

Title (en)

Dosing valve with light beam source.

Title (de)

Dosierventil mit einer Strahleinrichtung.

Title (fr)

Soupape de dosage avec un faisceau lumineux.

Publication

**EP 2251089 A3 20140430 (DE)**

Application

**EP 10004819 A 20100506**

Priority

DE 102009020785 A 20090511

Abstract (en)

[origin: EP2251089A2] The valve has a discharge nozzle (4) which can be closed by a sealing ball (5) and from which liquid drops are discharged on the discharge nozzle. A beam device generates a beam of electromagnetic radiation (1) e.g. UV radiation, in a region of the liquid drops being discharged, where an optical axis (O) of the beam device and the discharge direction of the liquid drops coincide with each other. The beam device has a light source (10) and a circular plastic lens (7) generating a visible marking in the region of the liquid drops being discharged, where the lens includes a lateral V-shaped cut-out. An independent claim is also included for a method for operating a metering valve for application of liquids onto a target surface.

IPC 8 full level

**B05B 1/30** (2006.01); **B05C 17/00** (2006.01); **B25F 1/00** (2006.01); **F21V 33/00** (2006.01); **B05B 15/00** (2006.01); **B05C 11/10** (2006.01)

CPC (source: EP US)

**B05B 1/3046** (2013.01 - EP US); **B05C 17/002** (2013.01 - EP US); **B05B 15/00** (2013.01 - EP US); **B05C 11/1002** (2013.01 - EP US); **Y10T 137/8158** (2015.04 - EP US)

Citation (search report)

- [X] US 6443365 B1 20020903 - TUCKER ROBERT M [AU], et al
- [XAI] US 2007167113 A1 20070719 - KLEIN RICHARD J II [US], et al
- [X] US 6557815 B1 20030506 - KLEIN II RICHARD J [US]
- [X] US 2008180939 A1 20080731 - COLIN RAYMUNDO [US]
- [A] DE 20206121 U1 20020814 - MERLAKU KASTRIOT [DE]
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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 SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

**EP 2251089 A2 20101117**; **EP 2251089 A3 20140430**; CN 101884972 A 20101117; CN 101884972 B 20141217; DE 102009020785 A1 20101125; JP 2010261594 A 20101118; JP 5042335 B2 20121003; US 2010284026 A1 20101111; US 8490575 B2 20130723

DOCDB simple family (application)

**EP 10004819 A 20100506**; CN 201010178230 A 20100511; DE 102009020785 A 20090511; JP 2010108338 A 20100510; US 77498610 A 20100506