

Title (en)

IMPERVIOUS SEALING AND PRODUCTION METHOD FOR CREATING SELF-SUPPORTING AND EXCAVATABLE GROUND MASSES FOR THE REALIZATION OF SUBTERRANEAN CONSTRUCTIONS SUCH AS HOLLOW STRUCTURES OR THE LIKE

Publication

EP 0188282 A3 19880316 (DE)

Application

EP 86100467 A 19860115

Priority

DE 3501128 A 19850115

Abstract (en)

[origin: EP0188282A2] The impervious sealing and the production method for it make it possible to replace the expensive methods of shield tunnelling or freezing and as a result eliminate interference with the ground-water balance and prepare the ground masses to be excavated in such a way that they can be continuously excavated in timed sequence with the subterranean construction from a secured position and in the dry. This is achieved by virtue of the fact that the impervious sealing consists of an elastic sealing jacket (3) which is formed from sealing walls (2) arranged in the form of a canopy, screen, housing or the like and which hermetically seals off the ground masses (5) to be excavated from the ground water (4) and/or from air. In the production method provided for this, the ground masses (5) in place of a site to be driven dry are sealed off from the ground water (4) and/or the air by a sealing jacket, are dewatered, are compacted under the pressure of the ground water (4) in place on the outside of the sealing jacket (3) and/or are stabilised by applying a vacuum. <IMAGE>

IPC 1-7

E02D 19/16; **E02D 29/00**; **E02D 31/02**; **E02D 5/18**; **E02D 3/12**

IPC 8 full level

E02D 3/12 (2006.01); **E02D 5/18** (2006.01); **E02D 19/12** (2006.01); **E02D 19/16** (2006.01); **E02D 29/00** (2006.01); **E02D 31/00** (2006.01); **E02D 31/02** (2006.01); **E21D 9/00** (2006.01)

CPC (source: EP US)

E02D 3/12 (2013.01 - EP US); **E02D 5/18** (2013.01 - EP US); **E02D 19/12** (2013.01 - EP US); **E02D 19/16** (2013.01 - EP US); **E02D 29/00** (2013.01 - EP US); **E02D 31/00** (2013.01 - EP US); **E02D 31/02** (2013.01 - EP US); **E21D 9/001** (2013.01 - EP US)

Citation (search report)

- [Y] DE 2158764 A1 19720622
- [A] GB 462566 A 19370311 - BATAAFSCHE PETROLEUM
- [A] FR 1056299 A 19540225
- [A] DE 2011823 A1 19701008
- [X] WEG EN WATERBOUW, Band 29, Nr. 10, Oktober 1969, Seiten 312,314,316; "Geotechniek 'nieuwe stijl'"
- [A] TRAVAUX, Band 57, Nr. 487, Oktober 1975, Seiten 69-72; M. HAFFEN: "Construction de tunnels et ouvrages souterrains en milieu urbain dans des sols granulaires sans cohésion et aquifères"

Cited by

CN108119149A; CN108756885A; CN109252863A; US6139225A; EP0810327A4; WO9202692A1

Designated contracting state (EPC)

AT BE DE GB NL

DOCDB simple family (publication)

EP 0188282 A2 19860723; **EP 0188282 A3 19880316**; **EP 0188282 B1 19910911**; AT E67259 T1 19910915; DE 3501128 A1 19860717; DE 3501128 C2 19880714; DE 3501128 C3 19981112; DE 3681298 D1 19911017; US 5722800 A 19980303

DOCDB simple family (application)

EP 86100467 A 19860115; AT 86100467 T 19860115; DE 3501128 A 19850115; DE 3681298 T 19860115; US 90388392 A 19920625