

Title (en)

Preparation of high-purity metal powder from metal alkoxides.

Title (de)

Herstellung von Reinstmetallpulver aus Metallalkoxiden.

Title (fr)

Préparation de poudre de métal de haute pureté à partir d'alkoxydes de métal.

Publication

EP 0667200 A1 19950816 (DE)

Application

EP 95101419 A 19950202

Priority

DE 4404747 A 19940215

Abstract (en)

Prod'n. of high purity metal powder is effected by reaction of volatile alkoxide cpd(s). with a redn. gas, pref. H₂ opt. diluted with an inert carrier gas selected from the noble gases, pref. Ar. Pref. the metal alkoxide is an alkoxide of a gp. 3-14 element (IUPAC 1985) and reaction is carried out at 400-1400 (pref. 600-1200) degrees C. The alkoxide is pref. selected from chromium tert.-butoxide, niobium methoxide, niobium ethoxide, tantalum methoxide, tantalum ethoxide, tungsten methoxide and tungsten ethoxide.

Abstract (de)

Gegenstand der Erfindung ist ein Verfahren zur Herstellung von hochreinem Metallpulver, dadurch gekennzeichnet, daß die Herstellung durch Reaktion einer oder mehreren flüchtigen Alkoxidverbindungen mit einem Reduktionsgas erfolgt.

IPC 1-7

B22F 9/22; B22F 9/16; C22B 34/00; C22B 5/00; C22B 34/12; C22B 34/24; C22B 34/36

IPC 8 full level

B22F 9/22 (2006.01); **B22F 9/16** (2006.01); **B22F 9/28** (2006.01); **C22B 5/00** (2006.01); **C22B 5/12** (2006.01); **C22B 34/00** (2006.01);
C22B 34/12 (2006.01); **C22B 34/24** (2006.01); **C22B 34/36** (2006.01)

CPC (source: EP KR US)

B22F 9/28 (2013.01 - EP KR US); **C22B 5/12** (2013.01 - EP KR US); **C22B 34/24** (2013.01 - EP KR US); **C22B 34/36** (2013.01 - EP KR US);
B22F 2201/013 (2013.01 - EP KR US); **B22F 2203/11** (2013.01 - KR)

Citation (search report)

Cited by

DE10231777A1; US6100415A

Designated contracting state (EPC)

AT DE FR GB LU SE

DOCDB simple family (publication)

EP 0667200 A1 19950816; EP 0667200 B1 19980826; AT E170116 T1 19980915; CA 2142254 A1 19950816; CN 1112467 A 19951129; DE 4404747 A1 19950817; DE 4404747 C2 19951214; DE 59503295 D1 19981001; IL 112620 A0 19950526; IL 112620 A 19970930; JP H07252511 A 19951003; KR 950031331 A 19951218; RU 2126735 C1 19990227; RU 95101844 A 19970310; TW 257706 B 19950921; US 5711783 A 19980127

DOCDB simple family (application)

EP 95101419 A 19950202; AT 95101419 T 19950202; CA 2142254 A 19950210; CN 95101889 A 19950215; DE 4404747 A 19940215; DE 59503295 T 19950202; IL 11262095 A 19950213; JP 4509895 A 19950210; KR 19950002665 A 19950214; RU 95101844 A 19950215; TW 84100320 A 19950116; US 67809596 A 19960711