

Title (en)

NEEDLE RING WITH NEEDLES FOR THE COMBING CYLINDERS OF AN OPEN-END SPINNING FRAME

Publication

EP 0358722 B1 19930922 (DE)

Application

EP 88905654 A 19880721

Priority

- CH 80788 A 19880303
- CH 296787 A 19870803

Abstract (en)

[origin: WO8901064A1] Whereas is known needle rings the needles are of circular cross-section, the cross-section of the needles (1) of the needle ring according to the invention is either oval or rectangular with flattened ends, or intermediate between these two shapes. The shorter dimension (1a) of the needle cross-section is arranged parallel to the axis of the ring. The needles (1) can be positioned vertically in the ring or form an angle alpha up to 30 DEG with the radius (2b), while the angle beta at the tip lies between 15 DEG and 45 DEG . The needles sit in round holes (3) the diameter of which is less than the width (1b) of the needles which in turn is approximately 4 to 6 times the thickness of the needles. Hence, the needle does not fully occupy the volume of the hole. Two tricks (3b) remain open and serve to direct the current of air which feeds the thread. Needle rings of this type have as long a service life as known needle rings with needles of circular cross-section, and hence an appreciably longer service life than the combing cylinders fitted with so-called all-steel card clothing, but in contrast to known needle rollers they can be used in virtually all open-end spinning frames.

IPC 1-7

D01H 4/32

IPC 8 full level

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CPC (source: EP US)

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Citation (examination)

Textil Betrieb, vol. 96, no. 4, April 1978 "Ein qualifiziertes Faserauflöseaggregat für OE-Rotorspinnsysteme" pages 22-24, see page 23, column 1, lines 1-22.

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