

Title (en)

ELEMENT HAVING REVERSIBLE AND FIXED LIGHT-EXTINCTION EFFECTS WHICH ARE VARIABLE WITH TEMPERATURE

Publication

EP 0014826 B1 19840620 (DE)

Application

EP 80100111 A 19800110

Priority

DE 2907352 A 19790224

Abstract (en)

[origin: EP0014826A2] 1. Body with reversible, fixed and temperature-variable light extinctions, especially for the use as erasable record carrier, consisting of a pair of materials (A and B), one material (A) of which consists of at least one polymer and/or resin matrix material and which when heated from the state of maximum light extinction to a clear temperature (T₁) lying below a conversion temperature (T₂) and subsequently cooled off below a low temperature (T₀) yields light extinctions which become smaller with increasing heating temperature (T), and when heated to a temperature between T₁ and T₂ and subsequently cooled below T₀ yield minimum light extinction, whereby when heated above the conversion temperature (T₂) lying above T₁ and subsequently cooled below T₀ again maximum light extinction is obtained, characterized in that the other material (B) of the pair of materials is at least one organic low-molecular substance which is contained in the material (A) at least partially as dispersed second phase and which is an alkanol, alkandiol, haloalkanol or haloalkandiol, alkylamine, alkane, alkene, alkyne, haloalkane, haloalkene or haloalkyne, cycloalkane, cycloalkene or cycloalkyne, a saturated or unsaturated mono- or dicarboxylic acid or an ester or an amide or an ammonium salt thereof, a saturated or unsaturated halogen fatty acid or an ester, an amide or an ammonium salt thereof, an arylcarboxylic acid or an ester, and amide or an ammonium salt thereof, a haloarylcarboxylic acid or an ester, an amide or an ammonium salt thereof, a thioalcohol, a thiocarboxylic acid or an ester, an amide or an ammonium salt thereof or a carboxylic acid ester of a thioalcohol or mixtures of these compounds, each of which has 10 to 60, preferably 10 to 38, especially 10 to 30 carbon atoms, whereby in the esters the alcohol group may be saturated or unsaturated and/or halogen substituted.

IPC 1-7

B41M 5/26; G03C 1/72

IPC 8 full level

C09K 3/00 (2006.01); **B41M 5/26** (2006.01); **B41M 5/36** (2006.01); **G03C 1/72** (2006.01)

CPC (source: EP)

B41M 5/363 (2013.01)

Citation (examination)

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- FR 1465453 A 19670113 - KEUFFEL & ESSER CO
- DE 2030652 A1 19710422 - NCR CO
- US 3496355 A 19700217 - NANFELDT RICHARD ERIC
- FR 2335347 A1 19770715 - AGFA GEVAERT [BE]
- DE 473772 C 19290402 - TELEFUNKEN GMBH
- EP 0000868 A1 19790307 - DABISCH TIPP EX TECH [DE]

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Designated contracting state (EPC)

AT BE CH DE FR GB IT LU NL SE

DOCDB simple family (publication)

EP 0014826 A2 19800903; EP 0014826 A3 19810722; EP 0014826 B1 19840620; AT E8025 T1 19840715; AU 532554 B2 19831006; AU 5583180 A 19800904; BR 8001060 A 19801104; CA 1142357 A 19830308; DD 149189 A5 19810701; DE 2907352 A1 19800828; DE 3068278 D1 19840726; ES 488878 A0 19811101; ES 8200272 A1 19811101; IL 59376 A0 19800530; IL 59376 A 19850830; JP S55154198 A 19801201; NO 800352 L 19800825; ZA 80990 B 19810325

DOCDB simple family (application)

EP 80100111 A 19800110; AT 80100111 T 19800110; AU 5583180 A 19800222; BR 8001060 A 19800222; CA 346304 A 19800222; DD 21919680 A 19800221; DE 2907352 A 19790224; DE 3068278 T 19800110; ES 488878 A 19800222; IL 5937680 A 19800213; JP 2068580 A 19800222; NO 800352 A 19800211; ZA 80990 A 19800221