

## Title (en)

Photographic element employing active, stable benzotriazole-releasing DIR couplers

## Title (de)

Photographisches Element, die aktive, stabile Benzotriazol freisetzende DIR Kuppler verwendet

## Title (fr)

Élément photographique utilisant des copulants DIR libérant benzotriazole actif et stable

## Publication

**EP 0884639 A1 19981216 (EN)**

## Application

**EP 98201821 A 19980602**

## Priority

- US 87351697 A 19970612
- US 93250697 A 19970918

## Abstract (en)

A photographic element comprising a silver halide emulsion layer having associated therewith a 1-phenyl-3-anilino-4-benzotriazolyl-5-pyrazolone magenta dye-forming DIR coupler of structure I: <CHEM> wherein: R1 is hydrogen, chlorine, fluorine or a methyl group; R2, R3, and R4 are individually selected from the group consisting of hydrogen, halogen, alkyl, phenyl, alkoxy, phenoxy, alkylthio, carbonamido, sulfonamido, carbamoyl, alkoxy carbonyl and aryloxy carbonyl groups; R5 is hydrogen, bromine, chlorine, fluorine, or an alkyl group; R6 and R7 are independently selected from the group consisting of hydrogen, halogen, carbonamido, carbamoyl, sulfonamido, sulfamoyl, alkylsulfonyl, arylsulfonyl, alkylsulfoxyl, arylsulfoxyl, sulfonyloxy, alkoxy carbonyl, aryloxy carbonyl, acyloxy, acyl, imido, trifluoromethyl and cyano groups, provided that at least one of R6 and R7 is not hydrogen; R8 and R9 are independently selected from the group consisting of hydrogen, halogen, alkyl, phenyl, alkoxy, phenoxy, alkoxy carbonyl, aryloxy carbonyl, carbonamido sulfonamido, carbamoyl and carbamoyloxy groups, provided that at least one of R8 and R9 is not hydrogen; further provided that (1) when R5 is hydrogen, the sum of the Hammett  $\sigma$  values of R6 and R7, referenced to the position of the anilino nitrogen, is at least 0.30, and R1 is also hydrogen, and (2) when R5 is bromine, chlorine, fluorine, or an alkyl group, the sum of the Hammett  $\sigma$  values of R6 and R7, referenced to the position of the anilino nitrogen, is at least 0.20; and the sum of  $\pi$  values of R8 and R9 taken together is at least 0.60 but not more than 3.00.

## IPC 1-7

**G03C 7/305**

## IPC 8 full level

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## CPC (source: EP)

**G03C 7/30558** (2013.01); **G03C 7/30529** (2013.01); **G03C 7/384** (2013.01)

## Citation (search report)

- [A] DE 3506805 A1 19850912 - FUJI PHOTO FILM CO LTD [JP]
- [A] US 4798784 A 19890117 - KISHIMOTO SHINZO [JP], et al
- [A] DE 3644406 A1 19880707 - AGFA GEVAERT AG [DE]

## Cited by

EP1072951A1; EP1072949A1

## Designated contracting state (EPC)

DE FR GB

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## DOCDB simple family (application)

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