

Title (en)
POWERED SAILBOAT WINCH

Publication
EP 0414707 A4 19910925 (EN)

Application
EP 89904429 A 19890406

Priority
US 18100588 A 19880413

Abstract (en)
[origin: WO8909744A1] A power sailboat winch for high speed gathering of running rigging line under initial low tension with final slow speed gathering of the line, combined with line storage, is disclosed. The winch mechanism includes a winding drum (T) and a conventional high torque drum (H). The winding drum includes a level wind mechanism (W), and provides initial rapid line take-up, tailing force to the high torque winch drum, and line storage. The high torque winch drum (H), provided between the winding drum and line load, freewheels during high speed line gathering, and provides high torque output for final tensioning. A hydraulic circuit with three hydraulic motors (M1, M2, M3) is disclosed. A first motor (M1) powers the winding drum for rapid line take-up and sequences a second hydraulic motor (M2) when drum torque exceeds a preset limit. This second motor in turn sequences a third motor (M3) for final high torque tensioning by all three motors driving in parallel.

IPC 1-7
B66D 1/08

IPC 8 full level
B66D 1/44 (2006.01); **B66D 1/76** (2006.01)

CPC (source: EP)
B66D 1/44 (2013.01); **B66D 1/76** (2013.01)

Citation (search report)
• [A] FR 762081 A 19340403 - ATEL, et al
• [A] US 4482133 A 19841113 - BISHOP CARL D [US]
• [A] DE 2616470 A1 19761028 - JACOB WENNBERG AB
• [A] DE 3005464 A1 19810820 - KLOECKNER BECORIT GMBH [DE]
• [A] GB 2017877 A 19791010 - VICKERS SHIPBUILDING GROUP LTD
• [A] FR 2487802 A1 19820205 - RETEL JR [FR]
• [A] FR 1487273 A 19670630 - TWIN DISC CLUTCH CO
• See references of WO 8909744A1

Designated contracting state (EPC)
BE DE FR GB IT NL

DOCDB simple family (publication)
WO 8909744 A1 19891019; AU 3368889 A 19891103; AU 615397 B2 19910926; DK 243390 A 19901008; DK 243390 D0 19901008;
EP 0414707 A1 19910306; EP 0414707 A4 19910925

DOCDB simple family (application)
US 8901425 W 19890406; AU 3368889 A 19890406; DK 243390 A 19901008; EP 89904429 A 19890406