

Title (en)

Textile processing machine with a drawing frame unit

Title (de)

Textilverarbeitende Maschine mit einer Streckwerkseinheit

Title (fr)

Machine pour le traitement de matériau textile avec banc d'étirage

Publication

EP 0978581 A3 20010404 (DE)

Application

EP 99810622 A 19990712

Priority

DE 19835372 A 19980805

Abstract (en)

[origin: EP0978581A2] The comber assembly (1), with a following two-stage drawing unit (6) to process the combed fibers (8), has a controlled speed for the paired entry rollers (42) at the second drawing stage (II). The roller speed is set through a signal from a monitor (30) for the drawn fibers (12) from the first drawing stage (I). A sliver buffer (3) is between the drawing stages (I,II). The paired outlet rollers (11) at the first drawing stage (I) have a controlled drive (M3), and its paired inlet rollers (10) are coupled to the drive (M1) of the textile machine (1). The drive motor (M1) for the textile machine (1) and the drive motor (M2) for the paired entry rollers (10) of the first drawing stage (I) are controlled by a common frequency converter (20). The transmission for the paired entry rollers (10) of the first drawing stage (I) is linked to the transmission (14) of the textile machine (1). The drawing stages (I,II) have separate drive motors (M3,M5). The machine drive motor (M1) acts as a master for the drive motor (M3) for the paired exit rollers (11) of the first drawing stage (I) and for the drive motor (M5) for the second drawing stage (II). A number of combing heads, at the comber (1), are in front of the drawing stages, with a separate drive motor for their lap rollers, with a speed controlled by the monitor (30) signals. A sliver laying unit (60) is after the drawing unit (6), to lay the drawn sliver (9). The drive (50,51) for the laying system is coupled to the transmission (47) for the paired exit rollers (43) of the second drawing stage (II). Sensors (S1,S2) at the sliver buffer (3) are connected to the control for the drive motor (M5) for the second drawing stage (II), which in turn controls the sliver buffer. The sliver buffer (3) forms a suspended sliver loop (FS), with at least one sensor (S1,S2) to register the loop. A further pair of rollers (40) is between the sliver buffer (3) and the monitor (30), with a drive (27) linked to the drive (38) for the paired entry rollers (42) at the second drawing stage (II). A monitor (57) for the drawn sliver (9) is between the second drawing stage (II) and the sliver laying unit (60). The sliver laying unit (60) has a separate electric drive motor, controlled by the drive motor (M5) for the second drawing stage (II), through a frequency converter.

IPC 1-7

D01G 21/00; **D01G 23/06**

IPC 8 full level

D01G 19/08 (2006.01); **D01G 21/00** (2006.01); **D01G 23/06** (2006.01)

CPC (source: EP)

D01G 19/08 (2013.01); **D01G 21/00** (2013.01); **D01G 23/06** (2013.01)

Citation (search report)

- [A] GB 2261884 A 19930602 - HOLLINGSWORTH [GB]
- [X] US 3403426 A 19681001 - EDWIN STIEPEL ERHARD, et al
- [Y] EP 0799916 A2 19971008 - RIETER AG MASCHF [CH]
- [Y] US 3703023 A 19721121 - KRAUSS PAUL, et al
- [Y] US 4100649 A 19780718 - ERISMANN HANS, et al
- [Y] US 5377385 A 19950103 - JORNOT ERICH [CH], et al

Cited by

CN113913978A; US6453513B2; GB2358878A; GB2358878B; EP2503034A1; CN102691141A; WO2007016798A1

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 (publication)

EP 0978581 A2 20000209; **EP 0978581 A3 20010404**; **EP 0978581 B1 20040121**; CN 1168863 C 20040929; CN 1243893 A 20000209; DE 19835372 A1 20000210; DE 59908347 D1 20040226

DOCDB simple family (application)

EP 99810622 A 19990712; CN 99111949 A 19990804; DE 19835372 A 19980805; DE 59908347 T 19990712