

Title (en)
Alkaline zinc-nickel bath

Title (de)
Alkalisches Zink-Nickelbad

Title (fr)
Bain Zinc-Nickel alcalin

Publication
EP 1344850 A1 20030917 (DE)

Application
EP 03003890 A 19990729

Priority
• DE 19834353 A 19980730
• EP 99940077 A 19990729

Abstract (en)
The alkaline galvanic bath (1) for production of zinc-nickel coatings, with an anode (2) and a cathode (3), has the anode separated from the alkaline electrolyte (4) by means of an ion exchange membrane (6).

Abstract (de)
Zur Vermeidung unerwünschter Nebenreaktionen in einem alkalischen Zink-Nickel-Galvanikbad wird vorgeschlagen, die Anode von dem alkalischen Elektrolyten zu trennen.

IPC 1-7
C25D 21/12

IPC 8 full level
C25D 1/00 (2006.01); **C25B 9/23** (2021.01); **C25D 3/56** (2006.01); **C25D 17/00** (2006.01); **C25D 17/10** (2006.01); **C25D 21/12** (2006.01)

CPC (source: EP KR US)
C25D 3/565 (2013.01 - EP US); **C25D 17/02** (2013.01 - KR); **C25D 21/12** (2013.01 - EP US)

Citation (search report)
• [A] EP 0410919 A1 19910130 - SIDERURGIE FSE INST RECH [FR]
• [A] DATABASE WPI Section Ch Week 198328, Derwent World Patents Index; Class M11, AN 1983-708398, XP002131380
• [A] DATABASE WPI Section Ch Week 199210, Derwent World Patents Index; Class M11, AN 1992-075074, XP002131381

Cited by
EP2384800A1; EP3358045A1; WO2018146041A1; EP3415665A1; RU2724765C1; DE102008058086A1; DE102010044551A1; WO2012031753A1; US11339492B2; DE20201500228U1; DE102015009379A1; US10738391B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
DE 19834353 A1 20000203; DE 19834353 C2 20000817; AT E242821 T1 20030615; AT E346180 T1 20061215; AU 5415299 A 20000221; BG 105184 A 20011031; BR 9912589 A 20010502; CA 2339144 A1 20000210; CN 1311830 A 20010905; CZ 2001189 A3 20010815; CZ 298904 B6 20080305; DE 59905937 D1 20030717; DE 59914011 D1 20070104; EE 200100059 A 20021015; EP 1102875 A2 20010530; EP 1102875 B1 20030611; EP 1344850 A1 20030917; EP 1344850 B1 20061122; ES 2201759 T3 20040316; ES 2277624 T3 20070716; HR P20010044 A2 20011231; HR P20010044 B1 20050630; HU P0103951 A2 20020228; HU P0103951 A3 20030528; IL 141086 A0 20020210; JP 2002521572 A 20020716; JP 2008150713 A 20080703; JP 4716568 B2 20110706; KR 20010071074 A 20010728; MX PA01000932 A 20020604; PL 198149 B1 20080530; PL 345970 A1 20020114; SK 285453 B6 20070104; SK 892001 A3 20011008; TR 200100232 T2 20010621; US 2004104123 A1 20040603; US 2008164150 A1 20080710; US 2011031127 A1 20110210; US 6602394 B1 20030805; US 7807035 B2 20101005; US 8486235 B2 20130716; WO 0006807 A2 20000210; WO 0006807 A3 20000504

DOCDB simple family (application)
DE 19834353 A 19980730; AT 03003890 T 19990729; AT 99940077 T 19990729; AU 5415299 A 19990729; BG 10518401 A 20010125; BR 9912589 A 19990729; CA 2339144 A 19990729; CN 99809138 A 19990729; CZ 2001189 A 19990729; DE 59905937 T 19990729; DE 59914011 T 19990729; EE P200100059 A 19990729; EP 03003890 A 19990729; EP 9905443 W 19990729; EP 99940077 A 19990729; ES 03003890 T 19990729; ES 99940077 T 19990729; HR P20010044 A 20010116; HU P0103951 A 19990729; IL 14108699 A 19990729; JP 2000562585 A 19990729; JP 2008069722 A 20080318; KR 20017001285 A 20010130; MX PA01000932 A 19990729; PL 34597099 A 19990729; SK 892001 A 19990729; TR 200100232 T 19990729; US 3075008 A 20080213; US 61835203 A 20030711; US 74470601 A 20010130; US 89667310 A 20101001