

Title (en)  
A method of consolidating soil for foundation

Title (de)  
Verfahren zur Stabilisierung eines Baugrundes

Title (fr)  
Procédé de stabilisation du sol pour fondations

Publication  
**EP 1536069 A1 20050601 (EN)**

Application  
**EP 03425756 A 20031125**

Priority  
EP 03425756 A 20031125

Abstract (en)  
A method for consolidating foundation soils, comprising the operative steps of drilling a plurality of holes (1) in the soil, injecting into the soil through each hole (1) at least an expanding substance (6) in one or more injection points (5) to compact the soil in proximity to said injection points (5) and monitoring the level of the soil to determine its rise. Moreover, for injection in each injection point (5), a minimum quantity of expanding substance (6) to be injected is determined, both as a function of the conditions of the soil in proximity to the injection point (5), and of the characteristics of the expanding substance (6), the quantity of expanding substance (6) injected into the soil is measured and compared to the determined minimum quantity. The injection of the expanding substance (6) is stopped when the injected quantity is at least equal to the minimum quantity, and the soil has risen by a predetermined minimum value, the consolidation being deemed to be effected in that moment. Advantageously, the expanding substance can expand less than five times. <IMAGE>

IPC 1-7  
**E02D 3/12**; C09K 17/00

IPC 8 full level  
**C09K 17/00** (2006.01); **E02D 3/12** (2006.01); **E02D 27/48** (2006.01)

CPC (source: EP)  
**E02D 3/12** (2013.01); **E02D 27/48** (2013.01)

Citation (search report)  
• [A] EP 0851064 A1 19980701 - URETEK SRL [IT]  
• [A] US 6521673 B1 20030218 - BROWN SCOTT A [US]  
• [A] US 4567708 A 19860204 - HAEKKINEN VEIKKO [FI]  
• [A] GB 2135721 A 19840905 - GKN KELLER GMBH  
• [A] DE 19842072 C1 19991028 - SCHOENBERGER MARTIN [DE]

Cited by  
CN111684043A; ITPR20080048A1; EP3029204A3; EP1914350A1; ITUB20152280A1; KR20190048097A; EP2746363A1; WO2009063513A1; WO2017013014A1; WO2010059949A3; WO2019114998A1; WO2007028534A1; EP2543769A1; KR101665377B1; US10760236B2; US8690486B2; US9284707B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1536069 A1 20050601**; **EP 1536069 B1 20051121**; AT E313666 T1 20060115; DE 60302904 D1 20060126; ES 2255666 T3 20060701; PT 1536069 E 20060531; WO 2005054586 A1 20050616

DOCDB simple family (application)  
**EP 03425756 A 20031125**; AT 03425756 T 20031125; DE 60302904 T 20031125; EP 2004012791 W 20041111; ES 03425756 T 20031125; PT 03425756 T 20031125