



US005428456A

# United States Patent [19]

[11] Patent Number: **5,428,456**

Parulski et al.

[45] Date of Patent: **Jun. 27, 1995**

- [54] **METHOD AND APPARATUS FOR ADAPTIVELY REDUCING INTERLINE FLICKER OF TV-DISPLAYED IMAGE**
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- [73] Assignee: **Eastman Kodak Company, Rochester, N.Y.**
- [21] Appl. No.: **669,832**
- [22] Filed: **Mar. 15, 1991**
- [51] Int. Cl.<sup>6</sup> ..... **H04N 5/93**
- [52] U.S. Cl. .... **358/340; 358/335; 358/346**
- [58] Field of Search ..... **358/335, 214, 340, 36, 358/167, 244, 345, 346, 342; 360/33.1, 35.1; 348/447; H04N 5/93**

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*Attorney, Agent, or Firm*—David M. Woods

## [57] ABSTRACT

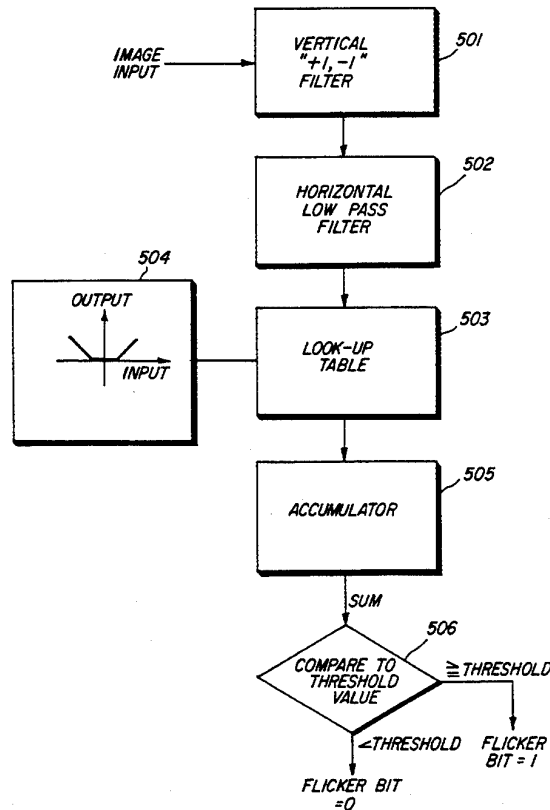
An image analysis and flicker filter control mechanism is incorporated into the image processing software of a photofinishing workstation for the purpose of analyzing the high frequency content of the image. As a result of this analysis, there is stored on a write once optical compact disc, in the header field associated with each image, an interlace "flicker code" representative of the extent, if any, to which the vertical dimension of the image is to be subjected to a low pass filtering operation in the course of reading out the image from the disc for application to a playback device, such as a raster scan TV display. The flicker code may be a binary value code or a multiple bit value controls the degree of vertical lowpass filtering of only those images which exhibit interlace flicker, and only during playback onto interlaced TV displays, thereby reducing the flicker of an image reproduced by an interlaced TV display without reducing print sharpness.

