

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 A2 20060628 (DE)

Application

EP 05024250 A 20051108

Priority

DE 102004063097 A 20041222

Abstract (en)

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 (applicant)

- WO 03024256 A2 20030327 - HAUNI MASCHINENBAU AG [DE], et al
- DE 10145326 A1 20030403 - HAUNI MASCHINENBAU AG [DE]
- DE 10217409 A1 20031106 - HAUNI MASCHINENBAU AG [DE]
- WO 2005002369 A1 20050113 - HAUNI MASCHINENBAU AG [DE], et al

Cited by

EP1847187A1; EP2633769A1; KR20190136013A; US7775956B2; EP2928327B1; EP4000425B1

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