

Title (en)

Module of a machine as well as method for perforation of rod-like articles of the tobacco industry

Title (de)

Modul einer Maschine sowie Verfahren zur Perforation von stabförmigen Artikeln der Tabak verarbeitenden Industrie

Title (fr)

Module d'une machine et procédé de perforation d'articles en forme de tige de l'industrie du tabac

Publication

**EP 1673990 A3 20060726 (DE)**

Application

**EP 05024250 A 20051108**

Priority

DE 102004063097 A 20041222

Abstract (en)

[origin: EP1673990A2] The module has a vertical conveyor to convey rod-shaped articles in vertical direction. A pair of perforation devices (80, 80') is arranged vertically above each other. Each perforation device comprises a conveying component for removing the rod-shaped articles from the conveyor. Optic systems focus high-energy radiation onto the cigarettes which are positioned between roller belts. Independent claims are also included for the following: (A) a machine comprising an inspection and delivery module (B) a method of processing, assembling and inspecting rod-shaped articles (C) a method for perforating rod-shaped articles.

IPC 8 full level

**A24C 5/47** (2006.01); **A24D 3/02** (2006.01)

CPC (source: EP US)

**A24C 5/475** (2013.01 - EP US); **A24C 5/478** (2013.01 - EP US)

Citation (search report)

- [PX] WO 2005077210 A1 20050825 - HAUNI MASCHINENBAU AG [DE], et al
- [X] US 2002129823 A1 20020919 - DOMBEK MANFRED [DE], et al
- [X] US 5366096 A 19941122 - MILLER LEWIS H [US]
- [DX] WO 03024256 A2 20030327 - HAUNI MASCHINENBAU AG [DE], et al
- [X] US 2002119873 A1 20020829 - HEITMANN UWE [DE]
- [X] US 3397922 A 19680820 - GEORGE DEARSLEY
- [X] GB 467333 A 19370615 - ISAAC LUBBOCK
- [A] US 6123201 A 20000926 - ATWELL CHARLES GARY [US], et al
- [PX] EP 1510142 A1 20050302 - HAUNI MASCHINENBAU AG [DE]
- [A] DE 10217409 A1 20031106 - HAUNI MASCHINENBAU AG [DE]
- [A] DE 10127101 A1 20011220 - HAUNI MASCHINENBAU AG [DE]
- [A] EP 0659354 A1 19950628 - GD SPA [IT]
- [A] EP 0304559 A1 19890301 - SASIB SPA [IT]

Cited by

KR20190136013A; EP2633769A1; EP1847187A1; US7775956B2; EP2928327B1

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