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31 Claims, 7 Drawing Sheets



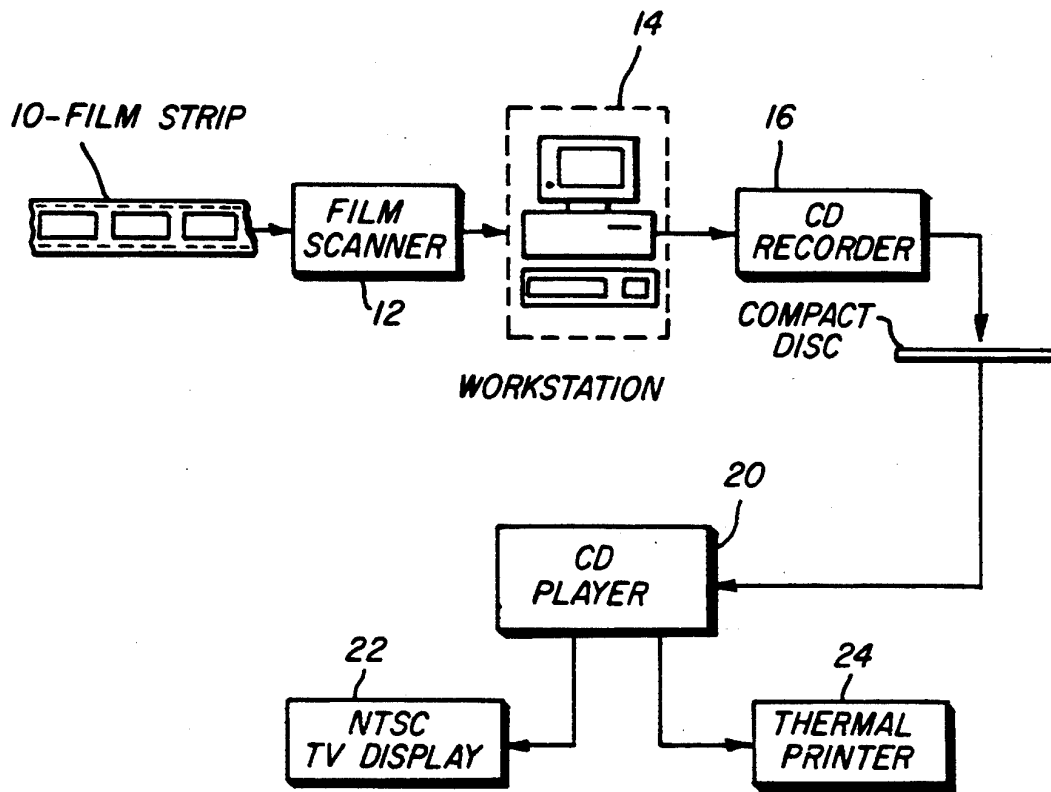


FIG. 1

