

Title (en)

Color mixing and control system for use in an electrostatographic printing machine

Title (de)

System zur Farbenmischung und Steuerung für ein elektrostatisches Druckgerät

Title (fr)

Système de mélange de couleurs et de commande pour un appareil à imprimer électrostatographique

Publication

EP 0833220 A1 19980401 (EN)

Application

EP 97307326 A 19970919

Priority

US 72142196 A 19960926

Abstract (en)

A system and method for color mixing and control in a developing material-based electrostatographic printing system. A developing reservoir containing an operative solution of customer selectable colored developing material is continuously replenished with selectively variable amounts developing material of basic color components making up the operative solution by controlling the rate of replenishment of the various color components added to the supply reservoir. A filter series is used to measure the optical properties of the developing material in the supply reservoir so that the actual optical properties thereof can be brought into agreement with set of predetermined target optical properties. The present invention can be used to control and maintain the color of the developing material in the reservoir through continuous monitoring and correction in order to maintain a particular ratio of color components in the reservoir over extended periods associated with very long print runs. The present invention may also be utilized to mix a customer selectable color in situ, whereby approximate amounts of basic color component developing material are initially deposited and mixed in the developing material reservoir and the resultant developing material mixture is continually monitored and adjusted until the mixture reaches target optical properties. <IMAGE>

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Citation (search report)

- [X] US 4111151 A 19780905 - RUCKDESCHEL FREDERICK R
- [X] US 4113371 A 19780912 - FRASER LAWRENCE J, et al
- [DA] US 5557393 A 19960917 - GOODMAN NANCY B [US], et al
- [A] DE 2724776 A1 19771215 - CANON KK
- [A] GOODMAN N B: "CUSTOM COLOR LIQUID INK DEVELOPMENT", XEROX DISCLOSURE JOURNAL, vol. 21, no. 2, 1 March 1996 (1996-03-01), pages 155, XP000587140
- [PA] PATENT ABSTRACTS OF JAPAN vol. 097, no. 001 31 January 1997 (1997-01-31)
- [PA] PATENT ABSTRACTS OF JAPAN vol. 097, no. 001 31 January 1997 (1997-01-31)

Cited by

EP0964310A3; US7480070B2

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