

Title (en)  
GROUND SURFACE INTEGRATED WATER STORAGE, WATER CONDUCTING AND WATER TREATMENT SYSTEM WITH INTEGRATEABLE GROUND AND WATER PROTECTION

Title (de)  
BODENFLÄCHENINTEGRIERTES WASSERSPEICHER-, -FÜHRUNGS- UND -BEHANDLUNGSSYSTEM MIT INTEGRIERBAREM BODEN- UND GEWÄSSERSCHUTZ

Title (fr)  
SYSTEME D'ACCUMULATION, DE GUIDAGE ET DE TRAITEMENT DE L'EAU INTEGRE A UN ELEMENT DE SURFACE DE SOL ET COMPORTANT UN DISPOSITIF DE PROTECTION DES EAUX ET DU SOL INTEGRABLE

Publication  
**EP 0938615 B1 20050209 (DE)**

Application  
**EP 97954884 A 19971108**

Priority

- DE 9702621 W 19971108
- DE 19647361 A 19961116
- DE 19704165 A 19970205
- DE 19725692 A 19970618
- DE 19729230 A 19970709

Abstract (en)  
[origin: WO9822669A1] A ground surface (10, 77, 142) especially for transport surfaces, pathways, industrial and trade areas, horticultural and agricultural surfaces, whose surface (10, 77, 142) superstructure (13-16, 55-60, 99-102) contains at least one barrier layer (18, 54, 85) and a drainage system (17, 60, 99) diverting liquid that penetrates the ground surface. Said surface is designed in such a way that the unoccupied intermediate gaps in the ground structure, especially between the grains of the bottomings (13-16, 58, 60, 74, 99, 100) of the superstructure (13-16, 55-60, 142), are to be used as available spaces for the intake, intermediary storage and deviation of liquids, and a liquid intake, storing and/or discharging ground surface (10, 77, 142) is formed by interaction with the barrier layer (18, 54, 85) and a liquid feed and/or discharge device.

IPC 1-7  
**E03F 1/00**

IPC 8 full level  
**A01G 7/00** (2006.01); **E01C 3/06** (2006.01); **E01C 11/24** (2006.01); **E02D 31/00** (2006.01); **E03F 1/00** (2006.01); **E03F 5/10** (2006.01)

CPC (source: EP)  
**E01C 3/06** (2013.01); **E02D 31/00** (2013.01); **E03F 1/002** (2013.01); **E03F 5/101** (2013.01); **E03F 5/106** (2013.01)

Citation (examination)

- DE 9316175 U1 19940310 - HAUG MANFRED [DE]
- FR 2282020 A1 19760312 - RHEINBAU GMBH [DE]
- US 4578897 A 19860401 - PAZAR ROBERT A [US], et al
- DE 3523099 C

Cited by  
CN107036926A; DE102012002518A1; US10767321B2; EP2410095A2; DE102010032198A1; EP1803851A1

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DOCDB simple family (publication)  
**WO 9822669 A1 19980528**; AT E288974 T1 20050215; AU 5307398 A 19980610; DE 59712199 D1 20050317; DK 0938615 T3 20050613; EP 0938615 A1 19990901; EP 0938615 B1 20050209; ES 2238084 T3 20050816; JP 2001503829 A 20010321; PT 938615 E 20050630

DOCDB simple family (application)  
**DE 9702621 W 19971108**; AT 97954884 T 19971108; AU 5307398 A 19971108; DE 59712199 T 19971108; DK 97954884 T 19971108; EP 97954884 A 19971108; ES 97954884 T 19971108; JP 52306798 A 19971108; PT 97954884 T 19971108