

Title (en)

Process for electroplating one or both sides of a thin polymer foil provided with a conductive coating.

Title (de)

Vorrichtung zur Galvanisierung dünner, ein- oder beidseits mit einer leitfähigen Beschichtung versehener Kunststoffolien.

Title (fr)

Procédé d'électrodéposition sur une ou deux faces d'une feuille mince en polymère revêtue d'une couche conductrice.

Publication

EP 0668374 A1 19950823 (DE)

Application

EP 94102542 A 19940220

Priority

- EP 94102542 A 19940220
- DE 4229403 A 19920903
- US 20548594 A 19940303

Abstract (en)

Appts. for electrocoating plastic sheet provided on one or both surfaces with a conductive coating in which the sheet passes consecutively through a series of chambers having anodes (24,25) connected to tampons (66,67) which, in turn, contact the plastic sheet and contact cathodes (9,10,13,14) arranged outside the chamber. Through the chambers the sheet is horizontal. At each inlet and outlet to the chambers, squeeze rollers (20 to 23) are arranged. They are arranged in pairs above and below the sheet at an obtuse angle of 120-190, pref. 150 deg. to each other. The dia. and rotational speed of the squeeze rollers increases along the feed direction of the sheet. Each roller has a brake coupling which limits the rotational moment to a max. value. The tampons (66,67) are made of soft open-pored plastic foam. The bores (30) in the anodes are inclined in a direction opposite to the feed direction of the sheet. The current source consists of at least one adjustable pulse generator with a rectangular pulse cycle of selectable frequency, time ratio, amplitude and polarity. The frequency is 0.1-10000 Hz. The electrolyte is passed through a cooling system before being recycled to the chambers.

Abstract (de)

Eine Vorrichtung zur Galvanisierung dünner, ein- oder beidseits mit einer leitfähigen Beschichtung versehener Kunststoffolien (1), die ggfs. mit Durchgangsbohrungen versehen sein können, umfaßt eine Fördereinrichtung (20 bis 23), welche die Kunststoffolie (1) im Bereich der mit Elektrolyt gefüllten Kammer (6) horizontal bewegt. Die Kontaktiereinrichtungen (9 bis 16), welche die Kunststoffolie (1) auf kathodisches Potential bringt, befinden sich außerhalb der Kammer (6) im "Trockenen". <IMAGE>

IPC 1-7

C25D 7/06

IPC 8 full level

C25D 7/06 (2006.01)

CPC (source: EP US)

C25D 5/56 (2013.01 - EP US); **C25D 7/0614** (2013.01 - EP US)

Citation (search report)

- [X] CH 537460 A 19730713 - DUERRWAECHTER E DR DODUCO [DE]
- [A] GB 1186357 A 19700402 - METADALIC LTD
- [A] US 2395437 A 19460226 - MAYO VENABLE WILLIAM
- [A] US 4039398 A 19770802 - FURUYA KIYOTO

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

DE 4229403 A1 19940310; DE 4229403 C2 19950413; EP 0668374 A1 19950823; US 5425862 A 19950620

DOCDB simple family (application)

DE 4229403 A 19920903; EP 94102542 A 19940220; US 20548594 A 19940303