

Title (en)

Mammography film and imaging assembly for use with rhodium or tungsten anodes

Title (de)

Mammographischer Film und Bildaufzeichnungskombination zur Verwendung mit Rhodium- oder Wolframanoden

Title (fr)

Pellicule mammographique et assemblage pour la formation d' images pour emploi avec anodes de rhodium ou tungstène

Publication

EP 1422557 A1 20040526 (EN)

Application

EP 03078511 A 20031107

Priority

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- US 29994102 A 20021119
- US 29975902 A 20021119

Abstract (en)

A radiographic silver halide film comprises a cubic grain silver halide emulsion layer on one side of the support and a tabular grain silver halide emulsion layer on the other side. The cubic grain silver halide emulsion layer comprises a combination of first and second spectral sensitizing dyes that provides a combined maximum J-aggregate absorption on the cubic silver halide grains of from 540 to 560 nm. The first spectral sensitizing dye is an anionic benzimidazole-benzoxazole carbocyanine, the second spectral sensitizing dye is an anionic oxycarbocyanine. The cubic grain silver halide emulsion layer also includes a mixture of gelatin or a gelatin derivative and a second hydrophilic binder other than gelatin or a gelatin derivative at a weight ratio of first to second hydrophilic binder of from 2:1 to 5: 1. The cubic silver halide grains comprise from 1 to 20 mol % chloride and from 0.25 to 1.5 mol % iodide, which cubic silver halide grains have an average ECD of from 0.65 to 0.8 μ m. Moreover, the cubic silver halide grains are doped with a hexacoordination complex compound within part or all of the innermost 95% of the grains. These films can be exposed to provide a black-and-white image having a $d(\gamma)/d(\log E)$ value greater than 5 and are particularly useful when imaged using X-radiation generating devices comprising rhodium or tungsten anodes. <IMAGE>

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IPC 8 full level

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Citation (search report)

- [DXY] US 6033840 A 20000307 - DICKERSON ROBERT E [US]
- [Y] EP 0862083 A1 19980902 - AGFA GEVAERT NV [BE]
- [Y] EP 0212968 A2 19870304 - KONISHIROKU PHOTO IND [JP]
- [DY] US 5800976 A 19980901 - DICKERSON ROBERT E [US], et al
- [Y] EP 0407890 A2 19910116 - MINNESOTA MINING & MFG [US]

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