

Title (en)

Photographic element with excellent speed differential for digital and optical exposure devices

Title (de)

Photographisches Element mit hervorragendem Empfindlichkeitsdifferential für digitale und optische Belichtungsvorrichtungen

Title (fr)

Élément photographique ayant un excellent différentiel de sensibilité pour des dispositifs d'exposition digitaux et optiques

Publication

EP 1094363 B1 20040407 (EN)

Application

EP 00203506 A 20001010

Priority

US 42074699 A 19991020

Abstract (en)

[origin: EP1094363A2] An imaging element comprising at least one silver halide emulsion wherein the silver halide emulsion grains incorporate dopant (i) which comprises a hexacoordination metal complex which satisfies the formula $\text{ML}_6\text{Ü}^n$ wherein n is zero, -1, -2, -3 or -4; M is a filled frontier orbital polyvalent metal ion, other than iridium; and L6 represents bridging ligands which can be independently selected, provided that least four of the ligands are anionic ligands, and at least one of the ligands is a cyano ligand or a ligand more electronegative than a cyano ligand; and wherein the emulsion has been spectrally sensitized with a sensitizing dye and contains a filter dye that (a) has a wavelength of absorbance maximum which is less than about 15 nm different than the maximum wavelength of emulsion sensitivity provided by the spectral sensitizing dye, and (b) has a half band width that is approximately equal to the half bandwidth of the sensitizing dye, thereby resulting in an emulsion which has a sensitivity at a wavelength of about 50 nm shorter than the maximum wavelength of sensitization which is about 65% or greater of the emulsion speed at the maximum wavelength of spectral sensitivity.

IPC 1-7

G03C 1/83; **G03C 1/12**; **G03C 1/29**; **G03C 1/40**; **G03C 1/08**

IPC 8 full level

G03C 1/09 (2006.01); **G03C 1/035** (2006.01); **G03C 1/08** (2006.01); **G03C 1/12** (2006.01); **G03C 1/14** (2006.01); **G03C 1/20** (2006.01); **G03C 1/29** (2006.01); **G03C 1/76** (2006.01); **G03C 1/79** (2006.01); **G03C 1/83** (2006.01)

CPC (source: EP)

G03C 1/08 (2013.01); **G03C 1/127** (2013.01); **G03C 1/832** (2013.01); **G03C 1/09** (2013.01); **G03C 2001/093** (2013.01)

Cited by

CN102464894A; EP1283438A1; EP1282003A3

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1094363 A2 20010425; **EP 1094363 A3 20020724**; **EP 1094363 B1 20040407**; DE 60009629 D1 20040513; DE 60009629 T2 20050407; JP 2001142173 A 20010525

DOCDB simple family (application)

EP 00203506 A 20001010; DE 60009629 T 20001010; JP 2000321268 A 20001020