

Title (en)
Emptying device for vacuum sewer system

Title (de)
Entleerungsvorrichtung für Unterdruckabwasseranlage

Title (fr)
Dispositif de vidage pour système d'égout sous vide

Publication
EP 1022399 A1 20000726 (EN)

Application
EP 00300093 A 20000107

Priority
FI 990111 A 19990120

Abstract (en)
A vacuum sewer system comprising at least one sanitary device (1), e.g. a water closet, connected through a normally closed sewer valve (4) to a collecting container (3) maintained in use under partial vacuum by means of a vacuum pump (5) or the like. The collecting container (3) is provided with a discharge means (8-10) comprising a rapidly rotatable discharge conduit (8) arranged, when rotated, to apply an inertia force on the sewage in the discharge conduit in opposition to the force applied on the sewage by the partial vacuum and which is sufficient to discharge sewage from the discharge conduit. The conduit suitably has an inlet end at a rotation axis (7) of the discharge conduit and an outlet end at a considerable radial distance from the rotation axis (7) of the discharge conduit. The outlet end may be provided with a valve means (10) which opens when the inertia force of the liquid in the conduit in the rotating conduit is sufficiently high. <IMAGE>

IPC 1-7
E03F 1/00

IPC 8 full level
E03D 11/11 (2006.01); **E03F 1/00** (2006.01); **E03F 11/00** (2006.01)

CPC (source: EP KR)
A47C 1/06 (2013.01 - KR); **E03F 1/006** (2013.01 - EP); **A47C 7/40** (2013.01 - KR); **A47C 7/62** (2013.01 - KR)

Citation (applicant)
GB 2012334 A 19790725 - ELECTROLUX AB

Citation (search report)
• [DA] GB 2012334 A 19790725 - ELECTROLUX AB
• [A] WO 9717502 A1 19970515 - DU PONT [US]

Cited by
WO20059432A1; US6910231B2

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

DOCDB simple family (publication)
EP 1022399 A1 20000726; CN 1261120 A 20000726; FI 105223 B 20000630; FI 990111 A0 19990120; JP 2000213055 A 20000802;
KR 20000076479 A 20001226

DOCDB simple family (application)
EP 00300093 A 20000107; CN 00101138 A 20000120; FI 990111 A 19990120; JP 2000009678 A 20000119; KR 20000002102 A 20000118