

Title (en)

Method for providing a foundation pile in the ground without vibration, and apparatus for applying such method.

Title (de)

Verfahren um einen Pfahl in den Untergrund zu bringen ohne Vibrationen, und Vorrichtung um dieses Verfahren auszuführen.

Title (fr)

Procédé de construction d'une pieu dans le sol sans vibrations, et dispositif pour la mise en oeuvre du procédé.

Publication

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Application

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Priority

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Abstract (en)

The invention relates to a method and apparatus for providing in the ground, free from vibration, a foundation pile having a slender section and an enlarged pile base (2). The method comprises the steps of driving a drill tube (17) into the ground with rotation under axial pressure, which is closed at the lower end by means of a preformed hollow displacement tip (3) and is provided on the outer surface thereof with helical coils (13), until the displacement element has penetrated into a bearing ground layer (P) for a certain distance; subsequently increasing the distance between the lower edge of the drill tube (1) and the displacement tip (3) forming an enlarged pile base (2) after penetration into a bearing ground layer (P) due to the pile base (2) being forced with rotation into the bearing ground layer (P) for a distance of at least twice the outer diameter of the pile base (2); and providing in the thus formed borehole a prefabricated slender foundation pile (11) whose section is considerably smaller than that of the drill tube (11), while the lower end of the foundation pile (11) comes to rest on the pile base (2). <IMAGE>

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CPC (source: EP)

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Citation (search report)

- [AD] NL 8802318 A 19900417 - BALLAST NEDAM GROEP NV
- [A] GB 552928 A 19430430 - BRAITHWAITE AND COMPANY ENGINE, et al
- [A] NL 80192 A
- [A] EP 0185402 A1 19860625 - ROMBALDI ALBERT

Cited by

AU723991B2; CN111395321A; AU2013351554B2; CN108797625A; CN101793027A; EP0687777A1; NL9400987A; WO2014082741A1

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