

Title (en)  
OPTICAL SENSORS AND ALGORITHMS FOR CONTROLLING AUTOMATIC BATHROOM FLUSHERS AND FAUCETS

Title (de)  
OPTISCHE SENSOREN UND ALGORITHMEN ZUR STEUERUNG VON BADEZIMMER-SPÜLVORRICHTUNGEN UND -WASSERHÄHNEN

Title (fr)  
CAPTEURS OPTIQUES ET ALGORITHMES PERMETTANT DE COMMANDER LES CHASSES D'EAU ET ROBINETS D'UNE SALLE DE BAIN AUTOMATIQUES

Publication  
**EP 1579136 A4 20091209 (EN)**

Application  
**EP 03808568 A 20031226**

Priority  

- US 0341303 W 20031226
- US 0241576 W 20021226
- US 0320117 W 20030624
- US 51372203 P 20031022
- US 0338730 W 20031204

Abstract (en)  
[origin: WO2004051011A1] A passive optical sensor includes a light detector sensitive to ambient (room) light for controlling, for example, the operation of automatic faucets (10, 10A, 10B, 10C) or automatic bathroom flushers (100, 100A). The passive optical sensors provide signals to flow controllers, including control electronics (400) and flow valves (38, 140) and require only very small amounts of electrical power for sensing users of bathroom facilities, and thus enable battery operation for many years. To control the operation of automatic faucets or automatic bathroom flushers based on ambient light, the controller executes novel algorithms (600, 900).

IPC 8 full level  
**E03C 1/05** (2006.01); **E03D 5/10** (2006.01); **F16K 31/02** (2006.01)

CPC (source: EP US)  
**E03C 1/057** (2013.01 - EP US); **E03D 5/105** (2013.01 - EP US)

Citation (search report)  

- [XY] US 5918855 A 19990706 - HAMANAKA TATSUMI [JP], et al
- [Y] US 5361802 A 19941108 - KROLL DIETER [DE], et al
- See references of WO 2004061343A1

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DOCDB simple family (publication)  
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DOCDB simple family (application)  
**US 0338730 W 20031204**; AT 03796714 T 20031204; AU 2003297994 A 20031204; AU 2003303592 A 20031226; CA 2507504 A 20031204; CA 2511809 A 20031226; DE 60305732 T 20031204; EP 03796714 A 20031204; EP 03808568 A 20031226; JP 2004557614 A 20031204; JP 2011039611 A 20110225; US 0341303 W 20031226