

Title (en)

AIR SUCTION DEVICE FOR TOILET DRAINAGE CHANNEL

Title (de)

LUFTABSAUGVORRICHTUNG FÜR TOILETTENABLAUFKANAL

Title (fr)

SYSTÈME D'ASPIRATION D'AIR POUR CANAL DE VIDANGE DE TOILETTES

Publication

**EP 2143848 A4 20110309 (EN)**

Application

**EP 08738793 A 20080325**

Priority

- JP 2008055493 W 20080325
- JP 2007098911 A 20070404

Abstract (en)

[origin: EP2143848A1] An air suction device for a toilet drainage channel, capable of good and silent toilet flushing. The air suction device (200) for the toilet drainage channel (5) has air suction means for sucking air from the toilet drainage channel (5) connected to the downstream side of a water sealing part (4) of a toilet body (1). The air suction means has an ejector (30) serving as a negative pressure generator and also has a suction tank (80) connected between the ejector (30) and the toilet drainage channel (5). The air suction device (200) further has a control device (C) for controlling both execution of a suction stroke in which the suction tank (80) exhausts air into the toilet drainage channel (5). The control device (C) executes the air suction stroke after the start of the supply of flush water to the bowl (2) of the toilet body (1) and then executes the air exhaust stroke before the completion of the supply of the flush water to the bowl (2).

IPC 8 full level

**E03D 11/02** (2006.01)

CPC (source: EP KR US)

**E03D 3/10** (2013.01 - EP US); **E03D 9/052** (2013.01 - EP US); **E03D 11/12** (2013.01 - KR); **E03D 11/18** (2013.01 - KR);  
**E03F 1/006** (2013.01 - EP US)

Citation (search report)

- [XY] WO 2007015405 A1 20070208 - INAX CORP [JP], et al
- [XD] JP H0754388 A 19950228 - TOTO LTD
- [Y] JP 2006070617 A 20060316 - INAX CORP
- [XY] US 5539938 A 19960730 - TUBBS ELTON H [US]
- See references of WO 2008123216A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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JP 4994089 B2 20120808; KR 20090126247 A 20091208; RU 2009140755 A 20110510; RU 2458210 C2 20120810; TW 200914691 A 20090401;  
TW I421395 B 20140101; US 2010088813 A1 20100415; WO 2008123216 A1 20081016

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JP 2008055493 W 20080325; KR 20097017272 A 20080325; RU 2009140755 A 20080325; TW 97111943 A 20080402;  
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