

Title (en)

MIST EJECTING TOY AND MIST PRODUCING UNIT

Title (de)

NEBELAUSSTOSSSPIELZEUG UND NEBELERZEUGUNGSEINHEIT

Title (fr)

JOUET EJECTEUR DE BROUILLARD ET MODULE GENERATEUR DE BROUILLARD

Publication

**EP 1834681 A4 20100915 (EN)**

Application

**EP 05822679 A 20051227**

Priority

- JP 2005023860 W 20051227
- JP 2004379080 A 20041228

Abstract (en)

[origin: EP1834681A1] A mist ejecting toy includes: a liquid retaining member fixed to a toy body; a jet cylinder provided in the toy body; an ultrasound generating element having a vibrating plate fixed to a piezoelectric vibrator; and a controller to drive and control the ultrasound generating element, wherein a vibrating section of the vibrating plate is abutted against the liquid retaining member, the controller vibrates the vibrating section to generate mist particles, the mist particles are ejected from the jet cylinder, and the vibrating plate is placed at a position where a liquid drop produced by adhesion of the mist particles to the jet cylinder does not fall onto the vibrating section, so that the mist particles can be generated and ejected effectively.

IPC 8 full level

**A63H 19/14** (2006.01); **A63H 17/26** (2006.01); **F21V 33/00** (2006.01); **F21Y 101/02** (2006.01)

CPC (source: EP KR US)

**A63H 5/00** (2013.01 - KR); **A63H 17/26** (2013.01 - EP US); **A63H 19/14** (2013.01 - EP KR US)

Citation (search report)

- [XY] EP 0546964 A1 19930616 - TDK CORP [JP]
- [Y] US 5174216 A 19921229 - MILLER GARY L [US], et al
- [YA] US 2004005836 A1 20040108 - PIERSON MARTIN D [US], et al
- [YA] US 2003064657 A1 20030403 - PIERSON MARTIN D [US]
- [A] JP H0724375 A 19950127 - MIKUNI KOGYO KK, et al
- See references of WO 2006070786A1

Cited by

EP3329978A1; GB2477862A; GB2477862B

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1834681 A1 20070919**; **EP 1834681 A4 20100915**; AU 2005320613 A1 20060706; CN 101090761 A 20071219; CN 101090761 B 20120425; JP 2006181171 A 20060713; JP 3744931 B1 20060215; KR 20070098832 A 20071005; US 2008085657 A1 20080410; WO 2006070786 A1 20060706

DOCDB simple family (application)

**EP 05822679 A 20051227**; AU 2005320613 A 20051227; CN 200580045251 A 20051227; JP 2004379080 A 20041228; JP 2005023860 W 20051227; KR 20077014801 A 20070628; US 79436105 A 20051227