

Title (en)
SECURITY PRINTING APPARATUS AND METHOD

Title (de)
SICHERHEITSDRUCKVORRICHTUNG UND -VERFAHREN

Title (fr)
APPAREIL ET PROCEDE D'IMPRESSION DE SECURITE

Publication
EP 1467874 A1 20041020 (EN)

Application
EP 02806277 A 20021230

Priority
• US 0241775 W 20021230
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Abstract (en)
[origin: WO03057503A1] A method and apparatus for producing security printing. A substrate such as a card is printed or etched to produce continuously varying patterns of graphics and/or text. Printing may be done with an inkjet printer etching may done with a laser. Text and graphics are transformed in characteristic patterns to discourage duplication. Text and graphics may be transformed by distorting the size, shape, and/or internal structure of the original text and graphics. Text and graphics may be transformed in accordance with various mathematical algorithms, including sinusoidal, elliptical, parabolic, and hyperbolic geometries. Transformations may be clearly visible to the naked eye, visible only with instrumentation, or a combination of both. The precise algorithms used to produce the transformations may be kept secret to discourage duplication. The algorithms may incorporate information based on the content of text being transformed. The algorithms may incorporate information other than text that is present on the card, including information not visible. Software may be used for performing the transformation and/or for controlling the etching process. The algorithms may be fixed or user-determined. Software written for implementing user-determined algorithms may include check routines to verify the functionality of user-determined algorithms prior to etching.
[origin: WO03057503A1] A method and apparatus for producing security printing. A substrate such as a card is printed or etched to produce continuously varying patterns of graphics and/or text. Printing may be done with an inkjet printer; etching may done with a laser. Text and graphics are transformed in characteristic patterns to discourage duplication. Text and graphics may be transformed by distorting the size, shape, and/or internal structure of the original text and graphics. Text and graphics may be transformed in accordance with various mathematical algorithms, including sinusoidal, elliptical, parabolic, and hyperbolic geometries. Transformations may be clearly visible to the naked eye, visible only with instrumentation, or a combination of both. The precise algorithms used to produce the transformations may be kept secret to discourage duplication. The algorithms may incorporate information based on the content of text being transformed. The algorithms may incorporate information other than text that is present on the card, including information not visible. Software may be used for performing the transformation and/or for controlling the etching process. The algorithms may be fixed or user-determined. Software written for implementing user-determined algorithms may include check routines to verify the functionality of user-determined algorithms prior to etching.

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Citation (search report)
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