

Title (en)

A photosensitive silver halide element with increased photosensitivity

Title (de)

Lichtempfindliches Silberhalogenidelement mit verbesserter Lichtempfindlichkeit

Title (fr)

Élément photosensible à l'halogénure d'argent ayant une photosensibilité améliorée

Publication

EP 0922994 A2 19990616 (EN)

Application

EP 98204077 A 19981130

Priority

- EP 98204077 A 19981130
- EP 97203897 A 19971211

Abstract (en)

A photosensitive element comprising a silver halide emulsion having silver halide grains containing an organic hole-trapping dopant. In a preferred embodiment said dopant is represented by formula (I): #####R-COOM#####(I) wherein R is hydrogen, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted aralkyl group or hetero-aryl group, and M is hydrogen or any metal or organic group which can form a salt or by formula (II): wherein : X and Y are independently selected from O, S, Se, m is 1 and n is 1 or 2, R1 and R2 are hydrogen, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl or aralkyl group or a substituted or unsubstituted heteroaryl group, wherein R1 and R2 may be the same or different and may form a ring, E represents a group linked to the carbon atom by a heteroatom, having at least one free electron pair, M+ is a proton or an organic or inorganic (metal) counterion. Moreover the invention provides a photosensitive element where said photosensitive element can be a photoaddressable thermographic element. The invention also provides a method for preparing said photosensitive element comprising a support and on one or both sides thereof at least one silver halide emulsion layer wherein the silver halide grains are doped with an organic hole-trapping dopant according to formula (I) or (II), optionally carried out in the presence of a oxidizing agent.

IPC 1-7

G03C 1/035

IPC 8 full level

G03C 1/005 (2006.01); **G03C 1/035** (2006.01); **G03C 1/08** (2006.01); **G03C 1/09** (2006.01); **G03C 1/52** (2006.01); **G03C 1/66** (2006.01); **G03C 1/015** (2006.01); **G03C 1/498** (2006.01)

CPC (source: EP)

G03C 1/005 (2013.01); **G03C 1/035** (2013.01); **G03C 1/08** (2013.01); **G03C 1/09** (2013.01); **G03C 1/52** (2013.01); **G03C 1/66** (2013.01); **G03C 1/015** (2013.01); **G03C 1/498** (2013.01); **G03C 2001/0156** (2013.01); **G03C 2001/03511** (2013.01); **G03C 2001/03535** (2013.01); **G03C 2001/03594** (2013.01); **G03C 2200/44** (2013.01)

Cited by

EP1271233A1; US6277550B1; US6514682B1; WO2010125323A1

Designated contracting state (EPC)

BE DE FR GB

DOCDB simple family (publication)

EP 0922994 A2 19990616; EP 0922994 A3 20070110; EP 0922994 B1 20090819

DOCDB simple family (application)

EP 98204077 A 19981130