

Title (en)
LIQUID COMPOSITION AND PROCESS FOR TREATING ALUMINIUM OR TIN CANS TO IMPART CORROSION RESISTANCE AND REDUCED FRICTION COEFFICIENT.

Title (de)
BEHANDLUNGSVERFAHREN VON ALUMINIUM- ODER BLECHDOSEN ZUR ERHÖHUNG DER KORROSIONSBESTÄNDIGKEIT UND ZUR VERRINGERUNG DES REIBUNGSKOEFFIZIENTEN UND ZUSAMMENSETZUNG DER BEHANDLUNGSFLÜSSIGKEIT.

Title (fr)
COMPOSITION LIQUIDE ET PROCEDE DE TRAITEMENT DE BOITES EN ALUMINIUM OU EN FER BLANC DESTINES A AMELIORER LA RESISTANCE A LA CORROSION ET A REDUIRE LE COEFFICIENT DE FRICTION.

Publication
EP 0533823 B1 19950104 (EN)

Application
EP 91912131 A 19910613

Priority
• JP 16044390 A 19900619
• JP 17927190 A 19900706
• US 9104250 W 19910613

Abstract (en)
[origin: WO9119828A1] A corrosion resistant film with a low coefficient of friction that facilitates automatic conveying can be formed on the surface of tin-plated steel or of aluminum, particularly DI cans of one of these types of metal, by contacting the aluminum or the tin plated steel with an aqueous liquid composition having a pH in the range from 2.0 to 6.5 and containing: (A) from 1 to 30 g/L of phosphate ions, (B) from 0.1 to 10 g/L of condensed phosphate ions, and (C) from 0.1 to 20 g/L as solids of a water-soluble resin component selected from the group of resins, including mixtures of resins, having general chemical formula (I) wherein n is an integer within the range from 10 to 80 inclusive; each of X and Y is independently selected from hydrogen or a group "Z" with formula (II), except that at least 15 % the total of all of the X and Y groups in this component of the composition are Z rather than hydrogen; and (II) wherein each of R1 and R2 in each of the phenyl rings in the formula independently is selected from the group consisting of alkyl groups containing from 1 to 10 carbon atoms per group and hydroxyalkyl groups containing from 1 to 10 carbon atoms per group.

IPC 1-7
C23C 22/23

IPC 8 full level
C23C 22/23 (2006.01); **C23C 22/68** (2006.01)

CPC (source: EP)
C23C 22/23 (2013.01); **C23C 22/68** (2013.01)

Designated contracting state (EPC)
AT BE DE DK ES FR GB IT NL SE

DOCDB simple family (publication)
WO 9119828 A1 19911226; AT E116694 T1 19950115; AU 647498 B2 19940324; AU 8069391 A 19920107; BR 9106572 A 19930601; CA 2085489 A1 19911220; CA 2085489 C 20001212; DE 69106510 D1 19950216; DE 69106510 T2 19950803; EP 0533823 A1 19930331; EP 0533823 B1 19950104; ES 2067942 T3 19950401

DOCDB simple family (application)
US 9104250 W 19910613; AT 91912131 T 19910613; AU 8069391 A 19910613; BR 9106572 A 19910613; CA 2085489 A 19910613; DE 69106510 T 19910613; EP 91912131 A 19910613; ES 91912131 T 19910613