

Title (en)
HORIZONTAL-FLOW OIL-SEALANT-PRESERVING DRAIN ODOR TRAP

Title (de)
ABFLUSS MIT GERUCHSSTOP MIT ÖLDICHTUNGSMITTELERHALTENDER HORIZONTALFLUSSANORDNUNG

Title (fr)
PIEGE A ODEURS POUR CONDUITS D'EVACUATION, A ECOULEMENT HORIZONTAL, PRESERVANT L'HUILE D'ETANCHEITE

Publication
EP 0857242 B2 20160713 (EN)

Application
EP 96936998 A 19961025

Priority
• US 9617187 W 19961025
• US 54828195 A 19951025

Abstract (en)
[origin: WO9715735A1] Improvements in retention of the oily liquid sealant (20) in an oil-sealed odor trap (10B), for drain applications such as a waterless urinal or anti-evaporation floor drain, are accomplished by making the liquid flow path (22A, 22B) substantially horizontal as a departure from conventional practice of substantially vertical flow. The trap (10B) is structured to realize the substantially horizontal liquid flow path (22A, 22B) and to locate the flow path immediately beneath the sealant layer (20) or beneath a baffle portion (16B) that is sloped such that stray sealant droplets migrating upwardly to the upper surface of the flow path due to their buoyancy will be recaptured and returned to the main sealant layer (20). To accomplish substantially horizontal flow (22A, 22B), the entry compartment can be made to have entry (16D) and exit openings substantially offset from each other. The baffle between the entry compartment and the discharge compartment, which has traditionally been made entirely vertical, is made to have a non-vertical portion (16B) that is preferably sloped for sealant recovery. A sealant sheltering region can be provided in the vicinity of the entry region to prevent catastrophic loss of sealant in the event of high pressure water flushing.

IPC 8 full level
E03D 13/00 (2006.01); **E03C 1/28** (2006.01); **E03D 9/00** (2006.01)

CPC (source: EP)
E03C 1/28 (2013.01); **E03C 1/281** (2013.01); **E03D 9/00** (2013.01)

Citation (opposition)
Opponent :
• CH 10342 A 18960131 - ERNST F [IT]
• DE 2816597 B1 19790906 - ERNST F ING AG
• FR 1497878 A 19671013 - ERNST F ING AG
• DE 4320980 A1 19940127 - AWAS ENGINEERING GMBH [DE]
• US 5203369 A 19930420 - HWANG JIN-CHYUAN [TW]
• GB 190928107 A 19100728 - HUTTON JOHN

Cited by
DE102011117750A1; WO2013064262A1

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

DOCDB simple family (publication)
WO 9715735 A1 19970501; AT E211207 T1 20020115; AU 699494 B2 19981203; AU 7477296 A 19970515; BR 9610879 A 19991221; CA 2236005 A1 19970501; CA 2236005 C 20020108; CN 1141468 C 20040310; CN 1200160 A 19981125; DE 29624209 U1 20010315; DE 29624315 U1 20020221; DE 69618225 D1 20020131; DE 69618225 T2 20020613; DK 0857242 T3 20020114; DK 199900216 U3 19991022; EP 0857242 A1 19980812; EP 0857242 B1 20011219; EP 0857242 B2 20160713; EP 1176261 A1 20020130; ES 2170281 T3 20020801; HK 1017038 A1 19991112; IL 124063 A 20010724; JP 3515785 B2 20040405; JP H11515068 A 19991221; MX 9803276 A 19981130; MY 118779 A 20050131; NO 981697 D0 19980416; NO 981697 L 19980622; NZ 321439 A 19991028; PL 182461 B1 20020131; PL 326383 A1 19980914; PT 857242 E 20020628

DOCDB simple family (application)
US 9617187 W 19961025; AT 96936998 T 19961025; AU 7477296 A 19961025; BR 9610879 A 19961025; CA 2236005 A 19961025; CN 96197788 A 19961025; DE 29624209 U 19961025; DE 29624315 U 19961025; DE 69618225 T 19961025; DK 96936998 T 19961025; DK BA199900216 U 19990527; EP 01123582 A 19961025; EP 96936998 A 19961025; ES 96936998 T 19961025; HK 99101832 A 19990427; IL 12406396 A 19961025; JP 51683397 A 19961025; MX 9803276 A 19980424; MY PI9705036 A 19971024; NO 981697 A 19980416; NZ 32143996 A 19961025; PL 32638396 A 19961025; PT 96936998 T 19961025