Title (en)

Process and apparatus for minimizing the spread of maximum pressing forces in a powder press

Title (de)

Verfahren und Vorrichtung zur Minimierung der Streuung der maximalen Presskräfte in einer Pulverpresse

Title (fr)

Procédé et dispositif pour minimaliser la dispersion des forces maximales dans une presse à poudre

Publication

EP 1287977 A3 20040128 (DE)

Application

EP 02017261 A 20020801

Priority

DE 10142623 A 20010831

Abstract (en)

[origin: EP1287977A2] Process for minimizing the scattering of maximum pressing forces during pressing of a metal powder using a powder press comprises: (a) acquiring the distribution of the maximum pressing force values in intervals; (b) comparing the standard deviation for the maximum pressing forces with a prescribed value; and (c) changing the vibration parameter, filling time and course of the filling device according to a prescribed program until the standard deviation reaches a prescribed value and/or a minimum. An Independent claim is also included for a device for controlling the powder press.

IPC 1-7

B30B 11/00

IPC 8 full level

B22F 3/00 (2006.01); **B30B 11/00** (2006.01); **B30B 11/02** (2006.01); **B30B 15/22** (2006.01); **B30B 15/30** (2006.01)

CPC (source: EP US)

B22F 3/004 (2013.01 - EP US); **B30B 11/005** (2013.01 - EP US); **B30B 11/022** (2013.01 - EP US); **B30B 15/22** (2013.01 - EP US); **B30B 15/302** (2013.01 - EP US); B22F 2999/00 (2013.01 - EP US)

C-Set (source: EP US)

1. B22F 2999/00 + B22F 3/004 + B22F 2203/03
2. B22F 2999/00 + B22F 3/03 + B22F 3/004 + B22F 2202/01

Citation (search report)

- [A] DE 19903417 A1 20000810 - FETTE WILHELM GMBH [DE]
- [A] US 4238431 A 19801209 - DEUSCH RUDOLF [DE], et al
- [A] US 4100598 A 19780711 - STIEL DONALD MELVYN, et al

Cited by

EP1964664A1; US7774092B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

EP 1287977 A2 20030305; **EP 1287977 A3 20040128**; **EP 1287977 B1 20080312**; AT E388809 T1 20080315; DE 10142623 A1 20030403; DE 10142623 C2 20031106; DE 50211876 D1 20080424; ES 2304236 T3 20081001; US 2003047089 A1 20030313; US 7147820 B2 20061212

DOCDB simple family (application)

EP 02017261 A 20020801; AT 02017261 T 20020801; DE 10142623 A 20010831; DE 50211876 T 20020801; ES 02017261 T 20020801; US 22560402 A 20020822