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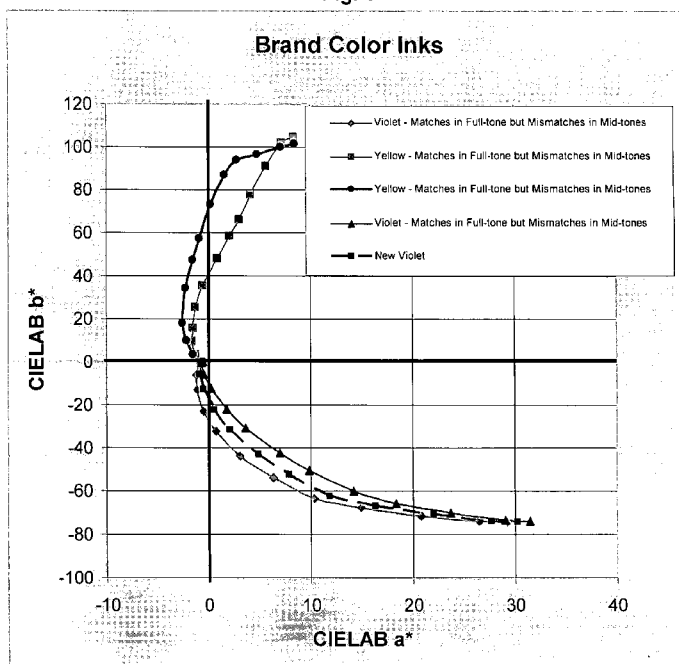
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[Continued on next page]

(54) Title: AUTOMATED INK COLOR MATCHING OF SOLIDS AND TONES

Fig. 8



(57) Abstract: A system and method is presented for finding a combination of colorants to produce custom SPOT color inks without requiring a complex suite of software algorithms. The method includes a search of a library of known colored inks printed onto a specified substrate using specified printing conditions. Each record of the library can contain the ink formula, the combination of colorants and resin, the spectral reflectance factor of the ink and substrate, color values of the solid ink color and 10% steps down to 0%. In such a database halftones can be specified in units of percentage, but can also, for example, be given as 8-bit integers (0 to 255). Such a search locates the solid ink color that meets the color requirements and simultaneously meets the color requirements at one or more intermediate halftone steps.

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