

Title (en)
Needle bed structure for flat knitting machines

Title (de)
Nadelbettstruktur für Flachstrickmaschinen

Title (fr)
Structure de lit pour machines de tricotage rectiligne

Publication
EP 2570533 A1 20130320 (EN)

Application
EP 11181615 A 20110916

Priority
EP 11181615 A 20110916

Abstract (en)
A needle bed structure for flat knitting machines that is located at two sides of a needle bed gap (11) includes a plurality of parallel needle plates (22), a plurality of knitting needles (24) and sinkers (25) located between the needle plates (22), and a sinker control portion (31) movable in parallel with the arranged direction of the sinkers (25), and at least one control cam (312) driven by a switching portion (311) to push the sinkers (25) to rotate towards the needle bed gap (11) during the switching movement. The switching portion (311) performs the switching movement according to the moving direction. The needle plates (22) hole at least one needle pressing board (28) to restrict vertical movement of the knitting needles (24). The switching portion (311) has a magnetic attracting portion (313) corresponding to the needle pressing board (28) to form magnetic attraction therewith. A spacer (26) is provided between the needle plates (22) to prevent horizontal movement of the sinkers (25).

IPC 8 full level
D04B 15/06 (2006.01); **D04B 15/10** (2006.01)

CPC (source: EP)
D04B 15/06 (2013.01); **D04B 15/10** (2013.01)

Citation (applicant)
• EP 1522618 A1 20050413 - STOLL & CO H [DE]
• EP 1522617 A1 20050413 - STOLL & CO H [DE]
• US 5475990 A 19951219 - SCHMID FRANZ [DE], et al

Citation (search report)
• [XY] EP 0602622 A1 19940622 - SHIMA SEIKI MFG [JP]
• [YA] WO 9507382 A2 19950316 - EMM SRL [IT]
• [A] US 4713948 A 19871222 - SCHMIDT HENNING [DE], et al

Cited by
CN111648016A; CN108179537A; CN111733514A; CN105544083A; CN108360132A

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 2570533 A1 20130320

DOCDB simple family (application)
EP 11181615 A 20110916