

Title (en)

DEEPWATER GROUP PILE FOUNDATION

Title (de)

TIEFSEEPPAHLFUNDAMENT

Title (fr)

FONDATION SUR PALÉE EN EAU PROFONDE

Publication

EP 4257753 A1 20231011 (EN)

Application

EP 21952500 A 20210830

Priority

- CN 202110903610 A 20210806
- CN 2021115223 W 20210830

Abstract (en)

A deepwater group pile foundation, comprising: multiple drilled piles (100), the cross-sectional shape of pile tops (100a) of the drilled piles (100) being a square provided with an arc chamfer, a first reinforcement cage (103) being pre-embedded at the interior of each pile top (100a), the cross-sectional shape of the first reinforcement cages (103) being the same as the cross-sectional shape of the pile tops (100a), and the first reinforcement cages (103) each comprising multiple first vertical main ribs (103a) arranged at even intervals; a bearing platform (200), the bearing platform (200) being fixed above the drilled piles (100), multiple horizontal steel reinforcing bars (105) being provided in the bottom part of the bearing platform (200), the upper ends of the first vertical main ribs (103a) being vertically inserted into the bearing platform (200), and the horizontal steel reinforcing bars (105) within the width range of the first reinforcement cages (103) each passing through gaps between two adjacent first vertical main ribs (103a); and bottom sealing concrete (300), the bottom sealing concrete (300) being located within the height range of the pile tops (100a) below the bearing platform (200).

IPC 8 full level

E02D 27/52 (2006.01); **E01D 19/00** (2006.01); **E02D 5/34** (2006.01); **E02D 19/04** (2006.01); **E02D 27/14** (2006.01); **E02D 31/12** (2006.01)

CPC (source: CN EP)

E01D 19/00 (2013.01 - CN); **E02D 5/34** (2013.01 - CN); **E02D 19/04** (2013.01 - CN); **E02D 27/14** (2013.01 - CN); **E02D 27/525** (2013.01 - CN EP); **E02D 29/12** (2013.01 - EP); **E02D 31/12** (2013.01 - CN)

Citation (search report)

See references of WO 2023010631A1

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 4257753 A1 20231011; CN 113700033 A 20211126; CN 113700033 B 20220923; WO 2023010631 A1 20230209

DOCDB simple family (application)

EP 21952500 A 20210830; CN 202110903610 A 20210806; CN 2021115223 W 20210830