

Title (en)

COMPOSITION AND PROCESS FOR TREATING TINPLATE AND ALUMINUM

Title (de)

ZUSAMMENSETZUNG UND VERFAHREN ZUM BEHANDELN VON ZINN UND ALUMINIUM

Title (fr)

COMPOSITION ET PROCEDE POUR TRAITER LE FER BLANC ET L'ALUMINIUM

Publication

**EP 0726968 A4 19960524 (EN)**

Application

**EP 94922040 A 19940705**

Priority

- JP 16560193 A 19930705
- US 9407298 W 19940705

Abstract (en)

[origin: WO9502077A1] A bath for the treatment of DI cans that contains phosphate ions, at least one of zirconium and titanium compounds, oxidizing agent at no more than 500 ppm, and fluorides at no more than 2,000 ppm as fluorine, and that has a pH of 2.0 to 4.0 is useful for treating the surface of both aluminum and tinplate cans prior to the painting/printing thereof.

IPC 1-7

**C23C 22/36**

IPC 8 full level

**C23C 22/36** (2006.01)

CPC (source: EP)

**C23C 22/361** (2013.01)

Citation (search report)

- [Y] EP 0178020 A1 19860416 - PARKER CHEMICAL CO [US]
- [A] US 5139586 A 19920818 - DAS NARAYAN [US]
- [A] GB 2014617 A 19790830 - PYRENE CHEMICAL SERVICES LTD
- [A] US 4470853 A 19840911 - DAS NARAYAN [US], et al
- [AD] FR 2347459 A1 19771104 - AMCHEM PROD [US] & JP S52131937 A 19771105 - AMCHEM PROD
- [X] CHEMICAL ABSTRACTS, vol. 90, no. 26, 25 June 1979, Columbus, Ohio, US; abstract no. 208761q, NIHON PARKERIZING: "Surface treatment of aluminum" page 303; column r; XP002001672 & JP S5424232 A 19790223 - NIPPON PACKAGING KK
- [Y] CHEMICAL ABSTRACTS, vol. 91, no. 18, 29 October 1979, Columbus, Ohio, US; abstract no. 144331k, NIHON PARKERIZING: "Surface treatment of tin-plated steel" page 219; column I; XP002001673 & JP S5468734 A 19790602 - NIPPON PACKAGING KK
- See references of WO 9502077A1

Cited by

EP0754250A4; EP0799326A4; CN1123649C; EP4276219A1; WO2023217652A1

Designated contracting state (EPC)

AT DE ES FR GB GR IT SE

DOCDB simple family (publication)

**WO 9502077 A1 19950119**; AT E186755 T1 19991215; AU 682706 B2 19971016; AU 7252194 A 19950206; CA 2166482 A1 19950119; DE 69421716 D1 19991223; DE 69421716 T2 20000629; EP 0726968 A1 19960821; EP 0726968 A4 19960524; EP 0726968 B1 19991117; ES 2140546 T3 20000301; JP H0748677 A 19950221; ZA 944822 B 19950222

DOCDB simple family (application)

**US 9407298 W 19940705**; AT 94922040 T 19940705; AU 7252194 A 19940705; CA 2166482 A 19940705; DE 69421716 T 19940705; EP 94922040 A 19940705; ES 94922040 T 19940705; JP 16560193 A 19930705; ZA 944822 A 19940704