

Title (en)

Dart launcher for well cementing operations

Title (de)

"Dart"-Auslösevorrichtung für Bohrlochzementierungsoperationen

Title (fr)

Système de libération de lanceurs ("darts") pour opérations de cimentation de puits

Publication

**EP 2199536 A1 20100623 (EN)**

Application

**EP 08172646 A 20081222**

Priority

EP 08172646 A 20081222

Abstract (en)

Modular apparatus for remotely activating a wiper plug launching tool or other down-hole equipment by launching a dart (32) or other projectile along tubing to the subsea equipment. A dart is loaded into a dart sleeve or basket (34) prior to launch and subsequently loaded into a modular tool piece. The pre-loaded tool pieces are configurable prior to use dependent on operational requirement and furthermore may be independently removable from the remaining equipment facilitating maintenance and serving of individual tool pieces.

IPC 8 full level

**E21B 33/05** (2006.01); **E21B 33/076** (2006.01)

CPC (source: EP US)

**E21B 33/05** (2013.01 - EP US); **E21B 33/076** (2013.01 - EP US); **E21B 33/165** (2020.05 - EP)

Citation (applicant)

US 5890537 A 19990406 - LAVAURE GILBERT [US], et al

Citation (search report)

- [XY] EP 0500165 A1 19920826 - PUMPTech NV [BE]
- [Y] GB 2378200 A 20030205 - SMITH INTERNATIONAL [US]
- [X] US 2005103504 A1 20050519 - SZARKA DAVID D [US]
- [X] GB 2404210 A 20050126 - WEATHERFORD LAMB [US]
- [A] WO 9848143 A1 19981029 - ALLAMON JERRY P [US]
- [DA] US 5890537 A 19990406 - LAVAURE GILBERT [US], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 2199536 A1 20100623**; US 2010175891 A1 20100715

DOCDB simple family (application)

**EP 08172646 A 20081222**; US 63835309 A 20091215