Title (en)

Fluid dispenser having infrared user sensor

Title (de)

Fluidspender mit einem Infrarot-Benutzersensor

Title (fr)

Distributeur de fluide doté d'un détecteur d'utilisateur infrarouge

Publication

EP 2008561 A8 20090225 (EN)

Application

EP 08252135 A 20080620

Priority

US 82324807 A 20070627

Abstract (en)

[origin: EP2008561A2] A dispenser (10) utilizes a controller (26) in conjunction with a photodetector (22) in order to provide automatic dispensing to a user when an object enters a target area. The controller (26) is programmed to pulse a light source (24) that is mounted proximate the photodetector (22). The controller (26) constantly monitors the voltage at the receiving signal of the photodetector (22), and evaluates the difference in voltage from the light pulsed on and off. The controller (26) sums the differences, and constantly updates the differences over a designated period to create an average difference value. The average difference value is summed with a target offset value and compared to a momentary voltage difference. When the momentary difference exceeds the sum of the target offset value and average difference, the controller (26) sends a signal via an actuating mechanism (20) to a dispense mechanism (18) which dispenses a fluid or other product on the object.

IPC 8 full level

A47K 5/12 (2006.01); **B67D 7/08** (2010.01); **G01S 7/486** (2020.01); **G01S 17/04** (2020.01)

CPC (source: EP KR US)

A47K 5/1217 (2013.01 - EP US); **A47K 10/34** (2013.01 - KR); **B65H 26/00** (2013.01 - KR); **G01S 7/486** (2013.01 - EP US); **G01S 17/04** (2020.01 - EP US); **G01S 17/88** (2013.01 - EP US)

Cited by

EP2199822A1; CN108563171A; WO2013059296A3; US10330821B2; US9226624B2; US9591950B2; US10159384B2; WO2016025711A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2008561 A2 20081231; **EP 2008561 A3 20101124**; **EP 2008561 A8 20090225**; **EP 2008561 B1 20140319**; AU 2008202770 A1 20090115; AU 2008202770 B2 20130620; BR PI0804745 A2 20100126; CA 2635169 A1 20081227; CA 2635169 C 20160119; CN 101332058 A 20081231; CN 101332058 B 20120229; DK 2008561 T3 20140526; ES 2455507 T3 20140415; HK 1126946 A1 20090918; JP 2009025297 A 20090205; JP 5295658 B2 20130918; KR 101432831 B1 20140826; KR 20080114602 A 20081231; MY 157284 A 20160531; PT 2008561 E 20140403; TW 200927049 A 20090701; TW I403299 B 20130801; US 2009000023 A1 20090101; US 7896196 B2 20110301

DOCDB simple family (application)

EP 08252135 A 20080620; AU 2008202770 A 20080624; BR PI0804745 A 20080627; CA 2635169 A 20080616; CN 200810126173 A 20080627; DK 08252135 T 20080620; ES 08252135 T 20080620; HK 09103958 A 20090429; JP 2008169481 A 20080627; KR 20080060700 A 20080626; MY PI20082146 A 20080617; PT 08252135 T 20080620; TW 97122306 A 20080613; US 82324807 A 20070627