

Title (en)

Multi-stage deep-drawing forming apparatus with independently controlled stages

Title (de)

Mehrstufen-Tiefzieh-Umformautomat mit unabhängig gesteuerten Stufen

Title (fr)

Dispositif de formage per étirage profond à plusieurs étages commandés indépendamment

Publication

EP 1759780 B1 20081126 (DE)

Application

EP 06016380 A 20060804

Priority

DE 202005013912 U 20050902

Abstract (en)

[origin: DE202005013912U1] A high-performance deep-drawing multi-stage (2a, 2b, 2c) metal stamping and bending assembly has a rigid outer frame (1). Each stage has an upper and lower section supporting a tool (14-17) operated by an actuator (A) linked to a freely programmable electronic control unit (C).

IPC 8 full level

B21D 22/00 (2006.01); **B21D 24/00** (2006.01); **B21D 43/05** (2006.01); **B30B 15/14** (2006.01); **B30B 15/16** (2006.01)

CPC (source: EP)

B21D 22/20 (2013.01); **B21D 22/22** (2013.01); **B21D 24/005** (2013.01)

Cited by

LU102201B1; DE102019127116A1; CN111482510A; CN112719478A; WO2022084466A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1759780 A1 20070307; **EP 1759780 B1 20081126**; AT E415216 T1 20081215; DE 202005013912 U1 20051208; DE 502006002171 D1 20090108

DOCDB simple family (application)

EP 06016380 A 20060804; AT 06016380 T 20060804; DE 202005013912 U 20050902; DE 502006002171 T 20060804