

Title (en)

Oligomer modified tabular grain emulsions.

Title (de)

Mit Oligomeren modifizierte Emulsionen tafelförmiger Körner.

Title (fr)

Emulsions à grains tabulaires modifiés par oligomères.

Publication

**EP 0617317 A1 19940928 (EN)**

Application

**EP 94104411 A 19940321**

Priority

US 3373993 A 19930322

Abstract (en)

A radiation sensitive emulsion is disclosed comprised of a dispersing medium and silver halide grains. At least 50 percent of total grain projected area is accounted for by tabular grains bounded by {100} major faces having adjacent edge ratios of less than 10, each having an aspect ratio of at least 2, containing on average at least one pair of metal ions chosen from group VIII, periods 5 and 6, at adjacent cation sites in their crystal lattice, and internally at their nucleation site containing iodide and at least 50 mole percent chloride. The emulsions are prepared by the steps of (a) introducing silver and halide salts into a dispersing medium so that nucleation of the tabular grains occurs in the presence of iodide with chloride accounting for at least 50 mole percent of the halide present in the dispersing medium and the pCl of the dispersing medium being maintained in the range of from 0.5 to 3.5, (b) following nucleation completing grain growth under conditions that maintain the {100} major faces of the tabular grains, and (c) during at least one of steps (a) and (b) introducing into the dispersing medium oligomers of group VIII, period 5 or 6, metal, wherein each oligomer contains at least two metal ions and on average at least two metal ions are incorporated in each grain in adjacent cation sites. <IMAGE>

IPC 1-7

**G03C 1/005**

IPC 8 full level

**G03C 1/035** (2006.01); **G03C 1/005** (2006.01); **G03C 1/09** (2006.01); **G03C 1/07** (2006.01); **G03C 1/16** (2006.01); **G03C 1/18** (2006.01)

CPC (source: EP)

**G03C 1/0053** (2013.01); **G03C 1/07** (2013.01); **G03C 1/08** (2013.01); **G03C 1/16** (2013.01); **G03C 1/18** (2013.01); **G03C 2001/0156** (2013.01); **G03C 2001/03558** (2013.01); **G03C 2001/0854** (2013.01); **G03C 2200/01** (2013.01)

Citation (search report)

- [Y] EP 0436249 A1 19910710 - EASTMAN KODAK CO [US] & US 5024931 A 19910618 - EVANS FRANCIS J [US], et al
- [DY] US 4063951 A 19771220 - BOGG THOMAS GEORGE
- [Y] DATABASE WPI Week 9151, Derwent World Patents Index; AN 91374154

Cited by

US5665530A; US5707793A; EP0618493A3; US5814439A

Designated contracting state (EPC)

BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

**EP 0617317 A1 19940928**; JP H06301131 A 19941028

DOCDB simple family (application)

**EP 94104411 A 19940321**; JP 7539694 A 19940322