Title (en)

Needle for a textile machine

Nadel für eine Textilmaschine

Title (fr)

Aiguille pour une machine textile

Publication

EP 2218812 B1 20110316 (DE)

Application

EP 09152725 A 20090212

Priority

EP 09152725 A 20090212

Abstract (en)

[origin: EP2218812A1] 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.

IPC 8 full level

D04H 18/02 (2012.01)

CPC (source: EP US)

D04H 18/02 (2013.01 - EP US)

Cited by

CN112030373A

Designated contracting state (EPC)

DE ES FR GB IT TR

DOCDB simple family (publication)

EP 2218812 A1 20100818; EP 2218812 B1 20110316; CN 101805960 A 20100818; CN 101805960 B 20120222; DE 502009000460 D1 20110428; ES 2362978 T3 20110718; JP 2010209506 A 20100924; JP 5697815 B2 20150408; KR 101182119 B1 20120913; KR 20100092380 A 20100820; TW 201040344 A 20101116; TW I435966 B 20140501; US 2010251525 A1 20101007; US 8245372 B2 20120821

DOCDB simple family (application) **EP 09152725 A 20090212**; CN 201010118608 A 20100212; DE 502009000460 T 20090212; ES 09152725 T 20090212; JP 2010027012 A 20100209; KR 20100012281 A 20100210; TW 99104254 A 20100211; US 70464010 A 20100212