

Title (en)  
TOILET BOWL FLUSHING DEVICE

Title (de)  
SPÜLVORRICHTUNG FÜR EINE TOILETTENSCHÜSSEL

Title (fr)  
DISPOSITIF DE RINCAGE DE CUVETTE DE TOILETTES

Publication  
**EP 1990473 A4 20091021 (EN)**

Application  
**EP 07714373 A 20070216**

Priority  

- JP 2007052843 W 20070216
- JP 2006042635 A 20060220
- JP 2006042636 A 20060220

Abstract (en)  
[origin: EP1990473A1] There is provided a toilet flushing apparatus for firmly discharging a filth by a small amount of flush water and by a short period of time and having still flush sound. The toilet flushing apparatus includes first water supply means for supplying flush water to a toilet bowl 2 of a toilet main body 1, second water supply means for additionally supplying the flush water, a drain flow path 5 communicated with a downstream side of a water seal portion 4 of the toilet main body 1, air sucking means for sucking air from the drain flow path 5, and a control apparatus 50 for controlling the first, the second water supply means and the air sucking means. The first water supply means is constituted to be able to supply the flush water from a rear side of the toilet bowl 2 such that a swirl flow is formed at inside of the toilet bowl 2. The second water supply means includes a water tank 20 and transporting means for transporting the flush water at inside of the water tank 20 to the toilet bowl 2 by opening an opening/closing valve V 2 . The control apparatus 50 produces a siphon operation by operating the air sucking means continuous to operating the first water supply means and opens the opening/closing valve V 2 after forming the swirl flow and before finishing the siphon operation.

IPC 8 full level  
**E03D 11/02** (2006.01); **E03D 3/00** (2006.01)

CPC (source: EP KR US)  
**E03D 3/00** (2013.01 - KR); **E03D 3/10** (2013.01 - EP US); **E03D 5/10** (2013.01 - EP US); **E03D 11/02** (2013.01 - KR); **E03D 11/08** (2013.01 - EP US); **E03D 11/13** (2013.01 - EP US); **E03D 2201/40** (2013.01 - EP US)

Citation (search report)  

- No further relevant documents disclosed
- See references of WO 2007097259A1

Cited by  
CN102782225A; US9009877B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
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**EP 07714373 A 20070216**; HK 09106334 A 20090714; JP 2007052843 W 20070216; KR 20087019284 A 20080806; TW 96106199 A 20070216; US 27994007 A 20070216