

Title (en)
Device for deep-drawing of a sheet metal blank

Title (de)
Vorrichtung zum Tiefziehen eines Blechzuschnittes

Title (fr)
Dispositif d'emboutissage d'un flan de tôle

Publication
EP 0664168 B1 19971029 (FR)

Application
EP 95400079 A 19950116

Priority
FR 9400666 A 19940121

Abstract (en)
[origin: EP0664168A1] The stamping tool has a matrix formed from a cushion (2) of elastomer held in a retaining tank (1), and a lower workpiece clamp (3). A pre-former in the form of an outer slider (6) carries an upper clamp (6a) and surrounds a plunger (7). The tool heats and regulates the temperature of the elastic cushion, using tubes (22,23) for the delivery and return of a heat-carrying agent and ducts (20) inside the lower workpiece clamp, or else a crown ring made from a material with a higher level of thermal conductivity and low friction coefficient.

IPC 1-7
B21D 22/10

IPC 8 full level
B21D 22/10 (2006.01); **B21D 24/04** (2006.01)

CPC (source: EP US)
B21D 22/10 (2013.01 - EP US); **B21D 26/021** (2013.01 - EP US); **B30B 5/02** (2013.01 - EP US); **Y10S 425/014** (2013.01 - EP); **Y10S 425/11** (2013.01 - EP)

Cited by
CN102274898A; ITMC20090202A1; WO9956928A1; WO2011036688A1

Designated contracting state (EPC)
DE ES GB IT

DOCDB simple family (publication)
EP 0664168 A1 19950726; **EP 0664168 B1 19971029**; DE 69500933 D1 19971204; DE 69500933 T2 19980618; ES 2110814 T3 19980216; FR 2715335 A1 19950728; FR 2715335 B1 19960405; JP H0833929 A 19960206; US 5599565 A 19970204

DOCDB simple family (application)
EP 95400079 A 19950116; DE 69500933 T 19950116; ES 95400079 T 19950116; FR 9400666 A 19940121; JP 833395 A 19950123; US 37622095 A 19950120