Title (en)

Method for making knitwear on a flat bed knitting machine

Title (de)

Verfahren zur Herstellung eines Gestricks auf einer Flachstrickmaschine

Title (fr)

Procédé pour la fabrication d'un tricot dans un métier à tricoter rectiligne

Publication

EP 0936294 A3 20000405 (DE)

Application

EP 98123873 A 19981216

Priority

DE 19801643 A 19980117

Abstract (en)

[origin: DE19801643A1] To knit a fabric on a flatbed knitter, using a simultaneous feed of two yarns (11,12) of different elasticity, for each stitch to be knitted at a needle the length to be fed of the yarn (12) with the higher elasticity is computed from the length required of the yarn (11) with the lower elasticity together with data giving the stretch characteristics of the more elastic yarn (12). The data for the higher stretch yarn (12) characteristics are used to compute a retarding factor to multiply the length of the less elastic yarn (11) to maintain the feed length of the higher stretch yarn (12). More higher stretch yarn (12) is delivered when the knitting direction for it is away from the yarn feed (21) than when it is towards the feed. The measured feed length of the lower stretch yarn (11) is given by a monitor (15). The fed length of the lower stretch yarn (11) is computed from data generated by a machine control for each stitch size and the number of stitches in the row. The two yarns (11,12) are fed to the knitter by a combined yarn guide (FF). An Independent claim is included for a flatbed knitter, with a bobbin (13) for the lower stretch yarn (11), and a feed (21) for the higher stretch yarn (12), and a common yarn guide (FF) for both yarns (11,12). A machine control (19) and computer unit (17) determine the length to be fed of the yarn (12) with higher elasticity, and control the yarn feed (21) accordingly. The yarn feed (21) unit preferably has two parallel feed rollers (23), rotating in the same direction, supporting the bobbin (24) wound with the higher stretch yarn (12). The feed (21) has a motor (22) coupled to the computer and control unit (17). A yarn tensioner (14), for the lower stretch yarn (11), is between its bobbin (13) and the yarn guide (FF). The monitor (15) to measure the length of the lower stretch yarn (11) is between its bobbin (13) and the yarn guide (FF), and is linked to the computer and control unit (17). A yarn break sensor (25) monitors the feed of the yarn (12) with the higher elasticity.

IPC 1-7 (main, further and additional classification)

D04B 1/22; D04B 15/38

IPC 8 full level (invention and additional information)

B65H 59/38 (2006.01); **D04B 1/18** (2006.01); **D04B 15/38** (2006.01); **D04B 15/50** (2006.01)

CPC (invention and additional information)

D04B 15/50 (2013.01); **B65H 59/387** (2013.01); **D04B 15/44** (2013.01); **D04B 15/80** (2013.01); B65H 2701/319 (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family

DE 19801643 A1 19990722; CN 1224086 A 19990728; CN 1265046 C 20060719; EP 0936294 A2 19990818; EP 0936294 A3 20000405; EP 0936294 B1 20030319; ES 2190566 T3 20030801; HK 1021554 A1 20070105; US 6170301 B1 20010109