

Title (en)

Aluminium-coating solution, process and concentrate.

Title (de)

Bad, Verfahren und Konzentrat zur Beschichtung von Aluminium.

Title (fr)

Bain, procédé et produit concentré pour le revêtement de l'aluminium.

Publication

**EP 0032306 A1 19810722 (EN)**

Application

**EP 80304673 A 19801222**

Priority

- US 10701779 A 19791226
- US 16573480 A 19800703

Abstract (en)

A chromate-free acidic aqueous conversion-coating solution which is effective in forming a clear, colourless, corrosion-resistant conversion-coating on an aluminium surface, to which moreover subsequently-applied overlying siccative coatings will adhere tightly, contains a Group IVa metal selected from the group consisting of zirconium, titanium, hafnium and mixtures thereof, as well as fluoride and one or more additives, namely a polyhydroxy compound having no more than 7 carbon atoms, the solution being in that event free of phosphate and boron, or a surfactant or a mixture of said surfactant and said poly-hydroxy compound. The coating-solution is employed in processes for forming conversion-coatings on aluminium surfaces, especially those of aluminium cans, which may thereafter be given a decorative and/or sanitary lacquer or other siccative coating. The coated aluminium is shown to have superior properties. Concentrates are disclosed for making up and also for replenishing the coating solution.

IPC 1-7

**C23F 7/00**; **C23F 11/04**; **C23C 3/00**

IPC 8 full level

**C23C 22/34** (2006.01)

CPC (source: EP)

**C23C 22/34** (2013.01)

Citation (search report)

- DE 2704261 A1 19780803 - METALLGESELLSCHAFT AG
- GB 1504494 A 19780322 - PYRENE CHEMICAL SERVICES LTD [JP]

Cited by

USRE35688E; CN102575355A; US5531820A; GB2131052A; US8951362B2; WO9114014A3; WO2011044099A1; WO9428193A1; WO9505496A1; WO2022072857A1

Designated contracting state (EPC)

AT BE DE FR GB IT NL SE

DOCDB simple family (publication)

**EP 0032306 A1 19810722**; **EP 0032306 B1 19850502**; AU 543720 B2 19850502; AU 6584780 A 19810702; BR 8008489 A 19810714; CA 1174945 A 19840925; DE 3070603 D1 19850605; DK 553280 A 19810627; ES 498079 A0 19821101; ES 8300142 A1 19821101; MX 157394 A 19881122; NO 803937 L 19810629; NZ 195810 A 19830715; PL 131953 B1 19850131; PL 228759 A1 19810904

DOCDB simple family (application)

**EP 80304673 A 19801222**; AU 6584780 A 19801224; BR 8008489 A 19801223; CA 366731 A 19801212; DE 3070603 T 19801222; DK 553280 A 19801223; ES 498079 A 19801223; MX 18535380 A 19801217; NO 803937 A 19801223; NZ 19581080 A 19801211; PL 22875980 A 19801224