

Title (en)

Bottom opening station in a paper bag apparatus

Title (de)

Bodenöffnungsstation einer Papierbeutelmaschine

Title (fr)

Station pour l'ouverture de fonds de sac dans une machine pour la fabrication de sacs en papier

Publication

**EP 1516718 A3 20060913 (DE)**

Application

**EP 04021274 A 20040908**

Priority

DE 10344156 A 20030922

Abstract (en)

[origin: EP1516718A2] The bottom opening station (1) contains a bottom opening cylinder (2) with gripper tool (5), which takes the paper bag part and twists it in the same direction as the cylinder's turning axis. The necessary force to grasp the paper bag part and to turn it around the cylinder originates from one ready source of energy. A second energy source is on hand to power the gripper tool which works in opposition to the first energy source and opens the gripper. The first energy source can come from a spring, magnet or other device while the second comes from the curved packaging - once the length of the packaging has been passed the force holding it against the cylinder ceases and the gripper opens.

IPC 8 full level

**B31B 29/00** (2006.01); **B31B 50/52** (2017.01); **B31B 50/78** (2017.01); **B31B 70/04** (2017.01)

CPC (source: EP US)

**B31B 70/00** (2017.07 - EP); **B31B 70/024** (2017.07 - EP US); **B31B 50/78** (2017.07 - EP); **B31B 2150/00** (2017.07 - EP); **B31B 2150/0012** (2017.07 - EP); **B31B 2160/10** (2017.07 - EP); **B31B 2160/20** (2017.07 - EP)

Citation (search report)

- [A] GB 327643 A 19300410 - ALFRED CLEMENT COTY, et al
- [DA] DE 4115161 A1 19921112 - WINDMOELLER & HOELSCHER [DE]
- [A] US 2123508 A 19380712 - JOHN KOENIG
- [A] US 2044476 A 19360616 - JOHN KOENIG
- [A] DE 1611699 B1 19710729 - WINDMOELLER & HOELSCHER

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CN106881908A; CN107225801A

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 1516718 A2 20050323**; **EP 1516718 A3 20060913**; **EP 1516718 B1 20080227**; AT E387307 T1 20080315; DE 10344156 A1 20050428; DE 10344156 B4 20080207; DE 502004006303 D1 20080410

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