

Title (en)

METHOD AND APPARATUS FOR PRODUCING METAL POWDER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON METALLPULVER

Title (fr)

PROCEDE ET APPAREIL DE PRODUCTION DE POUDRE METALLIQUE

Publication

EP 1393841 A4 20050223 (EN)

Application

EP 02708666 A 20020326

Priority

- JP 0202911 W 20020326
- JP 2001091941 A 20010328

Abstract (en)

[origin: EP1393841A1] Produce metal powder, especially titanium powder, offering high purity and uniform granular shape and size, in an economical manner using an apparatus that comprises a pressure-resistant container comprising a high-pressure water tank, an injector nozzle for mixture gas of oxygen and hydrogen, a material element-metal feeder part, an ignition plug and a combustion chamber. <IMAGE>

IPC 1-7

B22F 9/02; **B22F 9/06**

IPC 8 full level

B22F 9/02 (2006.01); **B22F 9/06** (2006.01); **B22F 9/08** (2006.01)

CPC (source: EP KR US)

B22F 9/02 (2013.01 - EP US); **B22F 9/04** (2013.01 - KR); **B22F 9/06** (2013.01 - EP US); **B22F 9/08** (2013.01 - EP US);
B22F 2009/0848 (2013.01 - EP US); **B22F 2009/086** (2013.01 - EP US)

Citation (search report)

- [XP] WO 0136337 A1 20010525 - PHILD CO LTD [JP], et al
- [XP] EP 1167292 A1 20020102 - PHILD CO LTD [JP]
- [A] US 2269528 A 19420113 - GALLUP JOHN L & EP 1238946 A1 20020911 - PHILD CO LTD [JP]
- See also references of WO 02078883A1

Cited by

EP1452491A4; EP1374836A4; US7300672B2; US8128789B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1393841 A1 20040303; **EP 1393841 A4 20050223**; BR 0208466 A 20040323; CA 2442153 A1 20021010; CN 1248812 C 20060405;
CN 1529644 A 20040915; HU P0303939 A2 20040329; HU P0303939 A3 20040830; JP 4137643 B2 20080820;
JP WO2002078883 A1 20041021; KR 20030080062 A 20031010; MX PA03008818 A 20040218; NO 20034327 D0 20030926;
NO 20034327 L 20031125; NZ 528630 A 20040827; PL 365332 A1 20041227; TW 570851 B 20040111; US 2004118244 A1 20040624;
WO 02078883 A1 20021010

DOCDB simple family (application)

EP 02708666 A 20020326; BR 0208466 A 20020326; CA 2442153 A 20020326; CN 02807134 A 20020326; HU P0303939 A 20020326;
JP 0202911 W 20020326; JP 2002577135 A 20020326; KR 20037011575 A 20030903; MX PA03008818 A 20020326; NO 20034327 A 20030926;
NZ 52863002 A 20020326; PL 36533202 A 20020326; TW 91104638 A 20020312; US 47270204 A 20040219