

Title (en)
Needling machine

Title (de)
Nadelmaschine

Title (fr)
Aiguilleteuse

Publication
EP 0892102 B1 20010328 (DE)

Application
EP 98108058 A 19980504

Priority
DE 19730532 A 19970716

Abstract (en)
[origin: EP0892102A2] The needling machine has a drive to give the needles a vertical movement component and a second drive system for the horizontal movement component. The second drive has two eccentric shafts (18,19;2) rotating at the same speed. Each eccentric section has a crankshaft (16,17;3) to convert the rotary movements into linear reciprocating movements. A coupling bridge (12) directs the linear reciprocating movements to two spaced linkage points (13,14), which have a third linkage point (15) between them coupled to the needle beam (6). A control unit (S1) sets the stroke movements for the horizontal component, by altering the rotary angle positions of the two eccentric shafts.

IPC 1-7
D04H 18/00

IPC 8 full level
D04H 18/00 (2012.01)

CPC (source: EP US)
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Cited by
EP4321670A1; EP4321671A1; EP3372716A1; EP1072724A3; FR2776678A1; CN108221180A; FR2829158A1; FR2825724A1; GB2335931A; GB2335931B; DE102004043890B3; DE10043534B4; DE10026501B4; FR2817562A1; AT410554B; DE10149289B4; EP1132511A3; US7614127B2; US6175996B1; US6568051B2; DE10215037B4; FR2823772A1; FR2800396A1; DE10046163B4; WO2009050051A1; WO2007134731A1; WO2008151961A1; WO2009127520A1; US6735837B2; WO2012107486A1; US9388518B2; US6748633B2; US6266856B1; US7373705B2; US6622359B2; US7845055B1; EP3412819A1; US6481071B1; EP2886694A1; US6389665B1; EP3693501A1; EP3372716B1

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