

Title (en)

APPARATUS FOR THE MECHANICAL TREATMENT OF THE BOTTOM SURFACE OF A SHIP IN DOCK

Publication

**EP 0141120 B1 19870722 (DE)**

Application

**EP 84110181 A 19840827**

Priority

DD 25506783 A 19830923

Abstract (en)

[origin: EP0141120A1] 1. Apparatus for the mechanical treatment of the bottom surface of ships in dock, consisting of a mobile tool carrier (1) with pivotal support arms (16), by which the tool can be brought up to the ship's bottom to be treated and also pivoted laterally to a limited extent away from the centre of the tool carrier (1), and in which the tool is coupled to the support arms (16) pivotally about at least one axis, characterized by a plurality of selectively usable tools for cleaning or removal of rust having a working opening directed towards the ship's bottom, the support arms (16) articulated to the tool carrier (1) possessing a quick-coupling gimbal seating (36) for the selected tool, ensuring adaptation to the plane and deformed regions, of limited slope, of the ship's bottom, which (tool) can be pressed by the pivot drive of the support arms (16) with a minimum force which ensures bearing of the working opening against the ship's bottom, which is automatically adjustable in conjunction with the contact points disposed around the working opening, and that the tools are in working connection with supply and removal devices situated on the tool carrier (1) by lines (18) which can be coupled.

IPC 1-7

**B63B 59/00**; **B24C 3/06**

IPC 8 full level

**B63B 9/00** (2006.01); **B24C 3/06** (2006.01); **B63B 59/06** (2006.01)

CPC (source: EP)

**B24C 3/06** (2013.01); **B63B 59/06** (2013.01)

Cited by

NO20220169A1; US6102157A; BE1002563A3; FR2603219A1; AU747014B2; CN113118978A; DE9109360U1; CN114589137A; US6186273B1; WO0015491A1; WO2023149806A1

Designated contracting state (EPC)

DE FR GB NL SE

DOCDB simple family (publication)

**EP 0141120 A1 19850515**; **EP 0141120 B1 19870722**; DD 231205 A3 19851224; DE 3464873 D1 19870827; DK 158293 B 19900430; DK 158293 C 19901112; DK 418584 A 19850324; DK 418584 D0 19840831; ES 536142 A0 19851016; ES 8601041 A1 19851016; FI 81756 B 19900831; FI 81756 C 19901210; FI 842934 A0 19840720; FI 842934 A 19850324; JP S6099791 A 19850603; NO 843317 L 19850325; PT 79253 A 19841001; PT 79253 B 19860822

DOCDB simple family (application)

**EP 84110181 A 19840827**; DD 25506783 A 19830923; DE 3464873 T 19840827; DK 418584 A 19840831; ES 536142 A 19840921; FI 842934 A 19840720; JP 18086784 A 19840831; NO 843317 A 19840820; PT 7925384 A 19840921