Title (en)

METHOD FOR PRODUCING Ag-OXIDE-BASED ELECTRIC CONTACT MATERIAL AND ITS PRODUCT

Title (de)

HERSTELLUNGSVERFAHREN FÜR ELEKTRISCHES KONTAKTMATERIAL AUF Ag-OXIDBASIS UND DESSEN PRODUKT

Title (fr)

PROCEDE DE PRODUCTION D'UN MATERIAU DE CONTACT ELECTRIQUE A BASE D'OXYDE-AG ET SON PRODUIT

Publication

EP 1584696 A1 20051012 (EN)

Application

EP 02762779 A 20020815

Priority

JP 0208294 W 20020815

Abstract (en)

Although an Ag-CdO-based material has excellent electric properties such as deposition resistance, arc resistance and low contact resistance, which are required for an electric contact, the discharge standard provision in Japan, EC Directive on Waste from Electrical and Electronic Equipment (WEEE) and the like have been directed toward disuse of Cd, as already known. <??>Thus, the present invention is characterized in that after an atmosphere in a pressured oxidation furnace is replaced with oxygen, the temperature of an internal-oxidative Ag alloy prepared under a condition of a cold roll rate of 50 to 95% is gradually raised from a temperature of 200 DEG C or less in a pressured oxygen atmosphere with an oxygen pressure of 5 to 50 kg/cm<2> and internal oxidation processing is performed with an upper limit temperature of 700 DEG C , thereby restraining an Ag-rich layer generated on an outermost surface and an oxide-flocculated layer immediately below the Ag-rich layer and uniformly and finely precipitating and dispersing a composite oxide of added elements to a deep part of an internal structure. <IMAGE>

IPC 1-7

C22C 1/10; B22F 1/00; C22C 5/06; H01H 1/02; C22C 32/00

IPC 8 full level

C22C 32/00 (2006.01); **B22F 1/145** (2022.01); **C22C 1/10** (2006.01); **C22C 5/06** (2006.01); **H01H 1/023** (2006.01); **H01H 1/0237** (2006.01); **H01H 11/04** (2006.01); **H01L 21/00** (2006.01)

CPC (source: EP US)

B22F 1/145 (2022.01 - EP US); **C22C 1/1078** (2013.01 - EP US); **C22C 5/06** (2013.01 - EP); **C22F 1/14** (2013.01 - EP); **C23C 8/02** (2013.01 - EP); **C23C 8/10** (2013.01 - EP); **H01H 1/0237** (2013.01 - EP)

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 1584696 A1 20051012; **EP 1584696 A4 20051012**; **EP 1584696 B1 20061108**; DE 60215981 D1 20061221; DE 60215981 T2 20070726; WO 2004016818 A1 20040226

DOCDB simple family (application)

EP 02762779 A 20020815; DE 60215981 T 20020815; JP 0208294 W 20020815