

Title (en)

A press for the production of pieces requiring for their industrial processing a preforming step with low expenditure of forces and a final high pressure.

Title (de)

Presse zum Herstellen von Gegenständen, deren Serienfertigung eine Vorformung mit geringem Kraftaufwand und einem hohen Enddruck erfordert.

Title (fr)

Presse pour l'obtention d'objets exigeant pour leur fabrication industrielle, une étape de préformage avec faible dépense d'effort, et une pression finale élevée.

Publication

EP 0221224 A1 19870513 (EN)

Application

EP 85830252 A 19851008

Priority

EP 85830252 A 19851008

Abstract (en)

A hydraulic press with a vertical axis for the production, by a dry process using suitable flowing powders, of articles which require a pre-shaping operation, an intermediate pressure and a final high pressure. The press includes a revolving table (6) with at least three movable lower punches (7). During the first step, the powder is supplied by a batching and preforming device (5) which acts directly on the movable punch (7), and runs through holes (28) in the chamber between counter-punch (27) and the elastic membrane (52) of the movable punch (7). The preforming device (5) also includes a hydropneumatic cylinder with a double-acting adjustable-stroke annular piston (66) for precompressing the article. During the second step, the final pressing stage occurs by means of an isostatic pressing punch (9) in cooperation with the lower movable punch (7), and during the third stage the discharging of the article takes place.

IPC 1-7

B30B 11/00; B30B 11/10; B28B 5/08; B28B 5/04

IPC 8 full level

B28B 3/00 (2006.01); **B28B 5/04** (2006.01); **B28B 5/08** (2006.01); **B28B 13/02** (2006.01); **B30B 11/00** (2006.01); **B30B 11/10** (2006.01);
B30B 15/30 (2006.01)

CPC (source: EP)

B28B 3/003 (2013.01); **B28B 5/04** (2013.01); **B28B 5/08** (2013.01); **B28B 13/0215** (2013.01); **B30B 11/001** (2013.01); **B30B 11/10** (2013.01);
B30B 15/302 (2013.01)

Citation (search report)

- [Y] FR 63296 E 19550912
- [Y] DE 126374 C
- [A] FR 2475971 A1 19810821 - KERAMIK WTB VEB [DD]
- [A] DE 194739 C
- [A] DE 441515 C 19270312 - PAUL WERNICKE
- [A] FR 1402317 A 19650611
- [A] DE 2630355 A1 19780112 - NETZSCH MASCHINENFABRIK
- [A] DE 1604492 A1 19701210 - DORST KERAMIKMASCHB INH OTTO D
- [A] US 2409221 A 19461015 - MILLER WILLIAM J
- [A] GB 2064417 A 19810617 - LAEIS WERKE AG

Cited by

EP1386704A3; EP1270160A1; EP0637489A1; CN117000995A; WO03028967A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0221224 A1 19870513

DOCDB simple family (application)

EP 85830252 A 19851008