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Gollier et al.

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(54) **APPARATUS AND METHOD FOR DETERMINING SPARKLE**

USPC 65/29.12; 324/760.01, 760.02; 345/207; 348/180; 702/81
See application file for complete search history.

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(57) **ABSTRACT**

An apparatus and method for determining and quantifying “sparkle”—the random noise that is generated when a pixelated image is viewed through a roughened surface of a transparent sample. The apparatus includes a pixelated source and an imaging system located in an optical path originating from the pixelated source, wherein a transparent sample may be placed in the optical path between the pixelated source and the optical system. The degree of sparkle is determined by obtaining an integrated image for the pixelated image; and calculating a standard deviation of the integrated pixel power. An objective level of sparkle can be defined by correlating the amount of sparkle provided by the apparatus with visual impressions.

24 Claims, 6 Drawing Sheets

