

Title (en)
Black passivation of zinc and zinc-iron layers

Title (de)
Schwarzpassivierung von Zink- und Zinkeisenschichten

Title (fr)
Passivation noire de zinc et couches de fer et de zinc

Publication
EP 2319957 B1 20170111 (DE)

Application
EP 10175959 A 20100909

Priority
DE 102009045569 A 20091012

Abstract (en)
[origin: EP2319957A1] Acidic, aqueous passivation solution comprises chromium(III) ions, fluoride ions and nitrate ions, dithiodiglycolic acid, thioglycolic acid or a salt of these acids. Independent claims are included for: (1) producing black passivation layers on zinc- or zinc iron alloy layers, comprising contacting a workpiece, which is coated with the zinc- or zinc iron alloy layers, with the acidic, aqueous passivation solution; and (2) the black passivation layer, obtained by the above process.

IPC 8 full level
C23C 22/06 (2006.01); **C23C 22/34** (2006.01)

CPC (source: EP)
C23C 22/34 (2013.01); **C25D 5/48** (2013.01); **C23C 2222/10** (2013.01); **C25D 3/22** (2013.01)

Cited by
CN103741128A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2319957 A1 20110511; EP 2319957 B1 20170111; DE 102009045569 A1 20110414; DK 2319957 T3 20170227; SI 2319957 T1 20170531

DOCDB simple family (application)
EP 10175959 A 20100909; DE 102009045569 A 20091012; DK 10175959 T 20100909; SI 201031381 A 20100909