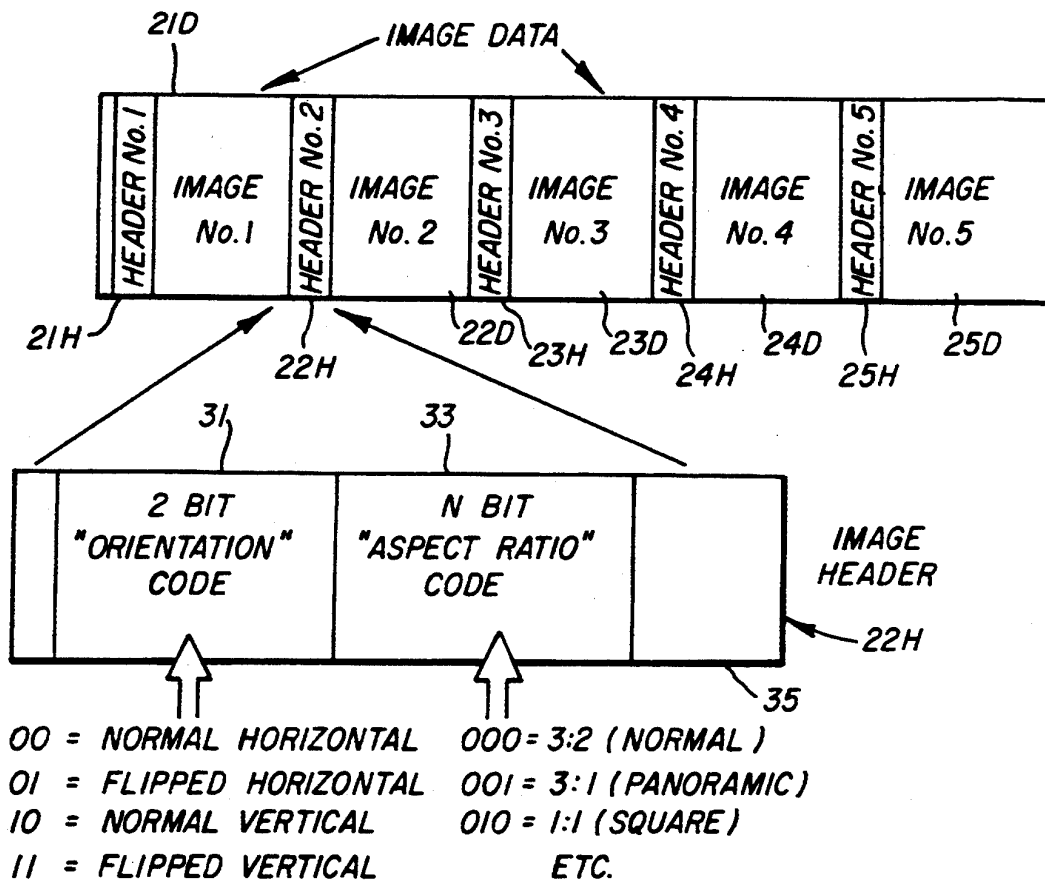
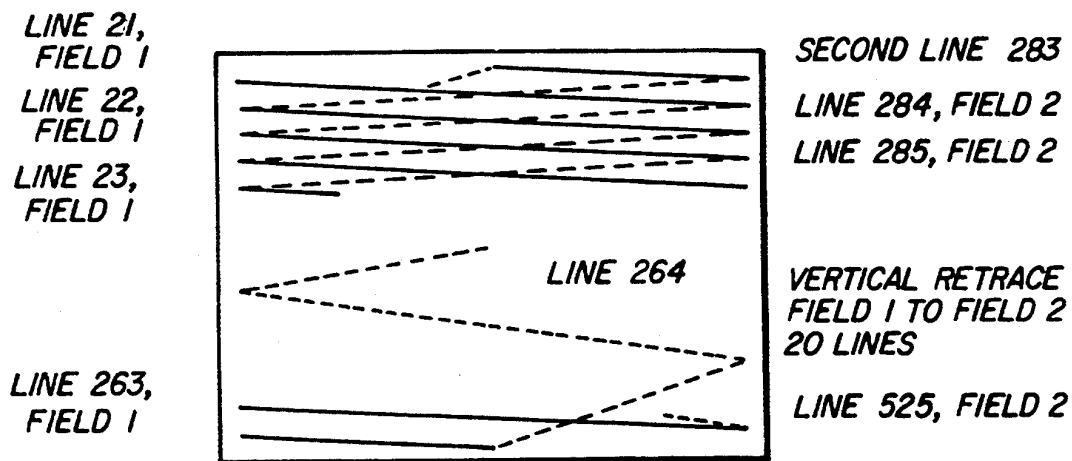


FIG. 2



INTERLACED-SCANNING PATTERN (RASTER)

