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(54) Infrared printing with process printing inks

(57) Infrared printing with process printing inks falls into the domain of security printing,

The innovation refers to applying the infrared effect in printing technology with application in graphic product security against counterfeiting, regardless of the fact whether the print is made on paper, glass, ceramics or plastic surfaces, using digital printing process printing inks (CMYK). This solution determines color generating with a completely different behavior in areas under the influence of IR light. Detecting IR response is possible only with instruments that «see» in wavelengths above 700 nm and convert an IR graphic into an area visible to the human eye.

By making use of specific characteristics that come from the possibility of programming for digital and conventional printing, algorithms have been derived that include spreading of two or more inks that are the same color (in daylight), but with a completely different behavior in IR light. The same image is separated with a double algorithm depending on the targeted visibility or invisibility in IR light. Alternating of certain graphic surface areas color is programmed, first with one and then the other combination.

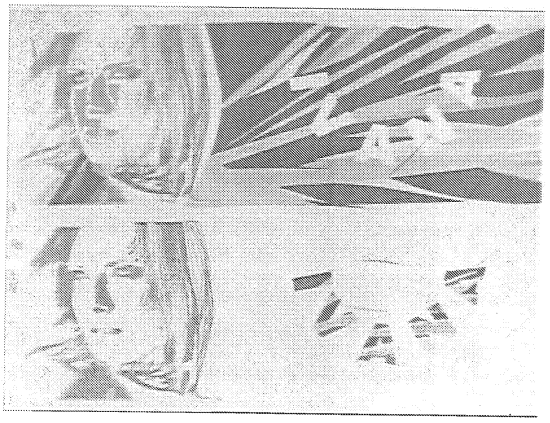

Fig. 1.2

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EUROPEAN SEARCH REPORT

Application Number
EP 09 17 0976

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	16 November 2011	Patosuo, Susanna

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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