

Title (en)
METHOD FOR FEEDING A PLURALITY OF YARNS TO A WARPING MACHINE AND APPARATUS FOR PERFORMING THE METHOD

Title (de)
VERFAHREN ZUM ZUFÜHREN EINER VIELZAHL VON FÄDEN ZU EINER SCHÄRMASCHINE UND VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)
PROCÉDÉ D'ALIMENTATION D'UNE PLURALITÉ DE FILS DANS UN OURDISOIR ET DISPOSITIF POUR LA MISE EN OEUVRE DU PROCÉDÉ

Publication
EP 4265831 A1 20231025 (EN)

Application
EP 23165702 A 20230330

Priority
IT 202200007784 A 20220420

Abstract (en)
A creel (12) comprising a frame (16) which supports a battery of spools (14) arranged on multiple horizontal rows and a series of yarn guiding eyelets (18) arranged to guide and support the yarns along their path from the spools (14) to an output end (12c) of the creel (12). The yarns are fed to a warping machine (10) by respective yarn feeders (23), each of which comprises a yarn winding reel (24) which is individually motorized. The yarns in output from the spools (14) are diverted toward the output end (12c) by yarn guiding means. The yarn feeders (23) associated with a same row of spools (14) are all supported at the output end (12c) and are subjected to control means adapted to adjust the rotation rate of the yarn winding reels (24) as a function of the signals received from respective load cells (26) functionally arranged between the yarn winding reels (24) and the warping machine (10), so as to stabilize the tension of the respective yarns fed to the warping machine (10) at a fixed or variable preset level.

IPC 8 full level
D02H 1/00 (2006.01); **B65H 59/38** (2006.01)

CPC (source: CN EP)
B65H 49/16 (2013.01 - EP); **B65H 59/388** (2013.01 - EP); **D02H 1/00** (2013.01 - CN EP); **D02H 3/00** (2013.01 - CN); **D02H 13/12** (2013.01 - CN); **D02H 13/26** (2013.01 - CN); **B65H 2701/31** (2013.01 - EP); **B65H 2701/38** (2013.01 - EP)

Citation (applicant)
IT 202200007784 A 20220420

Citation (search report)
• [XYI] US 2007084960 A1 20070419 - HEANEY DANIEL J [US], et al
• [XYI] US 2008283653 A1 20081120 - BING-WO RONALD D [US], et al
• [Y] EP 3763650 A1 20210113 - LGL ELECTRONICS SPA [IT]
• [Y] DE 602006000440 T2 20081224 - LGL ELECTRONICS SPA [IT]

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 4265831 A1 20231025; CN 116905148 A 20231020; IT 202200007784 A1 20231020

DOCDB simple family (application)
EP 23165702 A 20230330; CN 202310318450 A 20230328; IT 202200007784 A 20220420