

Title (en)  
Improved toilet bowl plunger.

Title (de)  
Gerät zum Entstopfen von Toilettenbecken.

Title (fr)  
Débouchoir pour cuvette de toilette.

Publication  
**EP 0233961 A1 19870902 (EN)**

Application  
**EP 86101838 A 19860213**

Priority  
EP 86101838 A 19860213

Abstract (en)  
The plunger includes an elongated knurled handle (12), a base sealing member (16) having a central aperture extending therethrough, and a multi-pleated bellows (14) preferably releasably connected to the bottom of the handle and preferably permanently connected to the top (36) of the base sealing member. Preferably, the bellows and base sealing member are generally cylindrical and of rubber, plastic or the like. They may be integral. The sealing member (16) may have an upper bowl sealing rim (38) with a collapsable top (36) wall adapted to receive the bellows, and a small diameter lower sealing ring (42), with depending skirt (32). Preferably, the transverse bellows pleats (26) increase in diameter from the bellows top (30) to bottom (32) and may be arranged in sets for improved seating. The handle top (18) can be removable and the handle can contain a central cavity (56) extending longitudinally therethrough, which cavity can, if desired, be threaded to receive a garden hose (60). Thus, the handle top when unscrewed can act as a vacuum relief valve. The handle top can also include a padded transverse grip. The device is highly efficient and durable and is adapted for use in a variety of applications.

IPC 1-7  
**E03C 1/308**

IPC 8 full level  
**E03C 1/308** (2006.01)

CPC (source: EP)  
**E03C 1/308** (2013.01)

Citation (search report)  
• [Y] FR 1602039 A 19700928  
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• [Y] FR 2540943 A1 19840817 - SCARELLA ROGER [FR]  
• [A] FR 503745 A 19200616 - ANTOINE GHIS ALBERTI [FR], et al  
• [AD] US 2844826 A 19580729 - CHEITEN SAMUEL S

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EP1108095A4; GR880100349A; US5423621A; GB2278175A; EP2525003A3; USD942717S; US8065754B2; WO2007018478A3; US9328492B2

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