

Title (en)
Spindle spinning or twisting device

Title (de)
Spindelspinn- oder Zwirnovorrichtung

Title (fr)
Dispositif de filage ou de retordage sur broche

Publication
EP 0933454 A3 19991229 (DE)

Application
EP 98120516 A 19981029

Priority
CZ 25198 A 19980128

Abstract (en)
[origin: EP0933454A2] The spindle assembly, for yarn spinning or twisting, has a sliding surface (26) over at least part of the balloon limit wall (25). The surface is from the first point of contact with the yarn (P) towards the lower end of the balloon limit wall (25), away from the axis (7) of the spindle (4). The sliding surface (26) is a conical, convex or concave surface, or it is formed by two adjacent conical part-surfaces. The sliding surface (26) transits into a holding surface at its largest diameter, which is at a constant gap from the spindle (4) axis, or which is pitched towards the spindle axis (7). An outlet from the gap (22), to guide the rotating open loop, is opposite the sliding surface (26). The gap (22) has one end at a rotating fan surface (19a) at the bottom of the balloon limit (6). An air guide surface (21a) is at the other end, which secures the balloon limit (6) axially at the spinning ring (20) and also gives a guide edge for the yarn (P). The balloon limit wall (25) and the lower end of the balloon limit (6) define the outlet of a blower. The blower has a second rotating fan surface, at the outer circumference of the balloon limit (6), thickening outwards to work with a static guide surface at a radial gap from it. The static guide surface is an extension of the balloon limit wall (25). The balloon limit wall (25) has a surface roughness of at most $R_a = 0.4 \mu$, at least at the sliding surface (26) and a thermal conductivity, at least at the sliding surface (26), of at least $0.15 \text{ cal/cm}^2 \text{ s}^2 \text{ degrees C}^2$ measured at 18 degrees C.

IPC 1-7
D01H 1/42; **D01H 1/06**

IPC 8 full level
D01H 1/06 (2006.01); **D01H 1/42** (2006.01); **D01H 7/74** (2006.01)

CPC (source: EP)
D01H 1/06 (2013.01); **D01H 1/427** (2013.01)

Citation (search report)
• [AD] WO 9732065 A1 19970904 - VYZK USTAV BAVLNARSKY A S [CZ], et al
• [A] EP 0458154 A1 19911127 - RIETER AG MASCHF [CH]

Cited by
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