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- (54) **Title:** ALUMINUM TREATMENT COMPOSITIONS

(57) **Abstract:** A method of preparing an aluminum or aluminum alloy substrate to accept an adherent coating thereon is provided. The method includes the steps of degreasing the substrate, deoxidizing the substrate, and providing a prepaint conversion coating on the degreased and deoxidized substrate. The prepaint conversion coating composition comprises i) a source of fluoride ions; ii) a source of zirconium ions; iii) an acrylic resin; and iv) an optical brightener and forms a colorless, chromium-free conversion coating on the aluminum substrate that can be observed by exposing the treated substrate to UV light.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - B05D 3/00 (2012.01) USPC - 427/327; 428/416 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) USPC - 427/327; 428/416		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 427/327; 428/416; IPC(8) - B05D 3/00 (2012.01)		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST(USPT,PGPB,EPAB,JPAB); Google Scholar. Search Terms: conversion coating, metal, aluminum, zirconium, polyacrylic acid, optical brightener, pH, acidity, hydrofluoric acid, resin, polymer, coating, fluorozirconate, zirconium carboxylate, zirconium acetate, zirconium hydroxy carboxylates, 4,4'-bis-(2-sulfostyryl)-biphenyl disodium salt		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ---- Y	US 2003/0199629 A1 (GELMAN et al.) 23 October 2003 (23.10.2003), paras [0031], [0128], [0145], [0158], [0204], [0242], [0253], [0268]	1, 5-6, 8 ----- 2-4,7,9-29
Y	US 2009/0101512 A1 (KUBOTA) 23 April 2009 (23.04.2009), paras [0021], 0098], [0165], [0210]	2-4, 7, 9-10, 14-28, 29
Y	US 2008/0244845 A1 (GOIBIER et al.) 09 October 2008 (09.10.2008), abstract; paras [0020], [0023]	11-13, 26-28
Y	US 4,191,596 A (DOLLMAN et al.) 04 March 1980 (04.03.1980), abstract; col 2, ln 19-22; col 3, ln 1-5	9-10, 24-25
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/>		
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