Title (en)

METHOD AND APPARATUS FOR DETECTING STRAND INHOMOGENEITY OF A ROD OF MATERIAL IN THE TOBACCO PROCESSING INDUSTRY

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERKENNUNG VON STRANGINHOMOGENITÄTEN EINES MATERIALSTRANGS DER TABAK VERARBEITENDEN INDUSTRIE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉTECTION DE DÉFAUTS D'HOMOGÉNÉITÉ D'UNE TIGE DE MATÉRIAU DE L'INDUSTRIE DE TRAITEMENT DU TABAC

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EP 2873334 A1 20150520 (DE)

Application

EP 14191605 A 20141104

Priority

DE 102013223535 A 20131119

Abstract (en)

[origin: CN104643283A] The present invention relates to a method for detecting strand inhomogeneity of a rod of material, especially a rod of tobacco or rod of a filter tip, in the tobacco processing industry, wherein the rod of material is longitudinally axially conveyed through at least two rod measuring devices operating at different measuring frequencies. The invention also relates to an apparatus for detecting strand inhomogeneity of a rod of material in the tobacco processing industry, a rod forming machine in the tobacco processing industry, an application and a software program. In the method according to the invention, at least one comparison parameter is independently and respectively derived from measuring signals of the at least two rod measuring devices, so as to form a difference of one comparison parameter of the at least two rod measuring devices or a difference vector obtained by a plurality of differences of the plurality of comparison parameters, and whether the difference or the difference vector is within a tolerance range which has been predetermined or can be predetermined is detected, wherein, excess of the tolerance range represents unallowed strand inhomogeneity through a signal.

Abstract (de)

Die Erfindung betrifft ein Verfahren zur Erkennung von Stranginhomogenitäten eines Materialstrangs der Tabak verarbeitenden Industrie, insbesondere eines Tabakstrangs oder eines Filterstrangs, wobei der Materialstrang längsaxial durch wenigstens zwei mit unterschiedlichen Messfrequenzen betriebene Strangmessvorrichtungen (30, 40) gefördert wird. Die Erfindung betrifft ferner eine Vorrichtung zur Erkennung von Stranginhomogenitäten eines Materialstrangs der Tabak verarbeitenden Industrie, eine Strangmaschine der Tabak verarbeitenden Industrie, eine Verwendung sowie ein Softwareprogramm.

IPC 8 full level

A24C 5/34 (2006.01)

CPC (source: CN EP)

A24C 5/34 (2013.01 - CN); **A24C 5/3412** (2013.01 - EP); **A24D 3/02** (2013.01 - CN)

Citation (applicant)

- EP 1330961 B1 20051214 - GD SPA [IT]
- DE 102012209954 A1 20131219 - HAUNI MASCHINENBAU AG [DE]
- DE 102011083049 A1 20130321 - HAUNI MASCHINENBAU AG [DE]
- DE 102011083052 A1 20130321 - HAUNI MASCHINENBAU AG [DE]

Citation (search report)

- [X] US 4942363 A 19900717 - LOWITZ DAVID A [US]
- [A] GB 2489586 A 20121003 - HAUNI MASCHINENBAU AG [DE]
- [A] EP 1702524 A1 20060920 - HAUNI MASCHINENBAU AG [DE]
- [A] DE 3400410 A1 19840726 - HAUNI WERKE KOERBER & CO KG [DE]
- [A] DE 4014659 A1 19901122 - HAUNI WERKE KOERBER & CO KG [DE]

Cited by

EP3281536A1; DE102016114642A1; WO2022101010A1

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