

Title (en)
Infrared printing with process printing inks

Title (de)
Infrarotdruck mit Mehrfarbendrucktinten

Title (fr)
Impression à infrarouge avec encres d'impression

Publication
EP 2165844 A2 20100324 (EN)

Application
EP 09170976 A 20090922

Priority
HR P20080466 A 20080922

Abstract (en)
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.

IPC 8 full level
B41M 3/14 (2006.01)

CPC (source: EP)
B41M 3/144 (2013.01)

Citation (examination)
• WO 03005291 A1 20030116 - DIGIMARC CORP [US], et al
• EP 0263446 A2 19880413 - DAINICHISEIKA COLOR CHEM [JP]
• GB 1534403 A 19781206 - RUE & CO LTD T DE

Cited by
CN108833734A; US2012127492A1; US9077914B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2165844 A2 20100324; EP 2165844 A3 20111228; HR P20080466 A2 20100331

DOCDB simple family (application)
EP 09170976 A 20090922; HR P20080466 A 20080922