

Title (en)

METHOD AND APPARATUS FOR RECOVERING SUBSTANCE ADHERED TO OBJECT TO BE PROCESSED

Publication

EP 0493122 A3 19930414 (EN)

Application

EP 91312040 A 19911224

Priority

- JP 34007491 A 19911129
- JP 41496390 A 19901227

Abstract (en)

[origin: EP0493122A2] A method for recovering substance such as zincing or the like adhered to the surface of an object to be processed, by causing such materials to be evaporated in a vacuum. In this method, the object to be processed is placed in a furnace provided with heating means; the temperature within the furnace is elevated up to a predetermined level with the aid of an oxidizing gas atmosphere; the pressure in the furnace is reduced so that the quantity of the oxidizing gas is reduced to be below the explosion limit; and a reducing gas atmosphere is fed into the furnace to reduce the oxidization of the object to be processed. Thereafter, the interior of the furnace is evacuated while being maintained under a predetermined evaporation temperature condition; and the substance evaporated from the object to be processed is passed to recovery means provided in communication with the furnace, so that the substance thus evaporated is condensed in the recovery means and recovered therefrom.

IPC 1-7

C22B 19/04; **C23G 5/00**

IPC 8 full level

B08B 3/10 (2006.01); **B08B 7/00** (2006.01); **C22B 1/00** (2006.01); **C22B 7/00** (2006.01); **C22B 19/04** (2006.01); **C23F 4/02** (2006.01); **C23G 5/00** (2006.01)

CPC (source: EP KR)

C22B 19/04 (2013.01 - EP); **C23F 4/02** (2013.01 - EP); **C23G 5/00** (2013.01 - EP KR)

Citation (search report)

- [A] FR 2419131 A1 19791005 - TOYO RADIATOR CO LTD [JP]
- [A] EP 0209307 A1 19870121 - SECR DEFENCE BRIT [GB]
- [A] CHEMICAL ABSTRACTS, vol. 101, no. 26, December 1984, Columbus, Ohio, US; abstract no. 234419z, MATSUSHITA ELECTRIC WORKS 'recovery of zinc in surface zinc removal from a brass plate' page 233 ;column 1 ;

Cited by

CN107051958A; ES2200717A1; CN106191444A; DE19781654B4; EP0748882A1; EP0694623A3; US5735933A; WO02053789A1; US10287651B2; US11136646B2; US6332909B1

Designated contracting state (EPC)

BE DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0493122 A2 19920701; **EP 0493122 A3 19930414**; CA 2058508 A1 19920628; CA 2058508 C 19940927; KR 920012522 A 19920727; KR 940004102 B1 19940513

DOCDB simple family (application)

EP 91312040 A 19911224; CA 2058508 A 19911227; KR 910024965 A 19911227