

Title (en)

TOUCHLESS ACTIVATION OF A TOILET

Title (de)

BERÜHRUNGSLOSE AKTIVIERUNG EINER TOILETTE

Title (fr)

ACTIVATION SANS CONTACT DE TOILETTES

Publication

**EP 2931986 A4 20151230 (EN)**

Application

**EP 13865770 A 20131216**

Priority

- US 201261738210 P 20121217
- US 2013075482 W 20131216

Abstract (en)

[origin: WO2014099817A1] A toilet sensor and actuator assembly, having: (a) an infrared sensor configured to detect the presence of an object at a far distance from a toilet; (b) an ultrasonic sensor configured to detect the presence of the object at a near distance from the toilet, wherein the ultrasonic sensor remains in a sleep mode until awakened by a signal from the infrared sensor that the infrared sensor has detected the presence of the object at the far distance; and (c) an actuator mechanism that flushes the toilet in response to a signal from the ultrasonic sensor that the ultrasonic sensor has detected the presence of the object at the near distance.

IPC 8 full level

**E03D 5/10** (2006.01)

CPC (source: EP)

**E03D 5/105** (2013.01); **E03C 1/057** (2013.01)

Citation (search report)

- [IAY] WO 0246541 A1 20020613 - GEBERIT TECHNIK AG [CH], et al
- [XY] EP 1057942 A2 20001206 - CAROMA IND LTD [AU]
- [XAY] US 2008072369 A1 20080327 - FUNARI MICHAEL A [US], et al
- [X] US 3471868 A 19691014 - ZORN EUGENE K
- See references of WO 2014099817A1

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)

BA ME

DOCDB simple family (publication)

**WO 2014099817 A1 20140626**; CA 2895477 A1 20140626; CN 104937183 A 20150923; EP 2931986 A1 20151021; EP 2931986 A4 20151230; HK 1210815 A1 20160506; JP 2016506511 A 20160303; KR 20150096712 A 20150825; MX 2015007779 A 20151106

DOCDB simple family (application)

**US 2013075482 W 20131216**; CA 2895477 A 20131216; CN 201380071144 A 20131216; EP 13865770 A 20131216; HK 15111473 A 20151120; JP 2015548048 A 20131216; KR 20157018828 A 20131216; MX 2015007779 A 20131216