

Title (en)

VEHICLE PROPULSION CONTROL HANDLE, ESPECIALLY FOR UNDERWATER VEHICLES

Title (de)

STEUERHEBEL FÜR EINEN FAHRZEUGANTRIEB, INSBESONDERE FÜR UNTERWASSERFAHRZEUGE.

Title (fr)

POIGNÉE DE COMMANDE DE PROPULSION DE VÉHICULES, NOTAMMENT DE VÉHICULES SOUS-MARINS.

Publication

EP 4311760 A1 20240131 (EN)

Application

EP 22460033 A 20220728

Priority

EP 22460033 A 20220728

Abstract (en)

This invention relates to a vehicle propulsion control handle, especially for underwater vehicles, characterised in that: the lower end of its handpiece (9) is connected in a detachable manner to an offset (4) of the upper surface of the base (1) and to a lower inner offset (15), mounted thereon, of the profile lever (14) arranged on a slot (10) of the handpiece (9), wherein the profile lever (14) is provided above the offset (15) with an inner offset (19) with a spring mounted thereon (21) whose other end is adjacent to the inner surface of the handpiece (9), and with an upper offset (17) with magnet M1 fitted loosely to a pin (18) in the slot (12) of the handpiece (9), inside the upper end of said handpiece, there is provided the lower end of the housing (22) with an outer ring-shaped offset (24) and a bottom (25) whose lower surface has two offsets (26, 26') separated by a slot (27) such that an offset (17) for the lever (14) is provided in said slot; in said housing (22), there is set an electronic board (32) permanently connected to an encoder (33) and to at least one Hall sensor (H2, H3), arranged on the upper surface of the board (32), and the Hall sensor (H1) arranged on the lower surface of said board such that electrical wires are led out of said board through a pass-through hole (31) in the offset (26) of the housing (22); next to each of the Hall sensors (H2, H3), in the side surface of the housing (22), there is provided at least one socket (44, 44') for a bistable slide function switch (45, 45') with a magnet (M2, M3), from top side, the electronic board (32) is covered with a sleeve-shaped lid (34) having on its upper face blind holes (35, 35') for springs (36, 36') with metal balls (37, 37') mounted thereon, wherein, on said lid (34), there is mounted a sleeve-shaped knob (38) with an upper bottom (39), connected to the lid in a detachable manner, whose inner surface has an offset for the upper end of the profile encoder (33) and blind holes (43) for said metal balls (37, 37') of the springs (36, 36').

IPC 8 full level

B63H 21/21 (2006.01); **G05G 9/047** (2006.01)

CPC (source: EP)

B63H 21/213 (2013.01); **G05G 1/01** (2013.01); **B63H 2025/026** (2013.01); **G05G 1/04** (2013.01); **G05G 1/10** (2013.01); **G05G 5/065** (2013.01)

Citation (applicant)

- PL 124239 B1 19830131
- US 2007141924 A1 20070621 - YASUDA KOJI [JP], et al
- US 2002090866 A1 20020711 - HOSHINA YOSHIKAZU [JP]
- US 6675733 B2 20040113 - HOSHINA YOSHIKAZU [JP]
- CN 113018801 A 20210625 - SHENZHEN ZHONGTIAN DIVING EQUIPMENT CO LTD

Citation (search report)

- [AD] CN 113018801 A 20210625 - SHENZHEN ZHONGTIAN DIVING EQUIPMENT CO LTD
- [A] US 2018356907 A1 20181213 - PARAZYNSKI SCOTT EDWARD [US], et al

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4311760 A1 20240131

DOCDB simple family (application)

EP 22460033 A 20220728