

Title (en)

A method for forming a passivation layer on an article having at least one tin-plated surface

Title (de)

Ein Verfahren zur Herstellung einer Passivierungsschicht auf einem Gegenstand mit wenigstens einer Zinn-Oberfläche

Title (fr)

Procédé pour la fabrication d'une couche de passivation sur un article avec au moins une surface en étain

Publication

EP 1445352 A1 20040811 (EN)

Application

EP 04001036 A 20040120

Priority

IT TO20030027 A 20030121

Abstract (en)

Described herein is a method for forming a passivation layer on an article having at least one tin-plated surface, comprising the step of subjecting the tin-plated surface to electrochemical oxidation for forming thereon a layer of tin dioxide in crystalline form of the type of natural cassiterite. Oxidation takes place in an electrolytic solution preferably comprising at least one compound chosen in the group constituted by salts of the gluconic acids, salts of citric acid, and salts of boric acid. Preferably, the article is made of copper and coated with a layer of tin obtained via hot tin-plating or electrolytic deposition.

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C25D 11/34

IPC 8 full level

C25D 11/34 (2006.01)

CPC (source: EP)

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Citation (applicant)

- GB 486752 A 19380609 - JOHN CAMPBELL, et al
- GB 819305 A 19590902 - EKCO PRODUCTS COMPANY
- US 2312076 A 19430223 - COOK WILLARD O, et al
- JP S59222220 A 19841213 - FUJI DENKI SOGO KENKYUSHO KK
- S. A. M. RAFAEY: "Passivation and pitting corrosion of tin in gluconate solutions and the effect of halide ions", JOURNAL OF APPLIED ELECTROCHEMISTRY, vol. 26, 1996, pages 503 - 507

Citation (search report)

- [XA] GB 486752 A 19380609 - JOHN CAMPBELL, et al
- [X] GB 819305 A 19590902 - EKCO PRODUCTS COMPANY
- [X] US 2312076 A 19430223 - COOK WILLARD O, et al
- [A] GB 2020695 A 19791121 - NIPPON KOKAN KK
- [X] DATABASE WPI Section Ch Week 198627, Derwent World Patents Index; Class M14, AN 1986-172372, XP002284379

Citation (examination)

- US 4264418 A 19810428 - WOOD WILLIAM G, et al
- US 3276458 A 19661004 - IVERSEN ARTHUR H, et al
- S. A. M. RAFAEY: "Passivation and pitting corrosion of tin in gluconate solutions and the effect of halide ions", JOURNAL OF APPLIED ELECTROCHEMISTRY, vol. 26, 1996, pages 503 - 507

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