

Title (en)

Developing solution and method for developing an exposed silver halide photographic material

Title (de)

Entwicklerlösung und Verfahren zum Entwickeln eines belichteten, photographischen Silberhalogenidmaterials

Title (fr)

Solution et méthode pour le développement d'un matériau photographique à l'halogénure d'argent exposé

Publication

EP 0731381 A1 19960911 (EN)

Application

EP 96200134 A 19960119

Priority

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Abstract (en)

A photographic developing solution and a method of developing silver halide materials in the said developing solution is disclosed, the said developing solution comprising hydroquinone in an amount from 0 to 30 g per litre, an auxiliary developer, and silver halide complexing agents in an amount from 0 to 50 g per litre, characterised in that said developer further comprises in amounts from 0.1 to 5 g per litre a compound corresponding to the formula (I), accompanied by charge compensating anions, $Z' N_{<+>-} R-N_{<+>-} Z''$ wherein at least divalent group R contains at least one oxyethylene group and wherein Z' and Z'' , being the same or different, are composed of enough atoms to form a substituted or unsubstituted heterocyclic aromatic 5- or 6-ring; and at least 1 g of a compound corresponding to the formula (II), a precursor thereof, a derivative thereof and/or a metal salt thereof <CHEM> wherein each of A, B and D independently represents an oxygen atom or $NR_{<1>-}$; X represents an oxygen atom, a sulphur atom, $NR_{<2>-}$; $CR_{<3>-}R_{<4>-}$; $C=O$; $C=NR_{<5>-}$ or $C=S$; Y represents an oxygen atom, a sulphur atom, $NR_{<2>-}$; $CR_{<3>-}R_{<4>-}$; $C=O$; $C=NR_{<5>-}$ or $C=S$; Z represents an oxygen atom, a sulphur atom, $NR_{<2>-}$; $CR_{<3>-}R_{<4>-}$; $C=O$; $C-NR_{<5>-}$ or $C=S$; n equals 0, 1 or 2; each of $R_{<1>-}$ to $R_{<5>-}$ $R_{<1>-}$ to $R_{<5>-}$ and $R_{<1>-}$ to $R_{<5>-}$, independently represents hydrogen, substituted or unsubstituted alkyl, aralkyl, hydroxyalkyl, carboxyalkyl; substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl, substituted or unsubstituted aryl or substituted or unsubstituted heterocyclyl; and wherein $R_{<3>-}$ and $R_{<4>-}$, $R_{<3>-}$ and $R_{<4>-}$, $R_{<3>-}$ and $R_{<4>-}$, may further form together a ring; and wherein in the case that $X=CR_{<3>-}R_{<4>-}$ and $Y=CR_{<3>-}R_{<4>-}$, $R_{<3>-}$ and $R_{<3>-}$ and/or $R_{<4>-}$ and $R_{<4>-}$ may form a ring and wherein in the case that $Y=CR_{<3>-}R_{<4>-}$ and $Z=CR_{<3>-}R_{<4>-}$ with n= 1 or 2, $R_{<3>-}$ and $R_{<3>-}$ and/or $R_{<4>-}$ and $R_{<4>-}$ may form a ring.

IPC 1-7

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Citation (search report)

- [DA] US 5384232 A 19950124 - BISHOP JULIE C [US], et al
- [A] EP 0518352 A1 19921216 - DAINIPPON INK & CHEMICALS [JP]
- [A] US T896022 I4 19720314
- [DA] US 3713827 A 19730130 - WILLEMS J
- [DA] EP 0585792 A2 19940309 - DU PONT [US]
- [A] US 3865591 A 19750211 - KATZ JEROME
- [A] EP 0480304 A1 19920415 - DAINIPPON INK & CHEMICALS [JP]
- [DA] EP 0552511 A1 19930728 - AGFA GEVAERT NV [BE]

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