781449A1; GB2523249A; CN107985536A; GB2523249B

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 2463195 A1 20120613**; **EP 2463195 B1 20130220**; DE 102010054124 A1 20120614; DE 102010054124 B4 20120726;  
ES 2408807 T3 20130621; KR 101388480 B1 20140429; KR 20120065259 A 20120620; PT 2463195 E 20130524

DOCDB simple family (application)  
**EP 11192581 A 20111208**; DE 102010054124 A 20101210; ES 11192581 T 20111208; KR 20110132052 A 20111209; PT 11192581 T 20111208