

Title (en)  
DRAIN CLEANING TOOLS

Title (de)  
ABLAUFREINIGUNGSWERKZEUGE

Title (fr)  
OUTILS DE NETTOYAGE DE DRAIN

Publication  
**EP 3327211 A2 20180530 (EN)**

Application  
**EP 17201903 A 20171115**

Priority  
• IN 201621040159 A 20161124  
• US 201715442764 A 20170227

Abstract (en)  
Drain cleaning tools (100) are described. The tools typically include a hollow drum (110, 140; 148) for housing a drain cleaning cable (170), an elongated cable guide (120), a locking nut engageable with the cable guide (120) for selectively engaging the cable (170), and a rotatable handle (170) on the cable guide (120). A particular configuration is used at an open end of the cable guide to facilitate engagement, i.e., selective locking and unlocking, of the cable. One or more flexible members (126,164) are provided in the cable guide (120) for rotatably retaining the handle (160) about the cable guide.

IPC 8 full level  
**E03F 9/00** (2006.01); **B08B 9/045** (2006.01); **E03C 1/302** (2006.01)

CPC (source: EP)  
**E03C 1/302** (2013.01); **E03F 9/005** (2013.01); **B08B 9/045** (2013.01)

Citation (applicant)  
• US 6158076 A 20001212 - RUTKOWSKI MICHAEL J [US], et al  
• US 9080599 B2 20150714 - RUTKOWSKI MICHAEL J [US], et al  
• US 6615436 B1 20030909 - BURCH JR DANNY L [US], et al  
• US 4218802 A 19800826 - BABB LARRY F [US], et al  
• US 6412136 B1 20020702 - RUTKOWSKI MICHAEL J [US]  
• US 6009588 A 20000104 - RUTKOWSKI MICHAEL J [US]  
• US 6243905 B1 20010612 - RUTKOWSKI MICHAEL J [US]  
• US 7367077 B2 20080506 - RUTKOWSKI MICHAEL J [US], et al  
• US 8413347 B2 20130409 - GRESS PAUL W [US], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
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