

Title (en)
Tabular grain emulsions with sensitization enhancements

Title (de)
Emulsionen aus tafelförmigen Körnern mit verbesserter Empfindlichkeit

Title (fr)
Emulsions aux grains tabulaires à sensibilité améliorée

Publication
EP 0699944 B1 20000607 (EN)

Application
EP 95420233 A 19950821

Priority

- US 29743094 A 19940826
- US 29656294 A 19940826
- US 29719594 A 19940826
- US 35925194 A 19941219
- US 44149195 A 19950515

Abstract (en)
[origin: EP0699944A1] A chemically and spectrally sensitized tabular grain emulsion is disclosed including tabular grains (a) having $\approx 111\bar{1}0$ major faces, (b) containing greater than 70 mole percent bromide and at least 0.25 mole percent iodide, based on silver, (c) accounting for greater than 90 percent of total grain projected area, (d) exhibiting an average equivalent circular diameter of at least 0.7 μm , and (f) exhibiting an average thickness in the range of from less than 0.3 μm to at least 0.07 μm . It has been observed that increased speed, lower granularity, increased contrast and faster rates of development can be realized when (1) the tabular grains contain less than 10 mole percent iodide and (2) the surface chemical sensitization sites include epitaxially deposited silver halide protrusions of a face centered cubic crystal lattice structure of the rock salt type forming epitaxial junctions with the tabular grains, the protrusions (a) being restricted to those portions of the tabular grains located nearest peripheral edges of and accounting for less than 50 percent of the $\approx 111\bar{1}0$ major faces of the tabular grains, (b) containing a silver chloride concentration at least 10 mole percent higher than that of the tabular grains, and (c) including at least 1 mole percent iodide.

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