Title (en)

LOAD-FORCE-INDEPENDENT TRIGGERING DEVICE

Title (de)

LASTKRAFTUNABHÄNGIGE AUSLÖSEEINRICHTUNG

Title (fr)

DISPOSITIF DE DÉCLENCHEMENT INDÉPENDANT DE LA FORCE EXERCÉE PAR UNE CHARGE

Publication

EP 3724121 A1 20201021 (DE)

Application

EP 18839804 A 20181207

Priority

- DE 102017130067 A 20171215
- DE 2018101001 W 20181207

Abstract (en)

[origin: WO2019114876A1] Triggering devices in which the load force of a suspended load does not act on the triggering mechanism operate in a load-force-independent manner using an advantageously low triggering force. Known triggering devices (tow couplings) operate with triggering lever, steering lever and triggering gear, which can however have undefined states with respect to one another, which can jeopardise the triggering. In the triggering device (01) according to the invention, the steering lever (10) therefore has an angular design, and in the CLOSED position of the triggering device (01) contacts a first contact surface (19) in the housing (02) and in the OPEN position of the triggering device (01) contacts a second contact surface (20) in the housing (02). The steering lever (10) only adopts defined positions in the housing (02); in the CLOSED position, said steering lever is positioned shortly before the dead-centre position (41) in relation to the triggering lever (05) and intends to open automatically. After the practically force-free unlocking of the triggering lever (05), a tension spring (14) pulls the triggering lever (05) into the defined OPEN position. The claimed triggering device (01) can thus operate reliably even under very adverse environmental conditions. In particular, it is particularly suitable, in a sea-water-resistant design, for underwater applications at great depths, for example for deploying autonomous measuring equipment.

IPC 8 full level

B66C 1/34 (2006.01)

CPC (source: EP US)

B66C 1/34 (2013.01 - EP); **B66C 1/36** (2013.01 - US)

Citation (search report)

See references of WO 2019114876A1

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

DOCDB simple family (publication)

DE 102017130067 A1 20190619; **DE 102017130067 B4 20200416**; CN 111727165 A 20200929; CN 111727165 B 20220513; EP 3724121 A1 20201021; EP 3724121 B1 20210414; ES 2876172 T3 20211112; US 11027947 B2 20210608; US 2020377343 A1 20201203; WO 2019114876 A1 20190620

DOCDB simple family (application)

DE 102017130067 A 20171215; CN 201880071096 A 20181207; DE 2018101001 W 20181207; EP 18839804 A 20181207; ES 18839804 T 20181207; US 201816767661 A 20181207