

Title (en)

PROCESS FOR PREPARING A THERMOCHROMIC VARNISH, COATING PREPARED THEREFROM AND UTILIZATION THEREOF

Publication

EP 0030939 B1 19840418 (DE)

Application

EP 80900487 A 19810126

Priority

CH 598779 A 19790627

Abstract (en)

[origin: WO8100084A1] For the preparation of a thermochromic varnish and appropriate mixture for the serigraphy of two or three storable compounds is used. The first compound is a heavy or noble metal compound dispersed in a resin based solution. The second compound is a compound covalent of sulphur and carbon, dispersable in the resin based solution or into a resin hardener and the third compound is a hardener. The resin and the metal compound are in stoichiometric proportions with respectively the hardener and the compound covalent of sulphur and carbon. The metal compound is a derivative of an oxide, of an inorganic anion or of a mono or dicarboxylic acid, forming with sulphur ions, metal sulphides of irreversible black colour. The resin is a prepolymer of a methacrylic acid or of a glycidyl ether and the hardener is a diol or an amine. The thermochromic coating has a thickness of 10 to 1000 Å and is subjected to an irreversible and local black coloration with a heating element. The varnish coatings are used on credit cards with optical markings which may be thermally erased and of which the erasure may be made visible by blackening.

IPC 1-7

B41M 5/26

IPC 8 full level

B41M 5/323 (2006.01); **B41M 5/337** (2006.01); **B42D 15/00** (2006.01); **B44F 1/12** (2006.01); **C09D 5/26** (2006.01); **C09D 11/00** (2006.01); **C09D 11/10** (2006.01); **G03C 1/498** (2006.01)

CPC (source: EP US)

G03C 1/4989 (2013.01 - EP US); **Y10S 428/913** (2013.01 - EP US)

Designated contracting state (EPC)

FR

DOCDB simple family (publication)

WO 8100084 A1 19810122; AT 384433 B 19871110; AT A904080 A 19870415; BE 884031 A 19801016; CH 641200 A5 19840215; DE 2927094 A1 19810108; DE 2927094 C2 19840628; EP 0030939 A1 19810701; EP 0030939 B1 19840418; ES 492802 A0 19810601; ES 8105640 A1 19810601; GB 2066977 A 19810715; GB 2066977 B 19830713; IT 1131372 B 19860618; IT 8022899 A0 19800620; JP S56500801 A 19810618; JP S5915079 B2 19840407; NL 8020078 A 19810429; SE 444537 B 19860421; SE 8101268 L 19810226; US 4394407 A 19830719

DOCDB simple family (application)

CH 8000039 W 19800321; AT 904080 A 19800321; BE 201196 A 19800626; CH 598779 A 19790627; DE 2927094 A 19790704; EP 80900487 A 19810126; ES 492802 A 19800626; GB 8101279 A 19800321; IT 2289980 A 19800620; JP 50059680 A 19800321; NL 8020078 A 19800321; SE 8101268 A 19810226; US 23378381 A 19810211