

Title (en)

TOOL LOCKING DEVICE FOR A MACHINE TOOL, PARTICULARLY FOR A FOLDING PRESS

Title (de)

VERRIEGELUNGSVORRICHTUNG FÜR DIE WERKZEUGE EINER BEARBEITUNGSMASCHINE, INSbesondere FÜR EINE BIEGEPRESSE

Title (fr)

DISPOSITIF DE VERROUILLAGE POUR LES OUTILS D'UNE MACHINE À USINER, EN PARTICULIER POUR UNE PRESSE À PLIER

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Application

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Priority

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Abstract (en)

The present invention concerns a locking device (1) for the tools of a machine tool, particularly of the folding press type, comprising: - a base body (3) provided with at least one insertion seat (5) for at least one tool (7); - a plurality of locking bodies (9) movable along an action direction (90) between an engagement position with the tool (7), to lock it inside the seat (5), and a disengaged position with the tool (7), to free it from the seat (5); - at least one mobile piston (11) able to be actuated to move the plurality of locking bodies (9) along the action direction (90) from the disengaged position to the engagement position with the tool (7). According to the invention, between the mobile piston (11) and the plurality of locking bodies (9) at least one lamina (13) is interposed that is configured to transmit a locking thrust from the mobile piston (11) to the plurality of locking bodies (9) and to move the plurality of locking bodies (9) along the action direction (90) from the disengaged position to the engagement position with the tool (7). A folding press comprising such a locking device (1) is also described.

IPC 8 full level

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B21D 5/0236 (2013.01); **B21D 5/0245** (2013.01)

Citation (search report)

- [A] EP 1622731 B1 20080521 - TRUMPF MASCHINEN AUSTRIA GMBH [AT]
- [A] EP 0940197 A2 19990908 - AMADA METRECS CO [JP]
- [A] JP H06182448 A 19940705 - AMADA METRECS CO

Cited by

CN113751593A; NL2026128B1; US11033944B2; WO2022019753A1

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