

Title (en)

Apparatus for applying a material forming a coating to electrical components.

Title (de)

Vorrichtung zum Aufbringen eines eine Ummantelung bildenden Materials auf elektrische Bauelemente.

Title (fr)

Dispositif pour l'application d'un matériau formant revêtement sur des composants électriques.

Publication

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Application

EP 85101784 A 19850219

Priority

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- DE 3430137 A 19840816

Abstract (en)

1. An apparatus for applying a material forming a coating to electrical components, the terminal wires of which project from a common side of the component body, in which [apparatus] the components (4) are secured by their terminal wires (5) to a conveying element (1) and with their component bodies (6) held hanging downwards by the said conveyor element (1) they are dipped into the material (26) contained in at least one container (21) open at the top and are then lifted out of the material (26) again, the container (21) being driven so as to revolve about a vertical axis of rotation (S) and having an interior space (25), preferably an annular interior space (25), with an annular outer boundary surface arranged concentrically to the axis of rotation (S) for receiving the material (26) which forms the coating, there being provided above the container (21) at least one guide element (13) by which the conveying element (1) is guided in the region above the container (21) on an arcuate path which embraces the axis of rotation (S) of the container in the manner of a loop and the axis (32) of which forms an angle (a) with the axis of rotation (S) of the container (21) such that the components are lowered along a first partial section of the path and are raised again along a second following partial section, and at least one driving element (13) being provided for the conveying element (1), by which the conveying element (1) is driven in such a way that the conveying element (1) moves on an arcuate path in the same direction and at approximately the same angular velocity as the container (21), characterized in that the material forming the coating is a powdered material (26), means (38, 52) are provided for swirling or loosening the material (26) in the interior space (25) of the container (21), at least one first stationary wiper (46) extending into the interior space (25) of the container is provided, a lower wiping edge (48) which is horizontal or extends at right angles to the axis of rotation (S) of the container (21) and which is disposed approximately radially to the axis of rotation (S) is provided for flattening the surface of the material (26), the first wiper (46) or the wiping edge (48) thereof extends as far as the outer boundary surface of the interior space (25) and terminates at a distance from the inner boundary surface (24) of the interior space (25) or from the centre of the container, at least one second stationary wiper (49) extending into the interior space (25) of the container is provided which comprises a lower wiping edge which extends approximately horizontally and is arranged approximately radially to the axis of rotation (S) of the container (21), the second wiper (49) or the wiping edge (50) thereof extends into the central region (21) or the inner boundary surface (24) of the interior space (25) and is at a distance from the outer boundary surface (22) of the interior space (25), and the second wiper (49) is disposed in front of the first wiper (46) relative to the direction of rotation (A) of the container (21).

Abstract (de)

Bei einem Verfahren bzw. bei einer Vorrichtung zum Aufbringen einer Ummantelung auf elektrische Bauelemente werden diese Bauelemente in radial geschrägter Form von oben in einen Behälter mit ihrem Bauelementekörper nach unten hängend hineinbewegt, der um eine vertikale Drehachse umlaufend angetrieben ist. Beim Eintauchen der Bauelementekörper in das in diesem Behälter vorgesehene und die Ummantelung bildende Material werden die Bauelemente um die vertikale Achse auf einer Kreisbahn gleichsinnig und mit gleicher Geschwindigkeit wie der Behälter bewegt. Das pulverförmige Material im Behälter wird durch geeignete Mittel aufgelockert und mit Hilfe eines Abstreifers auf ein vorgegebenes Niveau eingeebnet. Hierbei anfallendes überschüssiges Material wird zur Mitte des Behälters hin gefördert und bei dem anschließenden Auflockern und Einebnen wieder dem übrigen Material zugeführt.

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Citation (search report)

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