

Title (en)

Moderate aspect ratio tabular grain emulsions.

Title (de)

Emulsionen tafelförmiger Körner mit mässigem Aspekt-Verhältnis.

Title (fr)

Emulsions à grains tabulaires ayant un facteur de forme moderé.

Publication

EP 0617321 A1 19940928 (EN)

Application

EP 94104416 A 19940321

Priority

US 3500993 A 19930322

Abstract (en)

Silver halide emulsions are disclosed in which at least 50 percent of total grain projected area is accounted for by tabular grains (1) bounded by {100} major faces having adjacent edge ratios of less than 10, (2) each having an aspect ratio of at least 2 and together having an average aspect ratio of up to 8, and (3) internally at their nucleation site containing iodide and at least 50 mole percent chloride. The emulsions are prepared by a process comprised of 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 and (b) following nucleation completing grain growth under conditions that maintain the {100} major faces of the tabular grains, grain growth being continued until the tabular grains have an average aspect ratio of up to 8.

IPC 1-7

G03C 1/005

IPC 8 full level

G03C 1/00 (2006.01); **G03C 1/005** (2006.01); **G03C 1/035** (2006.01); **G03C 1/07** (2006.01)

CPC (source: EP)

G03C 1/0053 (2013.01); **G03C 1/07** (2013.01); **G03C 2200/01** (2013.01)

Citation (search report)

- [A] US 4425426 A 19840110 - ABBOTT THOMAS I [US], et al
- [A] GB 2109578 A 19830602 - EASTMAN KODAK CO
- [DA] US 4063951 A 19771220 - BOGG THOMAS GEORGE
- [PAL] EP 0534395 A1 19930331 - EASTMAN KODAK CO [US]
- [PA] EP 0584644 A2 19940302 - FUJI PHOTO FILM CO LTD [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 14, no. 169 (P - 1032)<4112> 30 March 1990 (1990-03-30)

Cited by

US5665530A; EP0932077A3; US5707793A

Designated contracting state (EPC)

BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0617321 A1 19940928; JP 3270614 B2 20020402; JP H06301129 A 19941028

DOCDB simple family (application)

EP 94104416 A 19940321; JP 4864394 A 19940318