

Title (en)

A SECURITY ELEMENT AGAINST COUNTERFEITING SECURITY PRINTING, ESPECIALLY BANKNOTES

Title (de)

SICHERHEITSELEMENT GEGEN NACHAHMUNG VON SICHERHEITSDRUCK, INSBESONDERE VON BANKNOTEN

Title (fr)

ÉLÉMENT DE SÉCURITÉ CONTRE LA CONTREFAÇON D'UNE IMPRESSION DE SÉCURITÉ, EN PARTICULIER DES BILLETS DE BANQUE

Publication

EP 3150399 B1 20180808 (EN)

Application

EP 15460085 A 20150930

Priority

EP 15460085 A 20150930

Abstract (en)

[origin: EP3150399A1] The present invention is a security feature (1) against counterfeiting security printing (3), in particular banknotes, comprising at least one graphene quantum dot (GQD) that is graphene nanoparticle diameter of from 0.5 nm to 60 nm, preferably 1 nm 11 nm, containing from 1 to 90, preferably from 1 to 20 layers of graphene disposed in the flexible layer of graphene nanocomposite material (2), wherein the elastic layer of graphene nanocomposite material (2) comprises at least one layer of graphene (G) arranged on the adhesive layer (P), preferably a polymer. The invention also includes the use of the security feature according to the invention, and method and system for verifying the authenticity of security printing (3).

IPC 8 full level

B42D 25/29 (2014.01); **B42D 25/378** (2014.01); **G07D 7/12** (2016.01)

CPC (source: EP)

B42D 25/29 (2014.10); **B42D 25/378** (2014.10); **G07D 7/12** (2013.01)

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3150399 A1 20170405; **EP 3150399 B1 20180808**; PL 3150399 T3 20190329

DOCDB simple family (application)

EP 15460085 A 20150930; PL 15460085 T 20150930