

Title (en)
COMPOSITIONS FOR POWDER COATING

Publication
EP 0176475 A3 19880316 (DE)

Application
EP 85810379 A 19850819

Priority
GB 8421525 A 19840824

Abstract (en)
[origin: US4757117A] Powder coating compositions suitable for use in the manufacture of laser-engraved printing rollers, comprise (a) a difunctional epoxy resin prepared from a bisphenol, (b) an epoxy resin having an epoxide functionality greater than 2, (c) a diaminodiphenylsulphone as hardener for the mixture of resins (a) and (b), and (d) an imidazole as curing accelerator. These compositions, when applied to a metal base member, fused, and cured, provide a surface that is easily engravable yet has excellent resistance to chemical attack and physical wear. Typical difunctional epoxy resins (a) are 2,2-bis(4-glycidyloxyphenyl)propane advanced with bisphenol A, while typical epoxy resins that may be used as (b) include polyglycidyl ethers of phenol-formaldehyde novolaks. The hardener (c) may be, for example, 3,3'- and 4,4'-diaminodiphenylsulphones and the imidazole accelerator (d) may be 2-methylimidazole or benzimidazole.

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B41N 1/12

IPC 8 full level
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CPC (source: EP US)
B41C 1/05 (2013.01 - EP US); **B41N 1/12** (2013.01 - EP US); **Y10S 525/934** (2013.01 - EP US)

Citation (search report)
• [Y] EP 0094142 A1 19831116 - CROSFIELD ELECTRONICS LTD [GB]
• [Y] BE 707663 A 19680607 - DOW CHEMICAL CO [US]
• [Y] US 4331582 A 19820525 - BABAYAN EDUARD P
• [A] EP 0077758 A1 19830427 - CIBA GEIGY AG [CH]
• [A] GB 2055843 A 19810311 - CIBA GEIGY AG
• [Y] CHEMICAL ABSTRACTS, Band 85, Nr. 6, 9. August 1976, Seite 1, Zusammenfassung Nr.34011z, Columbus, Ohio, US; & JP-A-51 023 600 (FUJITSU LTD) 25-02-1976

Cited by
EP2522508A3; EP2522509A3; EP0577465A1; FR2693205A1; US5462774A; US6620510B1

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