

Title (en)

RECYCLING OF HOT-DIP ZINC GALVANIZING BATH

Title (de)

REZYKLIERUNG VON FEUERVERZINKUNGSBÄDERN

Title (fr)

RECYCLAGE DE BAIN DE ZINCAGE A CHAUD

Publication

EP 1721021 B1 20070606 (EN)

Application

EP 05715245 A 20050201

Priority

- EP 2005001054 W 20050201
- EP 04075589 A 20040226
- US 54827304 P 20040301
- EP 05715245 A 20050201

Abstract (en)

[origin: WO2005083134A1] The present invention relates to a process to recover zinc from zinc containing residues or scraps, especially those produced by hot-dip galvanizing lines. The process comprises the steps of: - selecting a Si-bearing compound which, at a temperature up to 700 °C, either reacts with zinc, either melts, or dissolves in zinc; - adding the selected Si-bearing compound to an Fe-containing molten zinc bath, whereby the iron in the zinc bath reacts to produce an Fe-Si matte; - allowing the Zn bath to settle, whereby the Fe-Si matte raises to the surface of the bath, and - collecting the Fe-Si matte from the surface of the zinc bath.

IPC 8 full level

C22B 19/30 (2006.01); **C22B 19/32** (2006.01); **C25D 21/18** (2006.01)

CPC (source: EP)

C25D 21/18 (2013.01)

Cited by

CN103003018A

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005083134 A1 20050909; AT E364097 T1 20070615; DE 602005001323 D1 20070719; DE 602005001323 T2 20080207;
EP 1721021 A1 20061115; EP 1721021 B1 20070606; ES 2287903 T3 20071216; PL 1721021 T3 20071031

DOCDB simple family (application)

EP 2005001054 W 20050201; AT 05715245 T 20050201; DE 602005001323 T 20050201; EP 05715245 A 20050201; ES 05715245 T 20050201;
PL 05715245 T 20050201