

Title (en)

Drainage method and strap draining materials therefor

Title (de)

Dränageverfahren und Dränagestreifen zur Durchführung des Verfahrens

Title (fr)

Méthode de drainage et drains en forme de bande pour sa mise en oeuvre

Publication

**EP 0933477 B1 20040407 (EN)**

Application

**EP 98101547 A 19980129**

Priority

- EP 98101547 A 19980129
- CA 2229758 A 19980217

Abstract (en)

[origin: EP0933477A1] In a drainage method which is adapted for use in the system of soil conservation on mountain slopes, underground drainage in fruit ranges and farmlands and drainage in road bases, a draining strap with at least one side having a plurality of densely parallel-arranged small diameter drain collecting slots (21) extending along whole length of the band and with notches in the shape of capillary cracks, is buried in any form, preferably in a flatly laid state, within the soil layer to be drained. By the capillary action at the notches of the slots, water content in the soil is absorbed into the drain collecting slots, and water is drawn, collected and drained through the siphoning force created by the drop of water level at the two ends or at any one section of the slot. For draining materials for the present drainage method, flexible plastic materials of PVC, PE or PP are used in forming into thin sheet like elongated strap bodies. At least one surface of the strap bodies is formed with a plurality of narrow drain collecting ditches densely arranged spaced-apart in the direction of breadth of the strap and extending whole length along the length of the band. Opening of the ditch is formed into capillary cracks, while the ditch portion is formed in an expanded small hole in section. In the draining materials of another form, the one surface where there is no formation of drain collecting ditches is formed in a flat and even surface and to enhance the resistance to pressure and the form protecting property in the draining materials, this flat surface is attached with a U-shaped reinforcing material. Having also the function of a water resistant membrane, the draining strap may be used in the infiltration prevention and drainage system in the basement and tunnel constructions. <IMAGE>

IPC 1-7

**E02B 11/00**; **E02D 31/02**

IPC 8 full level

**E02B 11/00** (2006.01); **E02D 31/02** (2006.01)

CPC (source: EP)

**E02B 11/00** (2013.01); **E02D 31/02** (2013.01)

Cited by

CN109613209A; CN109613208A; CN112227504A; CN110485375A

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

**EP 0933477 A1 19990804**; **EP 0933477 B1 20040407**; CA 2229758 A1 19990817; CA 2229758 C 20050628

DOCDB simple family (application)

**EP 98101547 A 19980129**; CA 2229758 A 19980217