

Title (en)

APPARATUS FOR JOINING TWO OR MORE OVERLAPPING MATERIAL MEMBERS AND METHOD FOR MANUFACTURING OF THE APPARATUS

Title (de)

VORRICHTUNG ZUR VERBINDUNG ZWEIER ODER MEHRERER ÜBERLAPPENDER MATERIALELEMENTE UND VERFAHREN ZUR HERSTELLUNG DER VORRICHTUNG

Title (fr)

APPAREIL POUR RELIER DEUX OU PLUSIEURS ÉLÉMENTS DE MATÉRIAU SE CHEVAUCHANT ET PROCÉDÉ DE FABRICATION DE L'APPAREIL

Publication

EP 2440345 A4 20140507 (EN)

Application

EP 10767385 A 20100419

Priority

- SE 2010050420 W 20100419
- SE 0900538 A 20090422

Abstract (en)

[origin: WO2010123438A1] A tool kit, primarily intended for clinching, consisting of a punch (3.1), surrounded by an elastic stripper (3.2), a die cavity (3.5) the bottom of which constitutes an anvil (3.6) and the sides of which consist of two or more moving die elements (3.7) and (3.8) The moving die elements can slide laterally on a flat supporting face (3.9) One or more guiding elements (3.11) running parallel to the supporting face have dimensions, cross-sections and axial positions that closely match through holes (3.12) in the die elements and thus make the die elements slide laterally on the supporting face, steered by the guiding elements. The guiding elements consequently prevent the die elements from pivoting or rotating and generate a pure sliding. The length of each guiding element is roughly equal to or exceeds the distance between the outer faces of the die elements, even when the die elements are the furthest from an axis (3.10) running through punch and anvil, which will keep the die elements in place when the stripper pulls the punch out after the clinching operation finished. A method by which the described die design can be manufactured in a simple and economical way.

IPC 8 full level

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CPC (source: EP SE)

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Citation (search report)

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- [A] WO 0136124 A2 20010525 - ATTEXOR EQUIP [CH], et al
- [A] US 2006196034 A1 20060907 - SAWDON EDWIN G [US], et al
- [A] JP H11197765 A 19990727 - JAPAN DRIVE IT
- [A] EP 1468758 A1 20041020 - ECKOLD VORRICHTUNG [DE]
- See references of WO 2010123438A1

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