

Title (en)

Apparatus for making hollow products

Title (de)

Vorrichtung zum Herstellen von Hohlkörpern

Title (fr)

Dispositif pour la fabrication de corps creux

Publication

EP 0629456 B1 19970611 (DE)

Application

EP 94104469 A 19940322

Priority

DE 4320236 A 19930618

Abstract (en)

[origin: DE4320236C1] The pipe is shaped under high internal pressure, using two or more shaping tappets (3). Each of these has at its free end movable in the axial direction a hydraulic ram (4), to which fluid is supplied via the tappet. The axes of the tappets and their working positions are adjustable in relation to each other. The rams can tilt in pivot heads (5) working in parallel lengthwise guides (6), while in turn pivot on the central axis (8) in a circular guide (7) at right angles to the lengthwise ones. ADVANTAGE - Minimum tool-changing to form bodies of different types.

IPC 1-7

B21D 26/02

IPC 8 full level

B21D 26/02 (2011.01); **B21D 26/043** (2011.01)

CPC (source: EP US)

B21D 26/043 (2013.01 - EP US); **Y10T 29/49805** (2015.01 - EP US)

Designated contracting state (EPC)

BE ES FR IT NL

DOCDB simple family (publication)

DE 4320236 C1 19940331; EP 0629456 A1 19941221; EP 0629456 B1 19970611; ES 2065314 T1 19950216; ES 2065314 T3 19970716; US 5435163 A 19950725

DOCDB simple family (application)

DE 4320236 A 19930618; EP 94104469 A 19940322; ES 94104469 T 19940322; US 25577894 A 19940608