

Title (en)  
SYSTEMS AND METHODS FOR SEMI-SUBMERSIBLE LAUNCH AND RECOVERY OF OBJECTS FROM MULTI-MODE UNMANNED VEHICLE

Title (de)  
SYSTEME UND VERFAHREN FÜR HALBTAUCHFÄHIGEN ABSCHUSS UND BERGUNG VON OBJEKTEN AUS MULTIMODALEN UNBEMANNTEN FAHRZEUGEN

Title (fr)  
SYSTÈMES ET PROCÉDÉS DE LANCEMENT SEMI-SUBMERSIBLE ET DE RÉCUPÉRATION D'OBJETS À PARTIR DE VÉHICULE MULTIMODE SANS PILOTE

Publication  
**EP 3792172 A1 20210317 (EN)**

Application  
**EP 20181893 A 20200624**

Priority  
US 201916449824 A 20190624

Abstract (en)  
The systems and associated methods are for autonomously launching and recovering payload objects such as vessels, equipment and people by partially submerging a multi-mode unmanned vehicle in a controlled manner. Mechanical, power, signal and logical system components operate in a coordinated manner to repeatedly and reliably perform unmanned launch and recovery of payloads in a variety of conditions and sea states from a catamaran style hull with multi-mode, high-performance characteristics.

IPC 8 full level  
**B63G 8/00** (2006.01); **B63B 35/00** (2020.01)

CPC (source: EP)  
**B63B 35/00** (2013.01); **B63G 8/001** (2013.01); **B63B 2035/006** (2013.01); **B63G 2008/002** (2013.01)

Citation (applicant)

- US 7789723 B2 20100907 - DANE ROBERT A [AU], et al
- US 6807921 B2 20041026 - HUNTSMAN DWIGHT DAVID [US]
- US 201213470866 A 20120514

Citation (search report)

- [A] US 9669904 B2 20170606 - HANSON BRUCE BECKER [US], et al
- [A] US 8418642 B2 20130416 - VOSBURGH FREDERICK [US]
- [A] US 9096106 B2 20150804 - HANSON BRUCE [US], et al

Cited by  
CN115339599A; CN113978674A; CN116176779A; CN112631305A

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

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BA ME

DOCDB simple family (publication)  
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