

Title (en)  
Needle board for a needle machine

Title (de)  
Nadelbrett für eine Nadelmaschine

Title (fr)  
Planche à aiguilles pour une aiguilleuse

Publication  
**EP 2138616 A1 20091230 (DE)**

Application  
**EP 08011414 A 20080624**

Priority  
EP 08011414 A 20080624

Abstract (en)  
The needle board (6) comprises a base plate (16), needles (8) arranged in the area of the base plate in a predetermined pattern, where tips of the needles protrude from the base plate, and needle modules (20), of which each has a plastic carrier plate (22), which is equipped with one of the needles and is inserted into a reception (18) of the base plate. The receptions are formed as slits in the base plate. The needles have a rough needle shank, and forged or angular heads, and are unevenly arranged in the needle module. The carrier plates have a protruding edge section. The needle board (6) comprises a base plate (16), needles (8) arranged in the area of the base plate in a predetermined pattern, where tips of the needles protrude from the base plate, and needle modules (20), of which each has a plastic carrier plate (22), which is equipped with one of the needles and is inserted into a reception (18) of the base plate. The receptions are formed as slits in the base plate. The needles have a rough needle shank, and forged or angular heads, and are unevenly arranged in the needle module. The carrier plates have a protruding edge section, which lies on a recess in a wall area of the corresponding reception in the base plate. The edge section and the recess are formed in a rotating manner. The carrier plates are cast or injected onto the needles. Each needle module has a row of needles. The individual needle modules are arranged in groups in the base plate, and are displaceably arranged to each other. An independent claim is included for a method for producing a needle board for a needle machine.

Abstract (de)  
Das Nadelbrett für eine Nadelmaschine umfasst eine Grundplatte (16) und eine Mehrzahl von Nadeln (8), die in einem vorbestimmten Muster im Bereich der Grundplatte (16) angeordnet sind und deren Spitzen aus der Grundplatte (16) hervorragen. Dabei besitzt das Nadelbrett eine Mehrzahl von Nadelmodulen (20), von denen jedes eine Trägerplatte (22) aufweist, die mit einer Mehrzahl von Nadeln (8) bestückt ist und in eine Aufnahme (18) der Grundplatte (16) eingesetzt ist.

IPC 8 full level  
**D04H 18/00** (2012.01)

CPC (source: EP US)  
**D04H 18/00** (2013.01 - EP US); **D04H 18/02** (2013.01 - EP US); **Y10T 29/49826** (2015.01 - EP US)

Citation (applicant)  
LÜNENSCHLOSS; ALBRECHT: "Vliesstoffe", 1982, GEORG-THIEME-VERLAG STUTTGART, pages: 122 - 129

Citation (search report)  
• [X] GB 399104 A 19330928 - CHARLES JAMES WOODBURNE, et al  
• [A] EP 1391546 A1 20040225 - DILO KG MASCHF OSKAR [DE]  
• [A] DE 102005034144 B3 20061207 - DILO KG MASCHF OSKAR [DE]  
• [A] US 3680182 A 19720801 - SCOTT PERRY E

Cited by  
EP3000923A1; EP3165659A1; CN107012593A; EP3165660A1; EP3744889A1; CN112011899A; US9994983B2; US10100448B2; US11208746B2; DE202014011288U1; EP2918719A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2138616 A1 20091230; EP 2138616 B1 20111019**; AT E529557 T1 20111115; CN 101613911 A 20091230; CN 101613911 B 20110713; EP 2395143 A1 20111214; US 2010162543 A1 20100701; US 8099841 B2 20120124

DOCDB simple family (application)  
**EP 08011414 A 20080624**; AT 08011414 T 20080624; CN 200910146742 A 20090624; EP 11180560 A 20080624; US 49000709 A 20090623