

Title (en)

PILE ARRANGEMENT FOR VIBRATION DRIVING AND METHOD OF VIBRATION DRIVING

Title (de)

PFAHLANORDNUNG UND VERFAHREN ZUM EINBRINGEN DURCH RÜTTELN

Title (fr)

AGENCEMENT FORMANT PIEU ET PROCÉDÉ D'INSTALLATION PAR VIBRATION

Publication

EP 4212672 A1 20230719 (EN)

Application

EP 22151604 A 20220114

Priority

EP 22151604 A 20220114

Abstract (en)

A pile arrangement (1) for vibration driving, which pile arrangement (1) comprises a stem (2) extending in a longitudinal direction between a first end (2a) and a second end (2b), which first end (2a) is arranged to be positioned below the second end (2b) during driving of the pile arrangement (1); and a base structure (3) arranged at or in proximity to the first end (2a). The base structure (3) comprises a plurality of longitudinally open cells (6), which cells are symmetrically arranged around the stem (2) in the cross section of the base structure (3), each cell (6) being defined by a plurality of cell walls (4, 5) extending in the longitudinal direction. Each cell (6) has a height-to-width-ratio calculated as the longitudinal extension of the shortest cell wall (4, 5) defining the cell (6) divided by a significant distance (Sd) of the cell's (6) cross section. The height-to-width-ratio is in the range of 1 - 30, wherein said significant distance (Sd); for cells (6) having a non-triangular cross section, is constituted by the shortest distance between two mutually non-adjacent sides of the cross section, and for cells (806) having a triangular cross section, is constituted by the shortest of the cross-sectional triangle's base and height.

IPC 8 full level

E02D 7/18 (2006.01); **E02D 5/54** (2006.01); **E02D 15/08** (2006.01); **E02D 27/50** (2006.01); **E02D 27/52** (2006.01)

CPC (source: EP)

E02D 5/54 (2013.01); **E02D 7/18** (2013.01); **E02D 15/08** (2013.01); **E02D 27/50** (2013.01); **E02D 27/525** (2013.01)

Citation (search report)

- [XDAYI] WO 9535416 A1 19951228 - GEO ENGINEERING AB [SE], et al
- [XAYI] US 3683633 A 19720815 - WEELE ABRAHAM FRANCOIS VAN
- [XAYI] WO 2021045626 A1 20210311 - DR TECHN OLAV OLSEN AS [NO]
- [XAYI] JP 2013256791 A 20131226 - NIPPON STEEL & SUMITOMO METAL CORP
- [Y] JP 2000110185 A 20000418 - OHBAYASHI CORP
- [A] DE 102019104292 A1 20200820 - INNOGY SE [DE]
- [A] EP 3124706 A1 20170201 - SWIETELSKY BAUGESELLSCHAFT M B H [AT]

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4212672 A1 20230719; AU 2023207810 A1 20240829; CN 118556148 A 20240827; KR 20240132076 A 20240902;
WO 2023135282 A1 20230720

DOCDB simple family (application)

EP 22151604 A 20220114; AU 2023207810 A 20230116; CN 202380016929 A 20230116; EP 2023050827 W 20230116;
KR 20247026977 A 20230116