

Title (en)  
METHOD AND ARRANGEMENT FOR THE AUTOMATIC VERIFICATION OF THE VISUALLY PERCEIVED COLOR IMPRESSION OF MULTI-COLOR IMAGES

Title (de)  
VERFAHREN UND ANORDNUNG ZUR AUTOMATISCHEN ÜBERPRÜFUNG DES VISUELL WAHRGENOMMENEN FARBEINDRUCKS VON MEHRFARBIGEN FARBBILDERN

Title (fr)  
PROCÉDÉ ET AGENCEMENT POUR LE CONTRÔLE AUTOMATIQUE DE L'IMPRESSION COLORÉE PERÇUE PAR L'OEIL D'IMAGES COULEURS EN PLUSIEURS COULEURS

Publication  
**EP 2265935 A1 20101229 (DE)**

Application  
**EP 09728377 A 20090326**

Priority  
• EP 2009002238 W 20090326  
• DE 102008016538 A 20080329

Abstract (en)  
[origin: WO2009121522A1] The invention relates to a method for the automatic verification of the visually perceived color impression of multi-color images (12, 14, 16, 18) in a printed product, which in addition to the color images contains text. The method comprises the following steps: a reference image is digitally stored in a database (38) for each multi-color image to be verified. The printed product is scanned using an imaging sensor (28), which has at least n=3 spectral channels, and the signal obtained is converted into a digital image file. Using a method for optical character and pattern recognition and automatic document analysis, the digital image file is separated into such partial regions containing text or graphics, and into such comprising multi-color images without any text or graphics. At least one statistical descriptive characteristic of the occurring colors and at least one measure for the image sharpness are calculated for each partial region comprising a multi-color image. The calculated statistical descriptive characteristic and the measure for the image sharpness are compared to the corresponding statistical descriptive characteristic and the measure for the image sharpness of the corresponding reference image stored in the database. A deviation measure  $\Delta C$  for the statistical descriptive characteristic of the occurring colors and a deviation measure  $\Delta S$  for the measure of the image sharpness are calculated and displayed. The invention further provides an arrangement for carrying out the method.

IPC 8 full level  
**G01N 21/89** (2006.01); **B41F 33/00** (2006.01); **G06T 7/40** (2006.01)

CPC (source: EP US)  
**B41F 33/0036** (2013.01 - EP US); **B41F 33/0045** (2013.01 - EP US); **G01N 21/25** (2013.01 - EP US); **G01N 21/8915** (2013.01 - EP US)

Citation (search report)  
See references of WO 2009121522A1

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 TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**DE 102008016538 A1 20091001**; CN 102016555 A 20110413; EP 2265935 A1 20101229; US 2011188089 A1 20110804; WO 2009121522 A1 20091008

DOCDB simple family (application)  
**DE 102008016538 A 20080329**; CN 200980111601 A 20090326; EP 09728377 A 20090326; EP 2009002238 W 20090326; US 93407009 A 20090326