

Title (en)

Safety elements with machine readable, visually imperceptible characteristics

Title (de)

Sicherheitselemente mit maschinenlesbaren, visuell nicht erkennbaren Merkmalen

Title (fr)

Éléments de sécurité dotés de signes lisibles par une machine mais ne pouvant pas être reconnus visuellement

Publication

**EP 2014479 A1 20090114 (DE)**

Application

**EP 07011853 A 20070618**

Priority

EP 07011853 A 20070618

Abstract (en)

The safety element has a carrier substrate which is applied on one or multiple functional safety characteristics. The carrier substrate has a holohedral or partial printing on x-ray absorbing coating which is covered by a polymer coating. The x-ray absorbing coating is made of a printing ink containing pigments selected from a group of titanium dioxide, barium sulfate, phthalocyanine, copper porphyrin, chromium compounds, cadmium sulfate or other heavy metal compounds. The polymer coating is a metallic layer which is made of aluminum, copper, cobalt, iron, chromium, titanium, nickel.

Abstract (de)

Sicherheitselemente bestehend aus einem Trägersubstrat auf das ein oder mehrere funktionelle Sicherheitsmerkmale aufgebracht sind, dadurch gekennzeichnet, dass das Trägersubstrat eine vollflächige oder partielle Bedruckung aus einer röntgenstrahlenabsorbierenden Beschichtung, die von einer Abdeckschicht abgedeckt ist, aufweist.

IPC 8 full level

**B41M 3/14** (2006.01); **B42D 15/00** (2006.01); **B42D 15/10** (2006.01)

CPC (source: EP)

**B41M 3/14** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

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