

Title (en)

Thermographic recording material with improved image tone

Title (de)

Thermographisches Aufzeichnungsmaterial mit verbessertem Bildton

Title (fr)

Matériau thermographique d'enregistrement avec ton de l'image amélioré

Publication

EP 1059560 A1 20001213 (EN)

Application

EP 00201851 A 20000525

Priority

- EP 00201851 A 20000525
- EP 99201792 A 19990604

Abstract (en)

A substantially light-insensitive black and white thermographic recording material comprising a thermosensitive element and a support, the thermosensitive element containing at least one substantially light-insensitive organic silver salt, at least one organic reducing agent therefor in thermal working relationship therewith, a binder, at least one stabilizer and optionally an alpha , omega -alkyldicarboxylic acid with a straight chain alkyl group having at least 4 carbon atoms which may be substituted, however neither including 3,5-dihydroxybenzoic acid as acidic reagent nor di-tert-butyl-p-cresol as a sole organic reducing agent, characterized in that the at least one stabilizer is represented by formula (I): $R_{<1>}-(O=C)-R_{<2>}-(C=O)-R_{<3>}$ wherein $R_{<2>}$ is a divalent straight chain saturated hydrocarbon group with 2 or 3 carbon atoms which may be substituted with one or more of =O, =S, =CR<4>R<5>, an alkyl group, a cycloalkyl group, a hydroxy group, a thiol group, a $-(C=O)R_{<6>}$ group or two of the substituents of $R_{<2>}$ may together form a closed non-aromatic carbocyclic or heterocyclic ring; $R_{<4>}$ and $R_{<5>}$ are independently hydrogen or an alkyl, substituted alkyl, hydroxy, thiol, $-(C=O)R_{<7>}$ group or $R_{<4>}$ and $R_{<5>}$ together may form a closed carbocyclic or heterocyclic group; $R_{<1>}$, $R_{<3>}$, $R_{<6>}$ and $R_{<7>}$ are independently a hydroxy or -NHR<8> group or $R_{<1>}$ and $R_{<3>}$ together is an oxygen atom forming an anhydride group; $R_{<8>}$ is hydrogen or a hydroxy, alkyl, aryl or -SO₂R<9> group; $R_{<9>}$ is an alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, heterocyclic, substituted heterocyclic, aryl, substituted aryl, heteroaryl, substituted heteroaryl, an -OR<10>, or a -NR<11>R<12> group; $R_{<10>}$ and $R_{<11>}$ are independently an alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, aryl or substituted aryl group; $R_{<12>}$ is hydrogen or an alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, aryl or substituted aryl group; and $R_{<11>}$ and $R_{<12>}$ may together form a closed carbocyclic or heterocyclic group; and wherein the concentration of the at least one stabilizer and the alpha , omega -alkyldicarboxylic acid, if present, is together at least 20 mol % with respect to the organic silver salts; and a recording process therefor.

IPC 1-7

G03C 1/498

IPC 8 full level

G03C 1/498 (2006.01)

CPC (source: EP)

G03C 1/49809 (2013.01); **G03C 1/49845** (2013.01); **G03C 1/4989** (2013.01)

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