

Title (en)
Needle for a textile machine

Title (de)
Nadel für eine Textilmaschine

Title (fr)
Aiguille pour une machine textile

Publication
EP 2218812 A1 20100818 (DE)

Application
EP 09152725 A 20090212

Priority
EP 09152725 A 20090212

Abstract (en)
The needle is a felting- or forked-needle. The tipped working section (17) is connected to a lower shaft (20). This continues to an upper shaft section (25). All sections extend longitudinally and coaxially. The top of the needle (30) includes a retention section (32). In novel design, this has two limbs (38, 39) which extend away from each other and transversely with respect to the needle axis (16). The retention section is symmetrical about a notional plane extending along the axis. The plane lies at right angles to the limb extensions. On top of the retention section, a contact area (for penetrating force transmission) runs transversely along its entire length. The circular shaft sections and the retention section have constant cross sections along their respective lengths. The retention section width is less than the diameter of the upper shaft section. In a variant design, the cross section of the retention section departs from circular, being oval, elliptical, polygonal, rectangular, triangular or hexagonal. Its corners and/or edges are rounded. The upper shaft cross section is optionally non-circular. The area of the upper shaft section corresponds with that of the lower shaft section. The upper shaft section has uniformly-distributed lines of contact, lying on a common notional cylindrical surface about the longitudinal axis. These lines spiral along this cylindrical surface. A textile machine is equipped with the needles, spaced-apart and held in parallel grooves with penetrating bores through which the shafts pass. The needle holding sections extend away from the needle axes, held in and projecting along the grooves in the needle beam.

Abstract (de)
Die Erfindung betrifft eine Nadel (15) für eine Textilmaschine, insbesondere eine Filznadel oder eine Gabelnadel. Ein Arbeitsabschnitt (17) erstreckt sich entlang einer Längsachse (16) und weist eine Nadelspitze (18) auf. An den Arbeitsabschnitt (17) schließen sich ein unterer Schaftabschnitt (20) und ein oberer Schaftabschnitt (25) an, die beide koaxial zueinander entlang der Längsachse (16) angeordnet sind. Anschließend an den oberen Schaftabschnitt (25) ist ein Nadelfuß (30) vorgesehen, der einen Haltemittel (32) aufweist. Das Haltemittels (32) erstreckt sich in einer Querrichtung (31) und weist zwei ausgehend von der Längsachse (16) voneinander weg ragende Schenkel (38,39) auf.

IPC 8 full level
D04H 18/02 (2012.01)

CPC (source: EP US)
D04H 18/02 (2013.01 - EP US)

Citation (applicant)
US 2857650 A 19581028 - LAUTERBACH HERBERT G

Citation (search report)
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• [X] REICHELT W: "MODERNE FILZNADELN ZUR ERZEUGUNG MARKTGERECHTER VLIESSTOFFE", MELLIAND TEXTILBERICHTE, DEUTSCHER FACHVERLAG, FRANKFURT AM MAIN, DE, vol. 73, no. 5, 1 May 1992 (1992-05-01), pages 386 - 390, XP000273203, ISSN: 0341-0781

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