

Title (en)

Method and device for detecting and removing defective and/or defectively positioned cigarettes

Title (de)

Verfahren und Vorrichtung zum Detektieren sowie Beseitigen fehlerhafter und/oder fehlerhaft positionierter Zigaretten

Title (fr)

Procédé et dispositif pour détecter et rejeter des cigarettes défectueuses ou mal positionnées

Publication

**EP 1026079 A3 20020717 (DE)**

Application

**EP 00100309 A 20000107**

Priority

DE 19903777 A 19990201

Abstract (en)

[origin: JP2000217564A] PROBLEM TO BE SOLVED: To exclude defect cigarettes and irregularly arranged cigarettes by image-scanning the cigarettes arranged in the cigarettes magazines in the cigarettes-producing machine and the cigarettes-packaging machine with an optical inspector and excluding the unacceptable cigarettes with the ejection unit on the basis of the deviation from the standard value. SOLUTION: A defect cigarette 13 and/or an irregularly arranged cigarette 16 are scanned on at least one image of the cigarettes 13, 16 in the cigarette magazine 10 by at least one of optical inspector 17. The resultant image is evaluated with an image-processing device 18. In the process of evaluation, an error signal is generated, when the scanned image is decided as a certain deviation from the standard image and/or at least one standard value, the excluding unit 19 set in the magazine area is energized responding to the search and a plurality of cigarettes in the excluding zone (A-D) are excluded thereto and the cigarette 16 arranged transversely in the cigarette magazine 10 of the cigarettes-producing machine and the cigarettes-packaging machine are detected and excluded.

IPC 1-7

**B65B 19/30**

IPC 8 full level

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CPC (source: EP US)

**A24C 5/3412** (2013.01 - EP US); **B07C 5/3422** (2013.01 - EP US); **Y10S 131/906** (2013.01 - EP US); **Y10S 131/91** (2013.01 - EP US)

Citation (search report)

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- [X] DE 4424045 A1 19960118 - FOCKE & CO [DE]
- [Y] US 5223915 A 19930629 - NERI ARMANDO [IT]
- [A] US 5588068 A 19961224 - LONGEST H CARY [US], et al

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Designated contracting state (EPC)

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DOCDB simple family (publication)

**DE 19903777 A1 20000803**; BR 0000542 A 20001031; BR 0000542 B1 20110222; CN 1199039 C 20050427; CN 1264038 A 20000823; DE 50006030 D1 20040519; EP 1026079 A2 20000809; EP 1026079 A3 20020717; EP 1026079 B1 20040414; JP 2000217564 A 20000808; JP 4343375 B2 20091014; US 6446632 B1 20020910

DOCDB simple family (application)

**DE 19903777 A 19990201**; BR 0000542 A 20000131; CN 00101832 A 20000201; DE 50006030 T 20000107; EP 00100309 A 20000107; JP 2000018909 A 20000127; US 49621900 A 20000201