

Title (en)

HAND-OPERATED DEVICE FOR THE CLEANING OF PLAIN SURFACES, IN PARTICULAR WINDOW PANES

Publication

**EP 0263456 B1 19910116 (DE)**

Application

**EP 87114474 A 19871003**

Priority

- DE 8627272 U 19861007
- DE 8709764 U 19870716

Abstract (en)

[origin: US4893370A] A hand tool for cleaning smooth surfaces having a holder in the form of a flat box; a sponge block and a squeegee, spaced apart from and parallel to the sponge block; a swivelable handle disposed on the holder, on an incline and laterally about an axis extending vertically to the holder and an axis extending parallel to the holder, with two joints, disposed one above the other, with both joints locked in a particular handle position by a common locking and unlocking element in the form of a bolt-shaped and/or bush-shaped slide.

IPC 1-7

**A47L 1/06**; **B25G 3/38**

IPC 8 full level

**A47L 1/06** (2006.01); **B25G 1/06** (2006.01); **B25G 3/28** (2006.01)

CPC (source: EP US)

**A47L 1/06** (2013.01 - EP US); **B25G 3/28** (2013.01 - EP US); **Y10T 403/32024** (2015.01 - EP US); **Y10T 403/32049** (2015.01 - EP US); **Y10T 403/32336** (2015.01 - EP US)

Cited by

CN112754346A; AU668185B2; DE19831899C2; WO9905953A1; WO9326148A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

**US 4893370 A 19900116**; AU 8072587 A 19880506; DK 163408 B 19920302; DK 163408 C 19920824; DK 307888 A 19880607; DK 307888 D0 19880607; EP 0263456 A1 19880413; EP 0263456 B1 19910116; EP 0287598 A1 19881026; ES 2020540 B3 19910816; FI 86686 B 19920630; FI 86686 C 19921012; FI 882582 A0 19880601; FI 882582 A 19880601; GR 3001750 T3 19921123; JP H01501045 A 19890413; WO 8802615 A1 19880421

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**US 20319188 A 19880607**; AU 8072587 A 19871003; DK 307888 A 19880607; EP 8700570 W 19871003; EP 87114474 A 19871003; EP 87906573 A 19871003; ES 87114474 T 19871003; FI 882582 A 19880601; GR 910400468 T 19910409; JP 50600287 A 19871003