

Title (en)

METHOD FOR THE PRODUCTION OF A METAL OXIDE POWDER OR A SEMICONDUCTOR OXIDE POWDER, OXIDE POWDER, SOLID BODY, AND THE USE THEREOF

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES METALLOXIDPULVERS ODER EINES HALBLEITEROXIDPULVERS, OXIDPULVER, FESTK RPER UND SEINE VERWENDUNG

Title (fr)

PROCEDE DE PRODUCTION D'UNE POUDRE D'OXYDE METALLIQUE OU D'UNE POUDRE D'OXYDE SEMI-CONDUCTEUR, POUDRE D'OXYDE, CORPS SOLIDE ET SON UTILISATION

Publication

EP 1501759 A1 20050202 (DE)

Application

EP 03725165 A 20030507

Priority

- EP 0304780 W 20030507
- FR 0205784 A 20020510

Abstract (en)

[origin: WO03095360A1] The invention relates to a method for producing nanostructured mixed oxide having a high electrical conductivity, e.g. indium tin oxide, as well as an oxide powder, a solid body, and the use thereof as a sputter target. The oxide is produced by continuous direct oxidation, a metal material or semiconductor material being used as a smelting electrode in an oxygen plasma. The synthesis reaction is triggered at a very high temperature, followed by a thermal state which is controlled in such a way that an error-free crystalline structure allowing high mobility of electrical charges is created.

IPC 1-7

C01B 13/32; C01G 19/00; H01B 1/08

IPC 8 full level

C04B 35/00 (2006.01); **C01B 13/32** (2006.01); **C01G 19/00** (2006.01); **C23C 14/34** (2006.01); **H01B 1/08** (2006.01)

CPC (source: EP KR US)

B22F 9/10 (2013.01 - KR); **C01B 13/322** (2013.01 - EP US); **C01G 19/00** (2013.01 - EP US); **H01B 1/08** (2013.01 - EP US);
B82Y 30/00 (2013.01 - KR)

Citation (search report)

See references of WO 03095360A1

Citation (examination)

- US 2002055033 A1 20020509 - YADAV TAPESH [US], et al
- WO 9959754 A1 19991125 - UNIV WESTERN AUSTRALIA [AU], et al
- US 5128081 A 19920707 - SIEGEL RICHARD W [US], et al
- WO 9529872 A1 19951109 - ULRICH RESEARCH & CONSULTING I [US], et al
- DE 19540379 C1 19960926 - HERAEUS GMBH W C [DE]

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 03095360 A1 20031120; CN 1330560 C 20070808; CN 1652998 A 20050810; EP 1501759 A1 20050202; FR 2839506 A1 20031114;
FR 2839506 B1 20050610; JP 2005525283 A 20050825; KR 100676983 B1 20070131; KR 20040011527 A 20040205;
TW 200424120 A 20041116; US 2005019242 A1 20050127

DOCDB simple family (application)

EP 0304780 W 20030507; CN 03810549 A 20030507; EP 03725165 A 20030507; FR 0205784 A 20020510; JP 2004503388 A 20030507;
KR 20037015896 A 20031204; TW 92112827 A 20030512; US 87877604 A 20040628