

Title (en)

Apparatus for pressing flowable solid materials or semi-solid materials

Title (de)

Vorrichtung zum Verpressen von fließfähigen Feststoffen oder halbfesten Stoffen

Title (fr)

Dispositif pour le pressage de matières solides coulantes ou de matières semi-solides

Publication

**EP 0847850 A1 19980617 (DE)**

Application

**EP 97121052 A 19971201**

Priority

DE 19651953 A 19961213

Abstract (en)

A machine presses and consolidates flowing solids, especially powdered solids. It has shaping pressing dies which are novel in that the forming surfaces at least have a diamond-like, amorphous carbon layer. Preferably the thickness is 1-10  $\mu\text{m}$ . The dies are the tablet plungers (1-4) of a tablet making machine. The outer surface (6) of the plunger (3) can also be coated by the material. The head of the plunger (1) and optionally also the shaft (2) itself, are coated in this manner.

Abstract (de)

Die Vorrichtung zum Verpressen von fließfähigen Feststoffen besteht grundsätzlich aus Preßwerkzeugen mit formgebenden Oberflächen. Dabei sind zumindest die formgebenden Oberflächen mit einer diamantähnlichen, amorphen Kohlenstoffschicht versehen. Insbesondere bestehen die Preßwerkzeuge aus Tablettenstempeln (1, 2, 3, 4), die in einer Tablettiermaschine Verwendung finden. Die Schichtdicke der amorphen Kohlenstoffschicht liegt vorzugsweise im Bereich von 1 bis 10  $\mu\text{m}$ .

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

**B30B 11/08** (2013.01); **B30B 15/065** (2013.01)

Citation (search report)

- [AD] EP 0741195 A1 19961106 - FRAUNHOFER GES FORSCHUNG [DE]
- [A] WO 9614448 A1 19960517 - NEUVILLE STEPHANE [FR]
- [X] PATENT ABSTRACTS OF JAPAN vol. 018, no. 585 (M - 1700) 9 November 1994 (1994-11-09)
- [X] PATENT ABSTRACTS OF JAPAN vol. 014, no. 563 (M - 1058) 14 December 1990 (1990-12-14)
- [A] PATENT ABSTRACTS OF JAPAN vol. 007, no. 108 (C - 165) 11 May 1983 (1983-05-11)
- [A] PATENT ABSTRACTS OF JAPAN vol. 096, no. 011 29 November 1996 (1996-11-29)

Cited by

EP1261242A4; CN1292891C; US7311869B2; EP3936323A1; WO03016034A1; US11884426B2

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