

Title (en)

SEWING NEEDLE, NEEDLE MANUFACTURING METHOD AND SEWING METHOD

Title (de)

NÄHMASCHINENNADDEL, VERFAHREN ZUM HERSTELLEN EINER NÄHMASCHINENNADDEL UND NÄHVERFAHREN

Title (fr)

AIGUILLE À COUDRE, PROCÉDÉ DE FABRICATION D'AIGUILLE ET PROCÉDÉ DE COUTURE

Publication

EP 3359720 A1 20180815 (DE)

Application

EP 16769955 A 20160916

Priority

- EP 15188948 A 20151008
- EP 2016071998 W 20160916

Abstract (en)

[origin: WO2017060056A1] The invention relates to a sewing machine needle comprising a needle shaft which extends substantially in the longitudinal direction of the needle, an eye which passes substantially vertically through the needle, and a hollow groove which is arranged in front of the eye in the longitudinal direction of the needle. The contour of the hollow groove is set back in the vertical direction of the needle relative to the contour of the shaft. The contour of the hollow groove substantially has the shape of a circular arc at least in a sub-region of the extent of the hollow groove in the longitudinal direction of the needle on a sectional plane perpendicular to the longitudinal direction of the needle. The circular arc-shaped region extends over a first angular section of the needle circumference. The sewing machine needle according to the invention is characterized in that in the sub-region of the longitudinal extent of the hollow groove in the longitudinal direction of the needle, the radius of the substantially circular arc-shaped contour in the first angular section of the needle circumference is between 35% and 100% of the maximum extent of the needle in the width direction of the needle. The width direction is perpendicular to the longitudinal and vertical direction of the needle.

IPC 8 full level

D05B 85/00 (2006.01)

CPC (source: EP KR US)

D05B 85/00 (2013.01 - EP US); **D05B 85/02** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2017060056A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3153617 A1 20170412; EP 3153617 B1 20180704; BR 112018006708 A2 20181009; BR 112018006708 B1 20220621; CN 108368659 A 20180803; CN 108368659 B 20210330; EP 3359720 A1 20180815; EP 3359720 B1 20190904; HK 1254626 A1 20190726; JP 2018535720 A 20181206; JP 6892442 B2 20210623; KR 102556570 B1 20230718; KR 20180063245 A 20180611; PL 3153617 T3 20181130; PL 3359720 T3 20200228; TW 201727001 A 20170801; TW I700409 B 20200801; US 10753024 B2 20200825; US 2018291542 A1 20181011; WO 2017060056 A1 20170413

DOCDB simple family (application)

EP 15188948 A 20151008; BR 112018006708 A 20160916; CN 201680058199 A 20160916; EP 16769955 A 20160916; EP 2016071998 W 20160916; HK 18113593 A 20181024; JP 2018517369 A 20160916; KR 20187012543 A 20160916; PL 15188948 T 20151008; PL 16769955 T 20160916; TW 105132297 A 20161006; US 201615767097 A 20160916