

Title (en)

Twisting spindle in particular two-for-one twisting or direct cabling spindle

Title (de)

Zwirnspindel, insbesondere Doppeldraht- oder Direktkablrierspindel

Title (fr)

Broche à retordre en particulier broche à retordre à double torsion ou broche de câblage direct

Publication

EP 0900865 A2 19990310 (DE)

Application

EP 98113445 A 19980718

Priority

- DE 19739281 A 19970908
- DE 29719456 U 19971103

Abstract (en)

The twisting spindle (3), and especially a two-for-one or direct cabling spindle, is within a protective pot (6) secured against rotation. A rotating disk (7) is keyed to the spindle (3), with a radial yarn channel (7.1) connected to the hollow spindle axis (6.3,6.4), and carries a cylinder mantle (9) round the protective pot (6). A yarn guide is over the outlet of the yarn guide channel. An intermediate housing (11) with free rotation is round the rotating disk (7) and cylinder mantle (9), contained within a static outer mantle (1). The yarn guide (9.1) is at the yarn channel (7), extending over the height of the cylinder mantle, as a channel (9.1). The protective pot (6) holds at least one supply bobbin (A). As a two-for-one twisting spindle, the protective pot (6) has at least two open-end spinning turbines, to deliver at least two spun yarns. The spindle shaft (3) and intermediate housing (11) are on rotary mountings at a stationary mounting hub (40), as a sleeve inserted into the base (1.1) of the outer housing (1). The inner mantle surface is a ground bearing race (40.1) to form an integrated outer ring bearing unit for the spindle shaft (3). The outer mantle surface has a ground bearing race (40.2) as an integrated inner bearing unit for the intermediate housing (11), with its mounting hub (11.1) fitted with an outer bearing ring (50). The spindle shaft (3) can have a ground bearing race as an integrated inner bearing ring. A bearing bush (33) is pulled over the spindle shaft (3), with a ground bearing race on its outer side as an integrated inner ring bearing unit. Or the spindle shaft (3) rotates in a static outer bearing ring, and the intermediate housing (11) rotates on the spindle shaft (3). Or the spindle shaft (3) has ground inner bearing rings. The intermediate housing (11) can rotate through an intermediate bush in a static outer bearing ring, and the spindle shaft (3) rotates within the intermediate bush. The intermediate bush inner and outer surfaces can be ground to form bearing races.

Abstract (de)

Zwirnspindel, enthaltend a) eine rotatorisch antreibbare Spindel (3), b) einen auf der Spindel (3) gelagerten, gegen Rotation gesicherten Schutztopf (6), c) eine mit der Spindel (3) drehfest verbundene Drehscheibe (7), die einen an eine Spindelhohlachse (6.3; 6.4) angeschlossenen, radial verlaufenden Fadenkanal (7.1) aufweist und einen den Schutztopf (6) umgebenden Zylindermantel (9) trägt, der oberhalb der Fadenaustrittsöffnung des Fadenkanals ein Fadenführungsorgan aufweist, d) ein die Drehscheibe (7) und den Zylindermantel (9) umgebendes, frei drehbar gelagertes Zwischengehäuse (11), und e) ein das Zwischengehäuse (11) aufnehmendes stationäres Außengehäuse (1). <IMAGE>

IPC 1-7

D01H 7/86; D01H 7/90

IPC 8 full level

D01H 1/10 (2006.01); **D01H 7/74** (2006.01); **D01H 7/76** (2006.01); **D01H 7/82** (2006.01); **D01H 7/84** (2006.01); **D01H 7/86** (2006.01); **D01H 7/90** (2006.01)

CPC (source: EP US)

D01H 7/86 (2013.01 - EP US); **D01H 7/90** (2013.01 - EP US); **D02G 3/285** (2013.01 - EP US)

Designated contracting state (EPC)

BE CH DE FR GB IT LI

DOCDB simple family (publication)

EP 0900865 A2 19990310; EP 0900865 A3 19990929; EP 0900865 B1 20021002; CN 1210910 A 19990317; CZ 286898 A3 19990317; DE 59805772 D1 20021107; JP H11140727 A 19990525; US 6035620 A 20000314

DOCDB simple family (application)

EP 98113445 A 19980718; CN 98119112 A 19980908; CZ 286898 A 19980908; DE 59805772 T 19980718; JP 25383198 A 19980908; US 14938398 A 19980908