

Title (en)

PROCESS AND DEVICES FOR OPERATING TWISTING SPINDLES

Title (de)

VERFAHREN ZUM BETRIEB VON ZWIRNSPINDELN SOWIE EINRICHTUNGEN ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)

PROCEDE ET DISPOSITIF DE COMMANDE DE BROCHES A RETORDRE

Publication

EP 0642606 B1 19970730 (DE)

Application

EP 93912549 A 19930515

Priority

- DE 9300441 W 19930515
- DE 4217360 A 19920526
- DE 9209495 U 19920715

Abstract (en)

[origin: WO9324688A1] A process and devices are disclosed for operating twisting spindles. In twisting machines with several twisting spindles, the passage of the thread (F2) through the balloon of thread limited by limiting elements (3) is influenced so that each live thread element touches the limiting elements at time intervals that satisfy the following conditions: (a) the ratio between the sum of the contact times of each live thread element with the limiting elements (3) and the total time of passage of said thread element through the balloon of thread is comprised between 1:5 and 1:200; (b) the ratio between the contact time of a thread element and the following non-contact time is comprised between 1:2 and 1:20. In a device for carrying out the process, an undulating ring (6) is arranged between the upper edge of a balloon limiter (3) and the guide ring (2) in such a way that it is touched at its inner or outer side by the live thread (F2). The side of the undulating ring (6) touched by the thread has at its circumference cams with a sinus-shaped profile. The undulating ring forms transverse waves in the length of thread inside the balloon of thread which have such a wavelength that conditions (a) and (b) are satisfied.

IPC 1-7

D01H 1/42

IPC 8 full level

D01H 1/42 (2006.01); **D01H 7/86** (2006.01)

CPC (source: EP US)

D01H 1/425 (2013.01 - EP US); **D01H 1/427** (2013.01 - EP US); **D02G 3/285** (2013.01 - EP US)

Designated contracting state (EPC)

BE FR GB IT NL

DOCDB simple family (publication)

WO 9324688 A1 19931209; AU 4305693 A 19931230; CA 2136754 A1 19931209; EP 0642606 A1 19950315; EP 0642606 B1 19970730; JP 3362043 B2 20030107; JP H07507110 A 19950803; MX 9303076 A 19931101; US 5329755 A 19940719; US 5404703 A 19950411

DOCDB simple family (application)

DE 9300441 W 19930515; AU 4305693 A 19930515; CA 2136754 A 19930515; EP 93912549 A 19930515; JP 50007894 A 19930515; MX 9303076 A 19930526; US 25309894 A 19940602; US 97000292 A 19921102