

Title (en)

A process for of adjusting the size of knitted articles under production in circular knitting machines for knitwear or hosiery

Title (de)

Verfahren zur Regulierung der Größe von in Rundstrickmaschinen hergestellten Maschenwaren für Strickwaren oder Trikotagen

Title (fr)

Procédé permettant de réguler la taille des articles tricotés sous production dans des machines à tricoter circulaires pour articles tricotés ou articles chaussants

Publication

EP 2532776 A1 20121212 (EN)

Application

EP 12169736 A 20120529

Priority

IT MI20111030 A 20110608

Abstract (en)

A process for regulating the size of textile articles under production on circular knitting machines for knitwear or hosiery, comprising steps of: predisposing at least a circular knitting machine (1) for knitwear or hosiery; defining a knitted article (6) to be produced on the knitting machine (1); sub-dividing the knitted article (6), defining at least a plurality of consecutive knitted zones of the knitted article (6); activating a production program of the knitted article (6); producing the knitted zones of the knitted article (6) in sequence, maintaining a tension of the yarn (9) substantially constant; detecting a plurality of yarn consumption data (9) per knitted zone (6a, 6b) at each feeding position (10) of the machine and at the relative passive yarn feeder (8); comparing the plurality of yarn consumption data (9) per knitted zone (6a, 6b) with a respective plurality of reference values for yarn consumption (9) per knitted zone (6a, 6b), such as to obtain a respective plurality of comparable results; determining a plurality of corrective values of the position of the stitch cams (7) on the basis of the respective plurality of compared results, if the compared results are greater than respective predetermined tolerance thresholds; automatically displacing the stitch cams (7), according to the plurality of corrective values, such as to reduce the difference between the plurality of yarn consumption data (9) per knitted zone (6a, 6b) and the plurality of yarn consumption reference values (9) per knitted zone (6a, 6b). Also a software program and a circular knitting machine implementing the process is disclosed.

IPC 8 full level

D04B 15/32 (2006.01); **D04B 15/48** (2006.01)

CPC (source: EP KR)

D04B 1/24 (2013.01 - KR); **D04B 1/246** (2013.01 - EP); **D04B 1/26** (2013.01 - KR); **D04B 9/025** (2013.01 - EP); **D04B 9/44** (2013.01 - KR); **D04B 9/46** (2013.01 - KR); **D04B 15/488** (2013.01 - EP); **D04B 35/12** (2013.01 - EP)

Citation (applicant)

- EP 2186932 A1 20100519 - LGL ELECTRONICS SPA [IT]
- US 5174133 A 19921229 - KAWASE YOJI [JP], et al
- US 5511392 A 19960430 - SAWAZAKI MASATOSHI [JP], et al
- US 6832496 B2 20041221 - THOLANDER LARS HELGE GOTTFRID [SE], et al
- EP 0452800 A1 19911023 - BAREA TIZIANO [IT]
- EP 0950742 A2 19991020 - B TSR INT SPA [IT]
- EP 0707102 A2 19960417 - LGL ELECTRONICS SPA [IT]
- EP 1335054 A2 20030813 - LGL ELECTRONICS SPA [IT]

Citation (search report)

- [Y] GB 2193230 A 19880203 - ELITEX ZAVODY TEXTILNIHO
- [Y] DE 19756484 A1 19990624 - CETEX CHEMNITZER TEXTILMASCHIN [DE]
- [Y] EP 0723042 A1 19960724 - SHIMA SEIKI MFG [JP]

Cited by

CN110306287A

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2532776 A1 20121212; **EP 2532776 B1 20150819**; CN 102817167 A 20121212; CN 102817167 B 20150916; EP 2985372 A1 20160217; EP 2985372 B1 20190710; ES 2552660 T3 20151201; ES 2749162 T3 20200319; HR P20151179 T1 20160101; HR P20191819 T1 20191227; IT MI20111030 A1 20121209; KR 101520525 B1 20150514; KR 20120136310 A 20121218; PL 2532776 T3 20160429; PL 2985372 T3 20200331; TW 201303101 A 20130116; TW I498465 B 20150901

DOCDB simple family (application)

EP 12169736 A 20120529; CN 201210193804 A 20120608; EP 15179905 A 20120529; ES 12169736 T 20120529; ES 15179905 T 20120529; HR P20151179 T 20151104; HR P20191819 T 20191007; IT MI20111030 A 20110608; KR 20120061507 A 20120608; PL 12169736 T 20120529; PL 15179905 T 20120529; TW 101120449 A 20120607