

Title (en)
TUFTING NEEDLE

Publication
EP 0071164 B1 19841017 (DE)

Application
EP 82106559 A 19820721

Priority
DE 8121878 U 19810725

Abstract (en)
[origin: US4480563A] In a tufting needle for tufting machines comprising an operative shank portion of oblong cross-section and containing a thread guide and eye and an anchoring shank portion by which the needle is embedded in a needle module, said anchoring portion is of elliptical or rhombic cross-section and the major axes of the cross-sections of both portions are disposed in substantially the same plane.

IPC 1-7
D05B 85/00; **D05C 15/20**

IPC 8 full level
D05B 85/00 (2006.01); **D05C 15/20** (2006.01)

CPC (source: EP US)
D05C 15/20 (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0071164 A1 19830209; **EP 0071164 B1 19841017**; AT E9916 T1 19841115; CA 1210998 A 19860909; DE 3261000 D1 19841122; DE 8121878 U1 19811126; DK 330382 A 19830126; JP H0153387 B2 19891114; JP S5823955 A 19830212; US 4480563 A 19841106

DOCDB simple family (application)
EP 82106559 A 19820721; AT 82106559 T 19820721; CA 407932 A 19820723; DE 3261000 T 19820721; DE 8121878 U 19810725; DK 330382 A 19820723; JP 12682882 A 19820722; US 40036782 A 19820721