

Title (en)

Tug for rendering assistance to a larger vessel.

Title (de)

Schlepper als Hilfe für ein grösseres Schiff.

Title (fr)

Remorqueur pour assister un bateau plus grand.

Publication

EP 0174067 A1 19860312 (EN)

Application

EP 85304515 A 19850625

Priority

- GB 8420925 A 19840817
- GB 8427554 A 19841031

Abstract (en)

A tug (1) has a towing hook (6) mounted at the outer end of a towing arm (4), the inner end of which is mounted on the main deck (2) of the tug in a manner such that the arm (4) can swivel above the main deck (2) from one side (4a) to the other side (4b) of the tug about an upright axis. The arm (4) is also pivoted about a horizontal axis so that it can swing upwards and downwards and is mounted on a platform (12a, 12b) which is movable fore and aft on rails (14) on the main deck (2). The movements of the arm (4) are controlled by power mechanisms and they adjust the position of the point of action of the tow-line (7) in such a way that in whatever direction the tow-line (7) extends, even exactly athwartships from the tug, the line of action of the pull in the tow-line (7) produces only a small capsizing moment upon the tug. This capsizing moment is very much smaller than that which is produced by a similar pull of the tow-line connected to a tow-hook in a conventional fixed position on the main deck of the tug and on the centre line of the tug about 40% to 50% of the length of the tug from its stern. The arm (4) is preferably also mounted on a carriage (13) which is movable on rails (14) in a fore and aft direction on the deck (2) of the tug.

IPC 1-7

B63B 35/68

IPC 8 full level

B63B 35/68 (2006.01)

CPC (source: EP KR US)

B63B 21/16 (2013.01 - EP KR); **B63B 21/56** (2013.01 - KR); **B63B 35/68** (2013.01 - EP KR US); **B66D 1/50** (2013.01 - KR)

Citation (search report)

- [X] FR 1492939 A 19670825
- [A] DE 447183 C 19270720 - THEODOR KLUEVER
- [A] FR 1158501 A 19580616
- [A] GB 1357327 A 19740619 - KINGSTON MARINE TECHNOLOGY LTD
- [A] US 1530395 A 19250317 - HUGO MULLER ARTHUR

Cited by

US5609120A; CN114096460A; US10836617B2; US5575230A; CN109436203A; CN108974261A; US2019031299A1; WO2017167894A1; WO2017167890A1; WO2017167892A1

Designated contracting state (EPC)

BE DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0176189 A1 19860402; AU 4454085 A 19860220; AU 4591485 A 19860220; DK 372685 A 19860218; DK 372685 D0 19850816; EP 0174067 A1 19860312; ES 546139 A0 19860616; ES 8607151 A1 19860616; FI 852977 A0 19850801; FI 852977 L 19860218; KR 860001744 A 19860322; NO 853235 L 19860218

DOCDB simple family (application)

EP 85305402 A 19850729; AU 4454085 A 19850703; AU 4591485 A 19850808; DK 372685 A 19850816; EP 85304515 A 19850625; ES 546139 A 19850814; FI 852977 A 19850801; KR 850005793 A 19850812; NO 853235 A 19850816