

Title (en)  
Trench sheet and shoring unit of trench panels

Title (de)  
Kanaldiele und Kammerplatten-Verbaueinheit

Title (fr)  
Palplanche et unité de blindage par planches

Publication  
**EP 2246480 A3 20130130 (DE)**

Application  
**EP 10153571 A 20100215**

Priority  
DE 102009003821 A 20090424

Abstract (en)  
[origin: EP2246480A2] The pile (1) has multiple cross section segments (3) provided in a cross section plane that is oriented to a pile longitudinal direction (L). The cross section segments are oriented in the cross section plane in different directions. The pile is made of aluminum and/or aluminum alloy. Each cross section segment has an undercut i.e. T-profile-like undercut groove (4), that extends parallel to the pile longitudinal direction continuously along the entire length of the pile. An aid e.g. handle, is attached to the groove by an inserting screw. An independent claim is also included for a chamber plate comprising two chamber walls.

IPC 8 full level  
**E02D 17/08** (2006.01)

CPC (source: EP)  
**E02D 17/08** (2013.01); **E02D 17/083** (2013.01); **E02D 17/086** (2013.01)

Citation (search report)  
• [XAY] GB 1116382 A 19680606 - BRITISH ALUMINIUM CO LTD, et al  
• [YA] DE 4432306 A1 19960314 - EMUND & STAUDINGER GMBH & CO [DE]  
• [XA] WO 9005810 A1 19900531 - LUNDGREN JAN [SE]  
• [A] EP 1724400 A1 20061122 - FRITSCH WERNER [DE]  
• [AD] EP 0238783 B1 19900502

Cited by  
WO200012118A1; EP2369061A1; FR3083808A1; EP3617413A1; EP2453062A1; FR3122192A1

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 MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2246480 A2 20101103; EP 2246480 A3 20130130; EP 2246480 B1 20180221; DE 102009003821 A1 20101028; EP 2677085 A2 20131225; EP 2677085 A3 20140122; EP 2677085 B1 20180110; ES 2659036 T3 20180313; ES 2664579 T3 20180420**

DOCDB simple family (application)  
**EP 10153571 A 20100215; DE 102009003821 A 20090424; EP 13182816 A 20100215; ES 10153571 T 20100215; ES 13182816 T 20100215**