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(54) **METHOD FOR LOCATING FACES IN DIGITAL COLOR IMAGES**

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G06K 9/00 (2006.01)

(52) **U.S. Cl.** **382/118**; 382/164

(58) **Field of Classification Search** 382/118, 382/164

See application file for complete search history.

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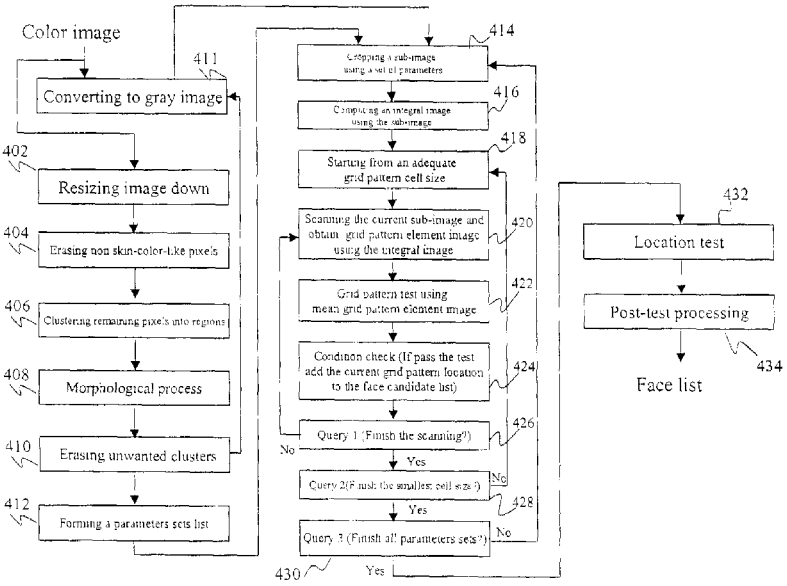
(57) **ABSTRACT**

A digital image processing method for locating faces in a digital color image includes the steps of: generating a mean grid pattern element (MGPe) image from a plurality of sample face images; generating an integral image from the digital color image; and locating faces in the color digital image by using the integral image to perform a correlation between the mean grid pattern element (MGPe) image and the digital color image at a plurality of effective resolutions by reducing the digital color image to grid pattern element images (GPes) at different effective resolutions and correlating the MGPe with the GPes.

23 Claims, 15 Drawing Sheets