Title (en)

METHOD FOR CONTROLLED WINDING OF A TEXTILE PRODUCT ON A TEXTILE MACHINE, AND TEXTILE MACHINE

Title (de)

VERFAHREN ZUM GESTEUERTEN AUFWICKELN EINES TEXTILPRODUKTS AUF EINE TEXTILMASCHINE SOWIE TEXTILMASCHINE

Title (fr)

PROCÉDÉ D'ENROULEMENT CONTRÔLÉ D'UN PRODUIT TEXTILE SUR UNE MACHINE TEXTILE ET MACHINE TEXTILE

Publication

EP 4328365 A1 20240228 (EN)

Application

EP 23182429 A 20230629

Priority

IT 202200017523 A 20220824

Abstract (en)

Warp yarns (3) are unwound from a supply unit (2) and longitudinally move towards a threads-interlacing area (8) at which a dragging roller (11) rotates to advance the textile product (9) toward a winding reel (15). A winding torque WT applied to the winding reel (15) is modulated by repeated winding adjustment cycles, to keep a target value WFtv of a winding traction force provided on the textile product (9) downstream of the dragging roller (11). Each winding adjustment cycle comprises: acquiring a winding rotation speed of the winding reel (15); acquiring a dragging rotation speed of the dragging roller (11); detecting an instant winding diameter WD of the textile product (9) in the winding reel (15); and applying an instant value of the winding torque WT calculated by the formula: WT = WFtv * WD / 2.

IPC 8 full level

D03D 49/10 (2006.01); **D03D 49/20** (2006.01); **D03D 51/00** (2006.01); **D04B 15/88** (2006.01)

CPC (source: EP)

D03D 49/10 (2013.01); **D03D 49/20** (2013.01); **D03D 51/005** (2013.01); **D04B 15/88** (2013.01)

Citation (search report)

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- [XYI] EP 2907905 A1 20150819 - TSUDAKOMA IND CO LTD [JP]
- [Y] US 5857496 A 19990112 - BROWN GEOFFREY T [GB], et al

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4328365 A1 20240228; CN 117622945 A 20240301

DOCDB simple family (application)

EP 23182429 A 20230629; CN 202311076679 A 20230823