

Title (en)
PROCESS FOR SETTING SELF-PIERCING RIVETS

Title (de)
VERFAHREN ZUM SETZEN VON SELBSTSTANZENDEN NIETEN

Title (fr)
PROCEDE DE POSE DE RIVETS AUTO-PERFORANTS

Publication
EP 1480782 B1 20060830 (EN)

Application
EP 03709000 A 20030206

Priority
• JP 2002032538 A 20020208
• US 0303725 W 20030206

Abstract (en)
[origin: WO03066278A2] A die 18 for use in a self-piercing rivet setting apparatus comprises a cavity 25 for receiving therein a protruded workpiece zone consisting of respective portions of the workpieces 2, 3 to be protrudingly deformed toward the die through the pressure of the self-piercing rivet 1. The cavity has a bottom surface provided with a central raised portion 29 protruding from the center of the bottom surface toward a punch. The central raised portion of the cavity has a vertical angle in the range of 90 to 160 degrees. Preferably, the central raised portion has a top formed in a spherical shape. The cavity has an approximately cylindrical outer wall 27 in the periphery thereof. The cavity has a curved inner surface extending from the top of the central raised portion to the lower end 33 of the outer wall through the bottom 35 of the cavity.

IPC 8 full level
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CPC (source: EP)
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WO 03066278 A2 20030814; **WO 03066278 A3 20040506**; AT E337869 T1 20060915; DE 60307990 D1 20061012; DE 60307990 T2 20070906; EP 1480782 A2 20041201; EP 1480782 A4 20050706; EP 1480782 B1 20060830; JP 2003230935 A 20030819

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