

Title (en)
DEVICE FOR DEEP-DRAWING SHEET MATERIALS

Publication
EP 0380894 B1 19920506 (FR)

Application
EP 89403591 A 19891220

Priority
FR 8817525 A 19881230

Abstract (en)
[origin: JPH03198924A] PURPOSE: To keep a sheet material blank between upper and lower blank holders and to enable forming it by composing the lower blank holder which cooperates with the upper blank holder of supporting and holding means to partially clamp the sheet material blank on a cushion. CONSTITUTION: By composing the device for pressing the sheet material blanks, especially a sheet metal blanks of the cushion 2 of an elastic material which is arranged in a retaining box 1, means for preforming the sheet material blank 10 including an outer slide 28 for carrying the upper blank holder 6, means for finally forming the sheet material blank 10 including a center slide 30 which acts on a punch 8 and, further, the lower blank holder for cooperating with the upper blank holder 6, which is composed of the frame 3 of the sheet material blanks 3 and retaining box 1, to clamp the sheet material blank 10 directly placed on the cushion 2 at least in a partial region, the sheet material blank 10 is clamped with the upper and lower blank holders and formed.

IPC 1-7
B21D 22/10

IPC 8 full level
B21D 24/00 (2006.01); **B21D 22/10** (2006.01); **B21D 22/20** (2006.01); **B21D 24/04** (2006.01); **B21D 24/06** (2006.01); **B21D 37/00** (2006.01); **B21D 37/08** (2006.01)

CPC (source: EP US)
B21D 22/10 (2013.01 - EP US); **Y10T 29/49805** (2015.01 - EP US)

Cited by
ITMC20090202A1; CN102744319A; WO2011036688A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0380894 A1 19900808; EP 0380894 B1 19920506; AR 247122 A1 19941130; AT E75640 T1 19920515; AU 4730589 A 19900705; AU 628456 B2 19920917; BR 8906860 A 19900925; CA 2006774 A1 19900630; CA 2006774 C 19970304; CN 1018528 B 19921007; CN 1043893 A 19900718; CS 751489 A3 19920115; CZ 283164 B6 19980114; DD 294439 A5 19911002; DE 68901457 D1 19920611; ES 2033118 T3 19930301; FR 2641215 A1 19900706; GR 3005288 T3 19930524; HU 205286 B 19920428; HU 896792 D0 19900328; HU T54540 A 19910328; JP 2680905 B2 19971119; JP H03198924 A 19910830; RO 106971 B1 19930830; RU 2037353 C1 19950619; US 5067336 A 19911126; ZA 899910 B 19910828

DOCDB simple family (application)
EP 89403591 A 19891220; AR 31574489 A 19891220; AT 89403591 T 19891220; AU 4730589 A 19891228; BR 8906860 A 19891229; CA 2006774 A 19891228; CN 89109855 A 19891230; CS 751489 A 19891228; DD 33681489 A 19891229; DE 68901457 T 19891220; ES 89403591 T 19891220; FR 8817525 A 19881230; GR 920401618 T 19920729; HU 679289 A 19891227; JP 34496589 A 19891228; RO 14355189 A 19891229; SU 4742837 A 19891229; US 45816989 A 19891228; ZA 899910 A 19891227