

Title (en)

METHOD AND DEVICE FOR RATING THE PRINTING QUALITY AND/OR CONTROLLING THE INK SUPPLY IN AN OFFSET PRINTING MACHINE, AND OFFSET PRINTING MACHINE WITH SUCH A DEVICE

Publication

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Application

**EP 84810525 A 19841029**

Priority

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Abstract (en)

[origin: ES8600624A1] The printed sheets are scanned, by image elements, immediately behind the last printing mechanism, with one or several measuring heads. Suitable dimensions of an image element range from approximately 1x1 mm<sup>2</sup> to 10x10 mm<sup>2</sup>. In each image element the reflectance is measured in four spectral ranges (infrared for black, red for cyan, green for magenta and blue for yellow). The measured reflectance values are converted by means of Neugebauer equations into surface coverages in a demasking step and inputted to a computer for evaluation. With the same measuring device, both the reference values associated with OK sheets, and the actual values associated with continuous printing, are measured. The computer compares the measured data, weights them with respect to such factors as surface coverage, foreign color component and the environment of a respective image element, and produces a regulating signal to control the ink feed elements. The color coordinates (X,Y,Z) may be determined from the surface coverage values of the four colors in a parallel computer program. Image elements which are important for the visual appearance of an image are given a high weight. A quality measure may be determined from the weighted comparison of reference and actual values to change the visual appearance. With this process it is possible to control the ink feed elements of a multicolor printing press by direct on-line measurement of the printed image, without using color measuring strips.

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