

Title (en)
PROCESS FOR APPLYING PHOSPHATE COATINGS

Publication
EP 0213567 B1 19900124 (DE)

Application
EP 86111618 A 19860822

Priority
US 76943385 A 19850826

Abstract (en)
[origin: US4595424A] Disclosed is an improved method for coating a zinc surface comprising treating said surface with an aqueous, acidic solution containing: (a) about 0.5 to about 4 percent phosphate ion; (b) an ion selected from the group consisting of zinc ions, manganese ions, and mixtures thereof, said ions being present at a level sufficient to form dihydrogen phosphate with substantially all of said phosphate ions; and (c) about 0.01 to about 1 percent complex fluoride ions; wherein the weight:weight ratio of complex fluoride ions:chloride ions in said solution is at a value of about 8:1 or greater. It is preferred that the ratio complex of fluoride ion to chloride ion (F:-Cl-) in said solution to be maintained at a value of greater than about 8:1, preferably greater than about 10:1, and more preferably greater than about 14:1. The select weight:weight complex fluoride:chloride ratio substantially eliminates the abnormal crystal growth frequently found in treated surfaces while at the same time reduces the need for excess fluoride.

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IPC 8 full level
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Cited by
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US 4595424 A 19860617; AT E49781 T1 19900215; AU 5871886 A 19870305; AU 594685 B2 19900315; CA 1293165 C 19911217; DE 3628303 A1 19870312; DE 3668475 D1 19900301; EP 0213567 A1 19870311; EP 0213567 B1 19900124; ES 2000229 A6 19880116; GB 2179680 A 19870311; GB 8620633 D0 19861001; JP H06104906 B2 19941221; JP S6247489 A 19870302; MX 165325 B 19921105

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