

Title (en)  
Ramming and traction device

Title (de)  
Ramm- und Ziehvorrichtung

Title (fr)  
Dispositif de battage et de traction

Publication  
**EP 2444553 A1 20120425 (DE)**

Application  
**EP 10013794 A 20101020**

Priority  
EP 10013794 A 20101020

Abstract (en)

The device has an exciter cell (1) guided at a guide pole (7) and coupled to an advancing system of the guide pole. The exciter cell is linearly movable by the advancing system. The exciter cell is rigidly connected with guide rails (21). The guide rails are guided at the guide pole and elastically connected with the advancing system by ropes (3, 4). A spring module is designed as a spring package (5) including cylindrical helical springs, disk springs, gas pressure springs, torsion springs and/or flexible springs. An elastic loop is made of glass fiber reinforced plastic material. The ropes are made of glass fibers.

Abstract (de)

Vorrichtung zum Rammen und Ziehen von Spundbohlen u.ä. in den bzw. aus dem Boden, umfassend einen Mäkler, an dem eine Erregerzelle geführt ist, die an ein Vorschubsystem gekoppelt ist, über das sie vertikal linear bewegbar ist. Die Erregerzelle (1) ist starr mit wenigstens einem Führungselement verbunden, wobei das wenigstens eine Führungselement ausschließlich an dem Mäkler (7) geführt ist und elastisch mit dem Vorschubsystem verbunden ist.

IPC 8 full level  
**E02D 7/16** (2006.01); **E02D 7/18** (2006.01); **E02D 11/00** (2006.01)

CPC (source: EP US)  
**E02D 7/16** (2013.01 - EP US); **E02D 7/18** (2013.01 - EP US); **E02D 11/00** (2013.01 - EP US)

Citation (applicant)  
DE 4312368 A1 19941020 - UTM UNIVERSAL TIEFBAU MASCHINE [DE]

Citation (search report)

- [A] DE 4312368 A1 19941020 - UTM UNIVERSAL TIEFBAU MASCHINE [DE]
- [A] JP 2009228220 A 20091008 - NIPPON SHARYO SEIZO KK
- [A] EP 1983112 A1 20081022 - IHC HOLLAND IE BV [NL]

Cited by  
EP3067470A1; WO2017127954A1

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)  
**EP 2444553 A1 20120425; EP 2444553 B1 20121205;** US 2012099931 A1 20120426

DOCDB simple family (application)  
**EP 10013794 A 20101020;** US 201113247077 A 20110928