

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 November 2004 (25.11.2004)

PCT

(10) International Publication Number
WO 2004/100742 A1

(51) International Patent Classification⁷: **A47K 1/14**,
E03C 1/22

(21) International Application Number:
PCT/GB2004/002063

(22) International Filing Date: 14 May 2004 (14.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0311036.8 14 May 2003 (14.05.2003) GB

(71) Applicant (for all designated States except US):
MCALPINE & CO LIMITED [GB/GB]; Kelvin
Avenue, Hillington, Glasgow G52 4LF (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MCALPINE, James,
Kenneth** [GB/GB]; McAlpine & Co Limited, Kelvin Av-
enue, Hillington, Glasgow G52 4LF (GB).

(74) Agents: **MACDOUGALL, Donald, Carmichael** et al.;
Marks & Clerk, 19 Royal Exchange Square, Glasgow G1
3AE (GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

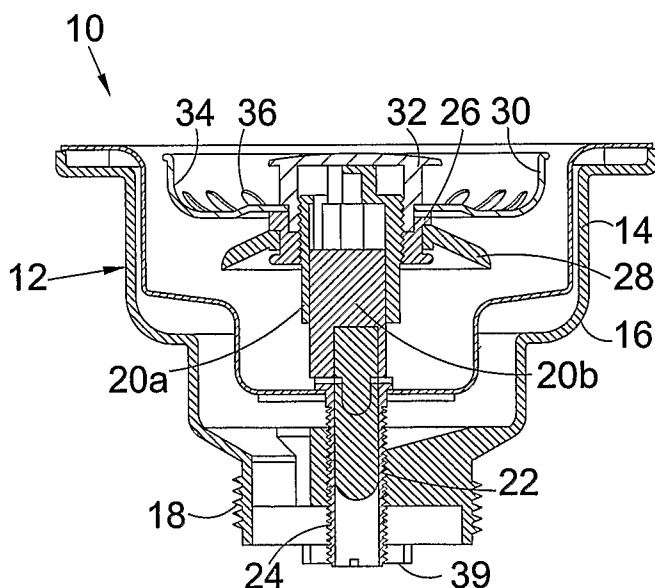
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: WASTE OUTLET PLUG



(57) Abstract: A mechanically-actuable combined seal and strainer plug (10) is provided. The plug (10) includes a length-adjustable stem (20a), (20b), which carries a seal (28) and a strainer (30). In use the strainer (30) is located above the seal (28), to permit easy access and cleaning. The stem (20a), (20b) is received in a waste outlet. The length of the stem may be adjusted by exertion of force on a knob (32) on the upper surface of the strainer (30); as the stem changes in length, the seal (28) engages and disengages with a surface of a waste outlet. When the seal (28) is disengaged, waste water can flow through the outlet passing first through the strainer (30) to remove solid particles.