

Title (en)  
Injection anchor for tunnels and trenches

Title (de)  
Injektionsanker für Tunnel und Gräben

Title (fr)  
Douille d'ancrage à injection pour les tunnels et les tranchées

Publication  
**EP 0726383 B1 19980121 (EN)**

Application  
**EP 96101053 A 19960125**

Priority  
IT MI950235 A 19950209

Abstract (en)  
[origin: EP0726383A1] A device is described for reinforcement, consolidation and stabilization of the ground, particularly for preventing landslides or deformation of the working face in tunnels or trenches, comprising an injection tube (5), advantageously with valves, to be inserted in a respective borehole (20) in the ground (3), around which tube (5) are arranged a plurality of strong reinforcing elements (7, 7'), mounted by means of centering spacers (6) and held together by external retaining elements. <IMAGE>

IPC 1-7  
**E21D 20/02**; **E21D 9/00**; **E02D 5/80**

IPC 8 full level  
**E02D 5/80** (2006.01); **E21D 9/00** (2006.01); **E21D 20/02** (2006.01); **E21D 9/06** (2006.01)

CPC (source: EP)  
**E02D 5/80** (2013.01); **E21D 9/001** (2013.01); **E21D 9/0671** (2016.01); **E21D 20/028** (2013.01)

Cited by  
EP0945553A1; EP2821554A1; CN102155234A; KR100715237B1; ITMI20131116A1; EP2976466A4; JP2015098685A; CN113047864A; WO2014147623A1; US9617703B2; US9976274B2

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0726383 A1 19960814**; **EP 0726383 B1 19980121**; **EP 0726383 B2 20020320**; AT E162593 T1 19980215; DE 69600147 D1 19980226; DE 69600147 T2 19980702; DE 69600147 T3 20030206; IT 1275231 B 19970731; IT MI950235 A0 19950209; IT MI950235 A1 19960809

DOCDB simple family (application)  
**EP 96101053 A 19960125**; AT 96101053 T 19960125; DE 69600147 T 19960125; IT MI950235 A 19950209