

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

Title (de)  
SYSTEME UND VERFAHREN FÜR HALBTÄUCHFÄHIGEN 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  
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• [A] US 9096106 B2 20150804 - HANSON BRUCE [US], et al

Cited by  
CN115339599A; CN113978674A; CN116176779A; CN112631305A

Designated contracting state (EPC)  
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BA ME

DOCDB simple family (publication)  
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