

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

Publication
EP 2873334 B1 20190130 (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.

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 (examination)
GB 1376747 A 19741211 - MOLINS LTD

Citation (opposition)
Opponent : G.D S.p.A.
• EP 1247462 A2 20021009 - HAUNI MASCHINENBAU AG [DE]
• DE 102011006414 A1 20121004 - HAUNI MASCHINENBAU AG [DE]
• DE 10100664 A1 20020711 - HAUNI MASCHINENBAU AG [DE]
• EP 2207027 A2 20100714 - TEWS ELEKTRONIK GMBH & CO KG [DE]
• US 4865054 A 19890912 - LORENZEN HEINZ-CHRISTEN [DE], et al
• EP 1702524 A1 20060920 - HAUNI MASCHINENBAU AG [DE]
• EP 2243385 A2 20101027 - HAUNI MASCHINENBAU AG [DE]
• EP 1327876 A1 20030716 - TEWS ELEKTRONIK DIPL ING MANFR [DE]

Cited by
EP3281536A1; DE102016114642A1; WO2022101010A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2873334 A1 20150520; EP 2873334 B1 20190130; EP 2873334 B2 20230913; CN 104643283 A 20150527; CN 104643283 B 20200121; DE 102013223535 A1 20150521

DOCDB simple family (application)
EP 14191605 A 20141104; CN 201410661038 A 20141119; DE 102013223535 A 20131119