

Title (en)

A HEIGHT-ADJUSTING DEVICE FOR SHELVES OF APPLIANCES

Title (de)

HÖHENVERSTELLVORRICHTUNG FÜR REGALE VON GERÄTEN

Title (fr)

DISPOSITIF DE RÉGLAGE EN HAUTEUR POUR ÉTAGÈRES D'APPAREILS

Publication

**EP 3895596 A1 20211020 (EN)**

Application

**EP 20169298 A 20200414**

Priority

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Abstract (en)

The present invention provides for a height-adjusting device for shelves of appliances, in particular for dishwasher racks, comprising: a support member (18), defining a substantially planar surfaces having an upper edge (26) and a lower edge (27) and extending in a substantially vertical first plane, when in use; a locking element (30), having a proximal end, hinged with said support member (18) at a first pivot axis (B) that is normal to said first vertical plane and provided towards said lower edge (27), and a distal end having a pin (34) that is operably linked via a biasing member (100) to a second pivot axis (C) vertically spaced apart from said first pivot axis (B) towards said upper edge (26) and that is normal to said first vertical plane, wherein said locking element (30) is configured to move about said pivot axis (B) relative to said support member (18) between an engaged position and a disengaged position, opposite said engaged position relative to a second plane (T) perpendicular to said first plane and containing said first pivot axis (B) and said second pivot axis (C); a bracket member (38), slidably coupleable with said support member (18) so as to allow vertical movement of said bracket member (38) relative to said support member (18) between a top position and a bottom position, comprising: a first cam surface (43), having at least one locking seat (44), configured to lockingly engage with said pin (34) of said locking element (30) when in said engaged position, when moving said bracket member (38) from said top position towards said bottom position; a second cam surface (47), configured to operably engage with said pin (34) of said locking element (30) so as to move said locking element (30) from said engaged position to said disengaged position and toggle said biasing member (100) from a first biasing disposition, where said locking element (30) is biased towards said first cam surface (43), to a second biasing disposition, where said locking element (30) is biased away from said first cam surface (43), when moving said bracket member (38) to said top position, and a third cam surface (48), configured to guidingly engage with said pin (34) of said locking element (30) so as to move said locking element (30) from said disengaged position to said engaged position and toggle said biasing member (100) from said second biasing disposition to said first biasing disposition, when moving said bracket member (38) from said top position to said bottom position.

IPC 8 full level

**A47L 15/50** (2006.01)

CPC (source: EP)

**A47L 15/504** (2013.01)

Citation (applicant)

EP 3387981 A1 20181017 - ILLINOIS TOOL WORKS [US]

Citation (search report)

- [AD] EP 3387981 A1 20181017 - ILLINOIS TOOL WORKS [US]
- [A] US 2006237042 A1 20061026 - WEAVER DAVID C [US], et al
- [A] WO 2009147612 A2 20091210 - ITW IND COMPONENTS SRL [IT], et al
- [A] DE 20019706 U1 20010118 - HACHTEL STEFFEN [DE]
- [A] US 2013300269 A1 20131114 - GARNETT WILLIAM NATHAN [US], et al

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