

## Title (en)

METHOD AND DEVICE FOR WINDING A YARN ON A CONICAL SPOOL AT A CONSTANT SPEED

## Publication

**EP 0165511 A3 19860813 (DE)**

## Application

**EP 85106573 A 19850529**

## Priority

DE 3422637 A 19840619

## Abstract (en)

[origin: US4789107A] When a thread (10) supplied at a constant speed is wound onto a cross-wound bobbin (11), the variations in thread tension are compensated, and in addition predetermined thread-tension limiting values are prevented from being exceeded as a result of a change in the winding-on speed. A first regulating system (96) is provided for compensating periodic variations in the thread tension, while a second regulating system (51) is provided for compensating shifts in the range of thread tensions. The second regulating system is designed as a variable step-up gear (5), the drive part (60) of which is connected to a drive shaft (4) extending over several spooling stations. The output part (62) of this step-up gear (5) is connected to the spooling roller (3), the drive part (60) being connected to the output part (62) by means of a transmission member (61) which determines the gear ratio at any particular time and which is adjustable as a function of the thread tension. The drive part (60) and the output part (62) are both designed as cone wheels, between which the transmission member (61) is continuously adjustable. The transmission member (61) has assigned to it an adjustable basic position and a return device (89) for returning to a basic position determining the maximum step-up ratio.

## IPC 1-7

**B65H 59/38**; **B65H 54/42**

## IPC 8 full level

**B65H 54/42** (2006.01); **B65H 59/38** (2006.01)

## CPC (source: EP US)

**B65H 54/42** (2013.01 - EP US); **B65H 59/382** (2013.01 - EP US); **B65H 2701/31** (2013.01 - EP US)

## Citation (search report)

- GB 1249247 A 19711013 - RIETER AG MASCHF [CH]
- US 3894439 A 19750715 - BORELLO DOMENIC
- DE 2730847 B1 19790104 - ROMBACH GMBH JOHANN B
- DE 2328993 C2 19750417
- DE 1912374 C3 19740808
- DE 2458853 A1 19760616 - SCHLAFHORST & CO W
- GB 1587377 A 19810401 - REINERS VERWALTUNGS GMBH
- DE 2419422 A1 19741205 - ELITEX ZAVODY TEXTILNIHO
- GB 2074204 A 19811028 - REINERS VERWALTUNGS GMBH
- FR 2386469 A1 19781103 - STARLINGER & CO GMBH [AT]

## Cited by

CN103538965A; EP1795477A1; EP0230943A1; US5035369A; EP0311815A3

## Designated contracting state (EPC)

CH DE FR GB IT LI

## DOCDB simple family (publication)

**EP 0165511 A2 19851227**; **EP 0165511 A3 19860813**; **EP 0165511 B1 19890524**; CS 448485 A3 19920513; DE 3422637 A1 19851219; DE 3570423 D1 19890629; EP 0165428 A2 19851227; EP 0165428 A3 19860820; HK 31493 A 19930408; JP S6175775 A 19860418; SG 86891 G 19920214; US 4789107 A 19881206

## DOCDB simple family (application)

**EP 85106573 A 19850529**; CS 448485 A 19850619; DE 3422637 A 19840619; DE 3570423 T 19850529; EP 85105557 A 19850507; HK 31493 A 19930401; JP 13210585 A 19850619; SG 86891 A 19911016; US 1316087 A 19870210