

Title (en)  
UNDERGROUND DIAPHRAGM AND METHOD FOR CREATING A SLIT IN THE GROUND

Title (de)  
SCHLITZWANDGERÄT UND VERFAHREN ZUM ERSTELLEN EINES SCHLITZES IM BODEN

Title (fr)  
DISPOSITIF D'EXCAVATION DE TRANCHÉE ET PROCÉDÉ DE FABRICATION DE TRANCHÉES DANS LE SOL

Publication  
**EP 3401444 B1 20191127 (DE)**

Application  
**EP 17170545 A 20170511**

Priority  
EP 17170545 A 20170511

Abstract (en)  
[origin: CA3004009A1] The invention relates to a trench wall apparatus and a method for creating a trench in the ground, whereby by means of a holding means at a top end section a base frame of the trench wall apparatus is held by means of at least one soil excavation means, which is positioned at a bottom end section of the base frame, soil is excavated while forming the trench, by means of a clamping means at least two clamping elements on opposite sides are extended laterally by at least one actuating cylinder, whereby at least one part of the trench wall apparatus is clamped in the trench, and by means of a pressing means is applied a pressing force on the at least one soil excavation means. According to the invention it is provided that the clamping means having the at least two clamping elements and the at least one clamping cylinder are positioned on an intermediate frame, which is mounted along the base frame such that it can be displaced. The inter-mediate frame is clamped in and is firmly fixed in regard to the ground by the clamping means. The base frame having the soil excavation means is pressed downward by means of the pressing means.

IPC 8 full level  
**E02D 17/13** (2006.01); **E02F 3/18** (2006.01); **E02F 3/20** (2006.01); **E02F 3/22** (2006.01); **E21B 4/18** (2006.01)

CPC (source: CN EP KR US)  
**E02D 17/06** (2013.01 - KR); **E02D 17/13** (2013.01 - EP US); **E02F 3/183** (2013.01 - US); **E02F 3/205** (2013.01 - EP US); **E02F 3/22** (2013.01 - US); **E02F 5/04** (2013.01 - KR); **E02F 5/08** (2013.01 - CN); **E02F 5/14** (2013.01 - CN); **E02D 2250/0038** (2013.01 - KR); **E21B 4/18** (2013.01 - US)

Citation (examination)  
WO 2017042499 A2 20170316 - SOLETANCHE FREYSSINET [FR]

Cited by  
EP4279659A1; EP4112816A1; WO2023222363A1; WO2023274711A1; EP3683361A1; EP4198204A1; EP3725950B1

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

DOCDB simple family (publication)  
**EP 3401444 A1 20181114**; **EP 3401444 B1 20191127**; CA 3004009 A1 20181111; CA 3004009 C 20200331; CN 108867735 A 20181123; KR 102003886 B1 20191001; KR 20180124774 A 20181121; SG 10201803597W A 20181228; US 10822767 B2 20201103; US 2018327996 A1 20181115

DOCDB simple family (application)  
**EP 17170545 A 20170511**; CA 3004009 A 20180504; CN 201810448208 A 20180511; KR 20180054057 A 20180511; SG 10201803597W A 20180430; US 201815970615 A 20180503