

Title (en)
Thread trapper for a gripper head

Title (de)
Fadenklemme für einen Greiferkopf

Title (fr)
Pince-fil pour une tête de préhension

Publication
EP 1867766 A1 20071219 (DE)

Application
EP 07108384 A 20070516

Priority
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Abstract (en)
The thread clamp for a gripper head (1) of a weaving machine, comprises a clamp part (4) for a weft (3), and an actuator (5) for moving the clamp part, in which the actuator consists of a ferromagnetic core, an anchor and a coil. The thread clamp is arranged on the core or anchor in order to produce a magnetic field and to move the anchor and the clamp part operationally connected with the same. The anchor is movably arranged between two rest positions, and a retaining unit is intended in both the rest positions in order to hold the anchor in dead condition of the coil. The thread clamp for a gripper head (1) of a weaving machine, comprises a clamp part (4) for a weft (3), and an actuator (5) for moving the clamp part, in which the actuator consists of a ferromagnetic core, an anchor and a coil. The thread clamp is arranged on the core or anchor in order to produce a magnetic field and to move the anchor and the clamp part operationally connected with the same. The anchor is movably arranged between two rest positions, and a retaining unit is intended in both the rest positions in order to hold the anchor in dead condition of the coil. A permanent magnet is intended as retaining units. The core is U-shapely formed and has two thighs. Two permanent magnets are intended to one of the two thighs in order to hold the anchor in dead condition of the coil. The anchor is movably arranged between the two thighs. The core and/or the anchor are developed from transformer plate. The clamp part is formed at the anchor. The coil is connected with energy storage by a control switching. The thread clamp is operatable in additionally mechanically and/or pneumatically. Independent claims are included for: (1) a gripper head with a thread clamp; and (2) a gripper weaving machine with a thread clamp.

Abstract (de)
Es wird eine Fadenklemme für einen Greiferkopf (1) vorgestellt, die ein Klemmteil (4) zum Festklemmen eines Fadens (3) enthält und einen Aktuator (5) zum Bewegen des Klemmteiles. Der Aktuator (5) umfasst einen ferromagnetischen Kern (12), einen Anker (11) und mindestens eine Wicklung (13), die auf dem Kern oder Anker angeordnet ist, um in denselben ein magnetisches Feld zu erzeugen und den Anker und das mit diesem verbundenen Klemmteil zu bewegen, wobei der Kern (12) zwei Schenkel (12.1, 12.2) aufweist, zwischen denen der Anker (11) bewegbar angeordnet ist, und wobei jeder Schenkel mit einem Permanentmagnet (14.1, 14.2) versehen ist, um den Anker in stromlosem Zustand der Wicklung an einem der beiden Schenkel festzuhalten.

IPC 8 full level
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Citation (search report)
• [DA] WO 9960193 A1 19991125 - TEXTILMA AG [CH], et al
• [A] WO 2004035891 A2 20040429 - DORNIER GMBH LINDAUER [DE], et al

Cited by
BE1018774A3; CN102803591A; WO2010142446A1; EP2440696B1

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