

Title (en)

Sewing machine device to maintain a constant distance between needle and looper, by laterally deflected needle.

Title (de)

Vorrichtung bei einer Nähmaschine um Abstand zwischen Nadel und Greifer gleich zu halten, ungeachtet einer seitlichen Nadelbiegung.

Title (fr)

Dispositif sur machine à coudre pour maintenir constante la distance entre le boucleur et l'aiguille quand celle-ci fléchit latéralement.

Publication

**EP 0157942 A1 19851016 (DE)**

Application

**EP 84116121 A 19841221**

Priority

DE 3400206 A 19840105

Abstract (en)

[origin: US4597344A] A sewing machine, particularly a multi-needle sewing machine, includes at least one sewing arrangement which includes a reciprocating needle mounted on a needle holding arrangement and a gripper mounted on a gripper holding arrangement for angular displacement along a displacement plane and operative for engaging a thread delivered by the needle through the material being sewn to a predetermined region beyond the material. As the material is advanced, especially transversely of the displacement plane, during the sewing stroke of the needle, it acts on the needle and deviates the same from its initial course. To avoid malfunctions, at least one of the holding arrangements is mounted on the support for movement at least transversely of the displacement plane and parallel to the sewing plane of the material, and such one holding means is displaced by an appropriate moving arrangement in dependence on the extent of the deviation of the needle in such a manner that the distance between the needle and the displacement plane of the gripper is maintained substantially constant during the sewing stroke of the needle.

Abstract (de)

Um Nähstörungen, hervorgerufen durch die Schrägbewegung des Nähgutes und die dadurch verursachte Auslenkung der, in das Werkstück noch bleibende, Nadel (10) zu vermeiden, werden die Greifer (1A) und oder die Nadelhalterung in Abhängigkeit der Steuerbefehle für Förderrichtung und Geschwindigkeit des Nähgutes und der Istwert einer Sensor (18) derart verschoben dass der Abstand (a) zwischen der Nadel (10) und der Bewegungsebene des Greifers im Wesentlichen gleich bleibt,

IPC 1-7

**D05B 85/00**; D05B 57/16

IPC 8 full level

**D05B 11/00** (2006.01)

CPC (source: EP US)

**D05B 11/00** (2013.01 - EP US)

Citation (search report)

- [A] GB 2035608 A 19800618 - BROTHER IND LTD
- [A] US 4173192 A 19791106 - GABLE LARRY P [US], et al
- [A] BE 748857 A 19700916 - HER MAJESTY IND INC

Cited by

CN110004598A

Designated contracting state (EPC)

CH FR GB IT LI

DOCDB simple family (publication)

**DE 3400206 A1 19850718**; **DE 3400206 C2 19870108**; EP 0157942 A1 19851016; EP 0157942 B1 19880601; US 4597344 A 19860701

DOCDB simple family (application)

**DE 3400206 A 19840105**; EP 84116121 A 19841221; US 68955685 A 19850107