

Title (en)

Photographic silver bromiodide emulsions, elements and processes.

Title (de)

Photographische Silberbromojodidemulsionen, Elemente und Verfahren.

Title (fr)

Emulsions, éléments et procédés photographiques au bromo-iodure d'argent.

Publication

**EP 0432834 A1 19910619 (EN)**

Application

**EP 90203208 A 19901206**

Priority

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Abstract (en)

A photographic silver bromiodide emulsion comprises a dispersing medium and silver bromiodide that (a) is octahedral silver bromiodide; (b) has a grain size within the range of 0.45 to 1.2 microns; (c) contains 1 to 12 mole percent iodide; (d) has a core region (A), a surface region (B) and a subsurface region (C) between core region (A) and surface region (B); wherein (i) subsurface region (C) contains an iodide concentration higher than the iodide concentration of core region (A); and, (e) the silver bromiodide is prepared by a process comprising, in sequence, (I) a nucleation step comprising mixing bromide or bromiodide salts and silver salts in a reaction medium; then, (II) a crystal growth step under controlled pBr conditions within the range of 1.75 to 4.2 pBr enabling formation of core region (A) comprising 50% to 90% by weight of the silver bromiodide; then, (III) addition to the composition from (II) of iodide salt in which 25 to 100 mole percent of the total iodide salt is added to the composition resulting from step (II) within a time period of 1 second to 20 minutes; then, (IV) holding the reaction mixture from step (III) for a time period of 0.5 second to 20 minutes that aids in formation of subsurface region (C); then, (V) addition of silver salts or, optionally, the combination of silver salts and bromide to the reaction mixture from step (IV) until reaction completion forming surface region (B). Such photographic silver bromiodide emulsions are useful in photographic silver halide materials to provide increased photographic speed of the materials.

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- [Y] EP 0340168 A2 19891102 - ILFORD AG [CH]
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