

Title (en)
Locking assurance construction

Title (de)
Sperrsicherungskonstruktion

Title (fr)
Construction assurant un verrouillage

Publication
EP 2186944 A2 20100519 (EN)

Application
EP 09175649 A 20091111

Priority
FI U20080367 U 20081117

Abstract (en)
The invention concerns a locking assurance construction in an extension joint for precast reinforced concrete piles. The first reinforced concrete pile (P1) and the second reinforced concrete pile (P2) have, at their interconnectible ends (11, 12), lock housings (2a) provided with transverse holes (3a), and lock spindles (2b) provided with transverse holes (3b). The lock housings and lock spindles extend one within the other with said transverse holes in line with each other. Said locking assurance construction comprises a locking ring (4) in each internal extension (13) of the transverse holes (3a) in the lock housings (2a). Said locking ring has between its outer diameter (D1) and inner diameter (D2) a continuous peripheral segment (5), and between the inner diameter (D2) and the bore diameter (D3) of a central aperture (15), spring tabs (6) separated from each other by radial slots (9). Said locking assurance construction also comprises in the insert pins (16), a cylindrical or cross-sectionally polygonal inner end (7), having an engagement diameter (D4) which is less than the locking ring's inner diameter (D2) and more than the locking ring's bore diameter (D3).

IPC 8 full level
E02D 5/52 (2006.01)

CPC (source: EP)
E02D 5/523 (2013.01)

Cited by
WO2020094923A1; CN113756298A; RU200419U1; WO2016171566A1; WO2023084125A1; US11530519B2

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 2186944 A2 20100519; EP 2186944 A3 20120606; EP 2186944 B1 20130529; FI 8230 U1 20090323; FI U20080367 U0 20081117; PL 2186944 T3 20131129

DOCDB simple family (application)
EP 09175649 A 20091111; FI U20080367 U 20081117; PL 09175649 T 20091111