

Title (en)

Device and method for deep-drawing

Title (de)

Tiefziehvorrichtung und Verfahren zum Tiefziehen

Title (fr)

Dispositif et procédé d' emboutissage

Publication

**EP 1396297 B1 20050810 (DE)**

Application

**EP 02020094 A 20020907**

Priority

EP 02020094 A 20020907

Abstract (en)

[origin: EP1396297A1] The deep drawing machine (10) has an upper die (12), a workpiece retainer (13) and a lower hollow molding die (14) to shape a metal sheet (11). Drawing rods (15), attached to the upper die, act on the work piece to impose a lower clamping force to give a low level resistance to the shaping behavior of the sheet at the start of the deep drawing operation. The drawing rods apply increasing clamping forces as the deep drawing action progresses.

IPC 1-7

**B21D 22/22**; B21D 24/10

IPC 8 full level

**B21D 22/22** (2006.01); **B21D 24/10** (2006.01)

CPC (source: EP)

**B21D 22/22** (2013.01); **B21D 24/10** (2013.01)

Cited by

CN104043713A; DE102006003268A1; DE102006003268B4; CN112654564A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1396297 A1 20040310**; **EP 1396297 B1 20050810**; DE 50203897 D1 20050915

DOCDB simple family (application)

**EP 02020094 A 20020907**; DE 50203897 T 20020907