FIG. 3

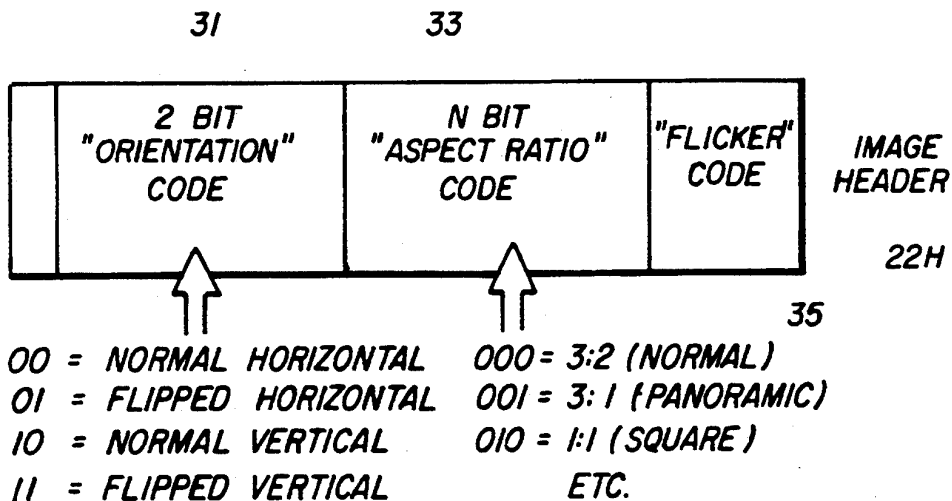


FIG. 4

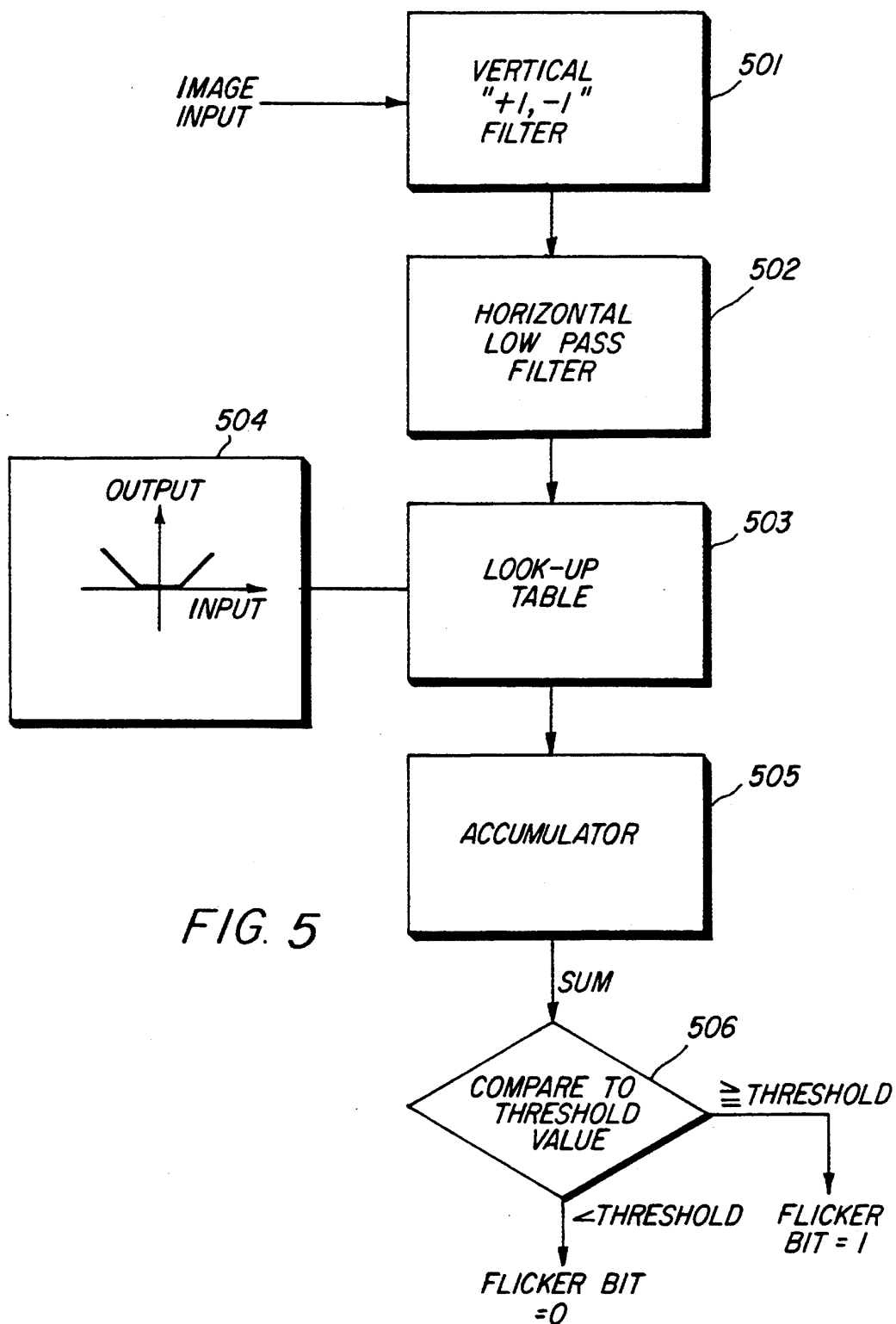


FIG. 5

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