

Title (en)
EMBOSSED TUFTING NEEDLE

Title (de)
GEPRÄGTE TUFTINGNADEL

Title (fr)
AIGUILLE À TUFTER GAUFRÉE

Publication
EP 1727931 A1 20061206 (DE)

Application
EP 05715360 A 20050217

Priority
• EP 2005001585 W 20050217
• DE 202004004401 U 20040320

Abstract (en)
[origin: US2007193487A1] A novel tufting needle (4) is distinguished by a hollow flute (15) which is preferably symmetrical to a central plane (29) and which is bilaterally provided with chamfers (33, 34). The chamfers (33, 34) are, in an inward-located, that is, in a region lying close to the central plane (29), inclined at a small acute angle (alpha) to a reference plane (28), while in a region bordering an externally located rim (edges (46, 47)), the chamfers (33, 34) are inclined at a larger acute angle (beta) to the reference plane (28). This feature improves the rigidity, the tufting properties and the mechanical strength, as well as the wear resistance of the novel tufting needle (4).

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

CPC (source: EP KR US)
D05C 15/20 (2013.01 - EP KR US); **D05B 85/00** (2013.01 - EP US)

Citation (search report)
See references of WO 2005095703A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2007193487 A1 20070823; US 7328664 B2 20080212; AT E397688 T1 20080615; CN 1946893 A 20070411; CN 1946893 B 20100616;
DE 202004004401 U1 20040519; DE 502005004344 D1 20080717; EP 1727931 A1 20061206; EP 1727931 B1 20080604;
JP 2007529639 A 20071025; JP 4436411 B2 20100324; KR 100790674 B1 20080102; KR 20070024494 A 20070302;
WO 2005095703 A1 20051013

DOCDB simple family (application)
US 59345005 A 20050217; AT 05715360 T 20050217; CN 200580009022 A 20050217; DE 202004004401 U 20040320;
DE 502005004344 T 20050217; EP 05715360 A 20050217; EP 2005001585 W 20050217; JP 2007503213 A 20050217;
KR 20067019152 A 20060918