

Title (en)
PULVERULENT METAL-CONTAINING MATERIAL AND PROCESS FOR THE PRODUCTION OF A PROTECTIVE LAYER

Publication
EP 0309657 B1 19910918 (DE)

Application
EP 88110585 A 19880702

Priority
DE 3722532 A 19870708

Abstract (en)
[origin: US4935266A] A process for producing a corrosion-resistant protection on stabilizing wall surfaces and superheater tubes in sulfur-bearing hot gases which are used at surfaces temperatures of over 400 DEG C. in combustion installations, and a material in powder form which is suitable for that process, are intended to make it possible to use such wall surfaces and superheater tubes in sulfur-bearing hot gases in a good and durable fashion. For that purpose, to form a protective layer which is preferably from 0.2 to 1.5 mm in thickness, a metal powder which is sprayed out of a molten state, of a given composition, with a surface area of more than 200 cm²/g, is applied with an autogenous flame spray torch, with a quantitative gas flow rate of between about 1000 to 3000 NL/h, or 1500 to 2500 NL/h, for the combustion gas. The preferred composition of the metal powder used in Cr 15% to 35%, Mn 0.05% to 3%, Mo 0.05% to 5.0%, C 0.1% to 3%, Si 0.1% to 3%, Al 2% to 15%, with the balance Fe.

IPC 1-7
C23C 4/06

IPC 8 full level
C22C 33/02 (2006.01); **C22C 38/18** (2006.01); **C23C 4/06** (2006.01); **C23C 4/067** (2016.01); **F22B 37/04** (2006.01)

CPC (source: EP US)
C22C 33/0285 (2013.01 - EP US); **C22C 38/18** (2013.01 - EP US); **C23C 4/067** (2016.01 - EP US); **F22B 37/04** (2013.01 - EP US)

Cited by
EP0499889A1; FR2795748A1; WO0102616A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)
US 4935266 A 19900619; AT E67522 T1 19911015; DE 3864963 D1 19911024; EP 0309657 A1 19890405; EP 0309657 B1 19910918; ES 2025737 T3 19920401

DOCDB simple family (application)
US 21371188 A 19880630; AT 88110585 T 19880702; DE 3864963 T 19880702; EP 88110585 A 19880702; ES 88110585 T 19880702