Title (en)

METHOD AND DEVICE FOR MANUFACTURING VARNISH-INSULATED WINDING WIRE, IN PARTICULAR THICK WIRES

Publication

EP 0023238 B1 19831116 (DE)

Application

EP 80100484 A 19800131

Priority

DE 2930870 A 19790730

Abstract (en)

[origin: US4329377A] Wire is coated with an insulator in an electrostatic coating machine which establishes a potential difference between the wire and the insulation and thereby causes the insulation to adhere to the wire electrostatically, without the use of solvents. After such coating, the coated wire is sintered and hardened in order to form a lacquered wire with a uniform insulation thickness. Insulation thickness can be maintained at a desired value by adjusting the length of wire being exposed to the insulator in pulverized form within the electrostatic coating machine and/or the potential difference therein. The supply of insulator used in pulverized form is continuously fed into the electrostatic coating machine so as to prevent smaller and lighter particles from being first attracted to the wire, and thereby depleting such particles excessively while leaving only larger and heavier particles available for coating. The final thickness of the insulation is constantly kept within a predetermined tolerance by varying the rate of feed of insulator supply to the coating machine directly as a function of insulation thickness, which insulation thickness is continuously monitored.

IPC 1-7

H01B 13/00; B05D 7/20

IPC 8 full level

B05B 5/14 (2006.01); **B05B 12/12** (2006.01); **B05D 3/02** (2006.01); **B05D 7/20** (2006.01); **H01B 13/00** (2006.01); B05D 3/06 (2006.01)

CPC (source: EP US)

B05B 5/14 (2013.01 - EP US); **B05B 12/12** (2013.01 - EP US); **B05D 3/0209** (2013.01 - EP US); **B05D 7/20** (2013.01 - EP US); **H01B 13/0033** (2013.01 - EP US); B05D 3/067 (2013.01 - EP US); B05D 2401/32 (2013.01 - EP US)

Cited by

CN113245107A; EP0407420B1

Designated contracting state (EPC)

AT DE FR GB IT NL SE

DOCDB simple family (publication)

DE 2930870 B1 19800717; **DE 2930870 C2 19810402**; AT E5354 T1 19831215; DE 3065570 D1 19831222; EP 0023238 A1 19810204; EP 0023238 B1 19831116; US 4329377 A 19820511; US 4337725 A 19820706

DOCDB simple family (application)

DE 2930870 A 19790730; AT 80100484 T 19800131; DE 3065570 T 19800131; EP 80100484 A 19800131; US 16732380 A 19800710; US 24334081 A 19810313