

Title (en)

AUXILIARY SAIL SYSTEM FOR SHIPS AND SAFETY SYSTEMS FOR SAME

Title (de)

HILFSSEGELSYSTEM FÜR SCHIFFE UND SICHERHEITSSYSTEME DAFÜR

Title (fr)

SYSTÈME DE VOILES AUXILIAIRES POUR NAVIRES ET SYSTÈMES DE SÉCURITÉ ASSOCIÉS

Publication

**EP 3526116 A4 20200909 (EN)**

Application

**EP 17860410 A 20171214**

Priority

- US 201715784148 A 20171015
- CA 2017051519 W 20171214

Abstract (en)

[origin: CN109937173A] A ship-mounted auxiliary sail system features a plurality of sail units mountable and movable about the ship on a rail system. The sail units can have automatic reefing safety features and/or automatic mast release safety features.

IPC 8 full level

**B63H 9/06** (2020.01); **B63B 15/00** (2006.01); **B63H 9/10** (2006.01); **B63H 21/20** (2006.01)

CPC (source: EP US)

**B63B 15/00** (2013.01 - EP); **B63H 9/06** (2013.01 - EP US); **B63H 9/10** (2013.01 - EP US); **B63H 9/1092** (2013.01 - EP);  
**B63H 21/20** (2013.01 - EP); **B63B 2015/0075** (2013.01 - EP)

Citation (search report)

- [YA] JP S61135894 A 19860623 - NIPPON KOKAN KK
- [YA] IT UA20162057 A1 20170907 - REGGIONI GIANLUCA [IT]
- [A] DE 212015000159 U1 20170125 - MUÑOZ SAIZ MANUEL [ES]
- [A] KR 20140070228 A 20140610 - SAMSUNG HEAVY IND [KR]
- [A] JP S61135895 A 19860623 - NIPPON KOKAN KK
- [A] JP S58164495 A 19830929 - HITACHI SHIPBUILDING ENG CO

Cited by

CN114162341A

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)

CN 109937173 A 20190625; CN 109937173 B 20230418; EP 3526116 A2 20190821; EP 3526116 A4 20200909; JP 2019531230 A 20191031;  
JP 7272654 B2 20230512

DOCDB simple family (application)

CN 201780063026 A 20171214; EP 17860410 A 20171214; JP 2019541831 A 20171214