

Title (en)
CONSUMABLE ELECTRODE WITH COMPOSITE CORE AND PROCESS FOR PRODUCING THE SAME

Title (de)
VERBRAUCHBARE ELEKTRODE MIT ZUSAMMENGESETZTEM KERN UND HERSTELLUNGSPROZESS DAFÜR

Title (fr)
ELECTRODE CONSOMMABLE À ÂME COMPOSITE ET PROCÉDÉ DE FABRICATION ASSOCI

Publication
EP 2104581 A2 20090930 (EN)

Application
EP 07869646 A 20071220

Priority
• US 2007088373 W 20071220
• US 87131006 P 20061221

Abstract (en)
[origin: WO2008079974A2] A wire-like product (10) for use as a feedstock in metal or plasma spraying or welding includes a metal case (12) and a composite core (14) in the case, with the core being partially sintered and containing enough metal to conduct an electrical current. To form the wire-like product, a metal tubular segment (20) is filled with a powder (26) in the absence of oxygen. Then the tubular segment is reduced in cross-section to compact the powder within it. Next the tubular segment is heated to anneal it and effect a partial sinter (32) of the powder. Another reduction in cross section breaks the partial sinter into particles and further compacts them, whereas a further heating anneals the tubular segment and resinters the particles. Repetitions of the cycle produce the wire-like product.

IPC 8 full level
B22F 3/20 (2006.01); **B22F 3/16** (2006.01); **B22F 7/08** (2006.01)

CPC (source: EP US)
B22F 3/16 (2013.01 - EP US); **B22F 5/12** (2013.01 - EP US); **B22F 7/08** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US)

C-Set (source: EP US)
B22F 2998/10 + B22F 3/20 + B22F 3/10 + B22F 3/20 + B22F 3/10

Citation (search report)
See references of WO 2008079974A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008079974 A2 20080703; WO 2008079974 A3 20080925; EP 2104581 A2 20090930; US 2010005847 A1 20100114

DOCDB simple family (application)
US 2007088373 W 20071220; EP 07869646 A 20071220; US 51971607 A 20071220