

Title (en)
Multitool punch holder.

Title (de)
Mehrfachwerkzeughalter für Stanzstempel.

Title (fr)
Porte-outil multiple pour poinçons.

Publication
EP 0399337 A1 19901128 (EN)

Application
EP 90109135 A 19900515

Priority
US 35525289 A 19890522

Abstract (en)
A multitool punch holder in which a tool carrier (22) holds a circumferential array of punches (76) in a corresponding series of bores. Each punch (76) is attached to a stem rod (50) having an upper end protruding above the tool carrier (22). The tool carrier (22) is rotated by an index drive (102, 104, 106, 108) so as to bring a selected one of the stem rods (50) beneath a ram drive feature (100) protruding radially outward to lie above of the stem rod ends (52). The tool carrier (22) is coupled to the ram (14) by a head member (20) which is telescopically received therein allowing the ram (14) to continue its descent after contact of the tool carrier (22) with the workpiece, the ram (14) having a feature (100) engaging a selected stem rod end (52) lying beneath the ram drive feature (100) to cause advance of the attached punch (76) against the resistance of an encircling stripper spring (62).

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IPC 8 full level
B21D 28/36 (2006.01); **B21D 28/12** (2006.01)

CPC (source: EP)
B21D 28/12 (2013.01); **B21D 28/125** (2013.01); **B30B 15/028** (2013.01); **B30B 11/08** (2013.01)

Citation (search report)
• [Y] DE 3720777 A1 19890105 - BEHRENS AG C [DE]
• [Y] WO 8809232 A1 19881201 - TOWER MACHINE TOOLS LIMITED [GB]
• [AD] US 4569267 A 19860211 - KLINGEL HANS [DE]

Cited by
US7326008B2; CN102806280A; US10730094B2; WO2017060241A1

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