

Title (en)

Method of preparing (111) tabular silver chloro(bromo)iodide crystals.

Title (de)

Verfahren zur Herstellung von tafelförmigen (111)-Silberchloro(bromo)jodidkristallen

Title (fr)

Procédé pour la préparation des cristaux tabulaires (111) au chloro(bromo)iodure d'argent

Publication

EP 0866362 A1 19980923 (EN)

Application

EP 98200706 A 19980306

Priority

- EP 98200706 A 19980306
- EP 97200812 A 19970319

Abstract (en)

A method has been found of preparing a silver halide emulsion comprising silver chlorobromiodide or silver chloriodide tabular grains with at least 75 mole % of chloride and from 0.1 up to 3 mole % of iodide, based on silver, further having $\{111\}$ crystal faces, an average aspect ratio of at least 2:1, with at least 50 %, more preferable at least 75 % and still more preferable more than 90 % of the total projected area of all grains being provided by said tabular grains and with a variation coefficient on sphere equivalent diameter (SED) of said grains being lower than 0.30, more preferably lower than 0.25 and most preferable from 0.05 up to at most 0.15, said method comprising the steps of preparing a dispersion medium (preferably containing a gelatino-peptizer) and a crystal habit growth modifier in a reaction vessel; precipitating silver chlor(oiod)ide or silver chlorobrom(oiod)ide nuclei in a crystal nucleation step by mixing silver salt and halide salt solutions in the said dispersion medium, growing the said nuclei during one or more growth and/or physical ripening steps; characterized by maintaining the said dispersion medium at an initial pH value maintained between 6.0 and 9.0 during nucleation; setting pH to a value lower than 6.0, and more preferably to a value of not more than 4.0, for at least 30 seconds, between ending the said nucleation step and ending the said growing step; followed by resetting pH to the said initial pH value.

IPC 1-7

G03C 1/005

IPC 8 full level

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

CPC (source: EP)

G03C 1/0053 (2013.01); **G03C 1/07** (2013.01); **G03C 1/08** (2013.01); **G03C 2200/03** (2013.01); **G03C 2200/43** (2013.01); **G03C 2200/44** (2013.01)

Citation (search report)

- [DX] US 5183732 A 19930202 - MASKASKY JOE E [US]
- [A] US 5176991 A 19930105 - JONES CYNTHIA G [US], et al

Designated contracting state (EPC)

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