Title (en)

Yarn feed device.

Title (de)

Fadenzuführeinrichtung.

Title (fr)

Dispositif d'alimentation en fil.

Publication

EP 0481803 A1 19920422 (EN)

Application

EP 91309619 A 19911017

Priority

GB 9022615 A 19901018

Abstract (en)

The yarn feed device for textile machinery comprises a yarn assist wheel (2) the outer surface of which is half-covered with rubber to provide axial zones (3) and (4) of relatively high and relatively low frictional characteristics. The wheel is driven by an electric motor (1) at a speed in excess of the maximum estimated demand rate of yarn by associated textile machinery. A yarn tension device (8) is provided on the yarn infeed side to the wheel, and a yarn tension device (13) is provided on the yarn outfeed side. In use the yarn is placed in contact with the surface of the rotating wheel, and can be placed against the low friction surface (4) or the high friction surface (3) by a tension-responsive yarn shipping lever (5) that is responsive to the tension in the yarn between the infeed tensioning mechanism (8) and the wheel (2). When a demand for the yarn exists, the tension in that particular section rises and the yarn is placed on the higher frictional portion of the wheel for assisting its motion towards the knitting machine. The device of the invention enables demand feeding to be provided at substantially constant and very low tension to sock machines which have widely varying and erratic demands for the yarn, and with a very wide range of different yarn types. <IMAGE>

IPC 1-7

D04B 15/48

IPC 8 full level

D04B 15/48 (2006.01)

CPC (source: EP)

D04B 15/48 (2013.01)

Citation (search report)

- [A] FR 1241501 A 19600916
- [A] US 2949756 A 19600823 CURTIS HORACE L
- [A] FR 2141482 A1 19730126 INST TEXTILE DE FRANCE
- [A] BE 720732 A 19690312
- [A] FR 1133959 A 19570404 STIBBE G & CO LTD
- [A] GB 2065723 A 19810701 STEVCOKNIT INC

Cited by

GB2297331A; EP2998255A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 0481803 A1 19920422; CN 1062561 A 19920708; GB 9022615 D0 19901128; JP H04263656 A 19920918

DOCDB simple family (application)

EP 91309619 Å 19911017; CN 91110684 A 19911018; GB 9022615 A 19901018; JP 29777691 A 19911018