

Title (en)

A TUGBOAT WITH A CAPSIZING AND SINKING PREVENTION SYSTEM

Title (de)

SCHLEPPSCHIFF MIT EINEM SYSTEM ZUR VORBEUGUNG DES KENTERNS UND SINKENS

Title (fr)

REMORQUEUR POURVU D'UN SYSTÈME DE PRÉVENTION DE CHAVIRAGE ET DE NAUFRAGE

Publication

EP 3436340 B1 20201209 (EN)

Application

EP 17714459 A 20170330

Priority

- DK PA201670188 A 20160331
- EP 2017057563 W 20170330

Abstract (en)

[origin: WO2017167890A1] A tugboat for assisting a marine vessel to maneuver. The tugboat boat comprises an engine driving one or more propulsors with a controllable direction of thrust, a towing line for establishing a pulling connection between an assisted vessel and the tugboat, a first sensor arrangement configured for sensing the size and direction of the pulling force that the towing line exerts on the tugboat, a second sensor arrangement configured for sensing the orientation of the tugboat, a controller in receipt of a signal from the first sensor arrangement and in receipt of a signal from the second sensor arrangement. The controller is informed of the size and direction of thrust generated by the one or more propulsors, and the controller is configured to determine if a safety threshold is exceeded on the basis of: sensed size and direction of thrust, sensed size and direction of the pulling force, and sensed orientation of the tugboat.

IPC 8 full level

B63B 35/68 (2006.01); **B63B 43/02** (2006.01); **B63H 21/21** (2006.01)

CPC (source: DK EP US)

B63B 35/68 (2013.01 - DK EP US); **B63B 43/02** (2013.01 - EP US); **B63H 21/21** (2013.01 - DK EP US)

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

DOCDB simple family (publication)

WO 2017167890 A1 20171005; AU 2017242677 A1 20181025; AU 2017242677 B2 20221117; CN 109153434 A 20190104; DK 179591 B1 20190221; DK 201670188 A1 20171009; EP 3436340 A1 20190206; EP 3436340 B1 20201209; ES 2847208 T3 20210802; JP 2019510679 A 20190418; JP 6986027 B2 20211222; SG 11201808584P A 20181030; US 2019031304 A1 20190131; US 2022009602 A1 20220113

DOCDB simple family (application)

EP 2017057563 W 20170330; AU 2017242677 A 20170330; CN 201780030866 A 20170330; DK PA201670188 A 20160331; EP 17714459 A 20170330; ES 17714459 T 20170330; JP 2018551945 A 20170330; SG 11201808584P A 20170330; US 201816147415 A 20180928; US 202117407058 A 20210819