

Title (en)
METHOD FOR THE THERMOCHEMICAL PASSIVATION OF STAINLESS STEEL

Title (de)
VERFAHREN ZUM THERMOCHEMISCHEN PASSIVIEREN VON EDELSTAHL

Title (fr)
PROCÉDÉ DE PASSIVATION THERMOCHIMIQUE D'ACIER INOXYDABLE

Publication
EP 2147131 B1 20110817 (DE)

Application
EP 08715970 A 20080222

Priority
• EP 2008001419 W 20080222
• DE 102007010538 A 20070305

Abstract (en)
[origin: US2010132844A1] The present invention relates to a process for improving the heat and corrosion resistance of stainless steel by means of a novel passivation process. This process comprises a chemical treatment with an aqueous solution comprising a complexing agent combination of at least one oxidant, a subsequent rinsing and a subsequent treatment at elevated temperature in an oxygen-containing atmosphere. The stainless steel surfaces obtained according to the invention have a homogeneous passive layer having increased chemical resistance and resistance to thermal discoloration.

IPC 8 full level
C23C 22/50 (2006.01); **C23C 22/82** (2006.01); **C23C 22/74** (2006.01)

CPC (source: EP US)
C23C 8/02 (2013.01 - EP US); **C23C 22/50** (2013.01 - EP US); **C23C 22/74** (2013.01 - EP US); **C23C 22/82** (2013.01 - EP US)

Cited by
DE102014203412A1; WO2015090660A1

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

DOCDB simple family (publication)
US 2010132844 A1 20100603; US 8430973 B2 20130430; AT E520802 T1 20110915; DE 102007010538 A1 20080911;
EP 2147131 A1 20100127; EP 2147131 B1 20110817; ES 2370088 T3 20111212; JP 2010521581 A 20100624; JP 5222308 B2 20130626;
PL 2147131 T3 20120131; WO 2008107082 A1 20080912; WO 2008107082 A8 20081120

DOCDB simple family (application)
US 52985808 A 20080222; AT 08715970 T 20080222; DE 102007010538 A 20070305; EP 08715970 A 20080222; EP 2008001419 W 20080222;
ES 08715970 T 20080222; JP 2009552092 A 20080222; PL 08715970 T 20080222