

Title (en)  
Marine outdrive apparatus.

Title (de)  
Aussenbordantrieb für Boote.

Title (fr)  
Propulsion marine hors-bord.

Publication  
**EP 0037690 A1 19811014 (EN)**

Application  
**EP 81301340 A 19810327**

Priority  
US 13779780 A 19800407

Abstract (en)  
A marine outdrive attachable to the transom of a boat having an inboard engine. The marine outdrive includes a support casing (23) securable to the boat's transom (20) and having a ball socket (24). The ball socket receives the ball (32) of a propeller shaft carrier (30). A drive shaft (38) connectable to the inboard engine is journalled in the support casing. A propeller shaft (40) is journalled in the propeller shaft carrier. A double universal joint (46) connects the two shafts, with the center of such joint coinciding with the point about which the ball pivots within the socket. Hydraulic steering cylinders (108, 110) are attached to the propeller shaft carrier to swing about a generally vertical steering axis extending through the a aforementioned pivot point. A hydraulic trim cylinder (140) extends between the transom and the propeller shaft housing to swing the housing vertically about a horizontal trim axis extending through the aforementioned pivot point.

IPC 1-7  
**B63H 5/12**

IPC 8 full level  
**B63H 5/125** (2006.01)

CPC (source: EP)  
**B63H 5/1252** (2013.01); **B63H 2001/185** (2013.01)

Citation (search report)

- US 3933116 A 19760120 - ADAMS THOMAS F, et al
- US 3976027 A 19760824 - JONES SR RONALD O
- US 2415183 A 19470204 - LAW BRETT D
- US 1697101 A 19290101 - BARKER MERRILL G

Cited by  
CN112591013A; US5312277A; EP2011732A1; EP0090497A3; EP2045183A1; AU637067B2; FR2710024A1; AU636858B2; CN105109652A; WO9108946A1; WO03097449A1; WO9006255A1; WO9006256A1

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

DOCDB simple family (publication)  
**EP 0037690 A1 19811014; EP 0037690 B1 19840620**; AU 542771 B2 19850314; AU 6866181 A 19811224; CA 1149684 A 19830712; DE 3164280 D1 19840726; JP H0618194 U 19940308; JP S56163994 A 19811216

DOCDB simple family (application)  
**EP 81301340 A 19810327**; AU 6866181 A 19810324; CA 374772 A 19810406; DE 3164280 T 19810327; JP 4112691 U 19910603; JP 4185381 A 19810324