

Title (en)  
Submarine

Title (de)  
Unterseeboot

Title (fr)  
Submersible

Publication  
**EP 2246252 B1 20190508 (DE)**

Application  
**EP 10003112 A 20100324**

Priority  
DE 102009019539 A 20090430

Abstract (en)  
[origin: EP2246252A2] The submarine has a pressure body (2) at least partially shrouded by an outer skin (4). The submarine has a main propeller drive and an auxiliary drive as an in-line thruster (22). The auxiliary drive can be moved from a rest position in the space (6) between the pressure body and the outer skin for deployment into the active position outside the skin at the under side of the submarine. The auxiliary drive is on a swing frame (8) and is coupled to a hydraulic or electric rotary drive (18). The auxiliary drive has a cladding (44), forming part of the outer skin.

IPC 8 full level  
**B63H 25/42** (2006.01); **B63G 8/08** (2006.01); **B63G 8/16** (2006.01); **B63G 8/34** (2006.01); **B63H 5/125** (2006.01); **B63H 21/30** (2006.01); **B63G 13/02** (2006.01); **B63H 1/16** (2006.01); **B63H 23/00** (2006.01)

CPC (source: EP KR)  
**B63G 8/08** (2013.01 - KR); **B63G 8/16** (2013.01 - EP); **B63H 1/14** (2013.01 - KR); **B63H 5/07** (2013.01 - KR); **B63H 21/12** (2013.01 - KR); **B63H 23/02** (2013.01 - KR); **B63G 8/34** (2013.01 - EP); **B63G 2013/022** (2013.01 - EP); **B63H 25/42** (2013.01 - EP); **B63H 2001/165** (2013.01 - EP); **B63H 2005/1258** (2013.01 - EP); **B63H 2023/005** (2013.01 - EP); **B63H 2025/425** (2013.01 - EP)

Citation (examination)  
EP 0566786 A1 19931027 - WESTINGHOUSE ELECTRIC CORP [US]

Cited by  
EP2757037A1; CN114013613A; CN105109652A; CN114590383A; EP4098545A1; ITTO20130045A1; CN109305316A; GB2607313A; CN103112571A; USD1023888S; US11939036B2; US11801926B2; US11873071B2; EP2548797A1; US11591057B2; US11866144B2; USD983838S; USD1006828S; WO2022050850A2; WO2024027213A1; US11572146B2; US11932369B1; WO2022254180A1; US9567053B2; US10293926B2; US11603179B2; USD1023889S

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**EP 10003112 A 20100324**; DE 102009019539 A 20090430; KR 20100038544 A 20100426