

Title (en)
LAYER-TYPE VALUE DOCUMENT COMPRISING AN INK MIXTURE IN ONE LAYER

Title (de)
SCHICHTARTIGES WERTDOKUMENT MIT FARBGEMISCH IN EINER SCHICHT

Title (fr)
DOCUMENT DE VALEUR STRATIFIE COMPRENANT UN MELANGE D'ENCRE DANS UNE COUCHE

Publication
EP 1744905 B1 20140709 (DE)

Application
EP 05730712 A 20050405

Priority
• EP 2005003577 W 20050405
• DE 102004022080 A 20040505

Abstract (en)
[origin: WO2005108110A1] The invention relates to a value document (10), particularly a banknote, comprising a sequence of layers into which visually and/or mechanically recognizable markings are introduced in the form of patterns, letters, numbers, or images under the effect of laser radiation. According to the invention, the sequence of layers encompasses a marking layer (22) that is composed of an ink mixture (24, 26) comprising a component (26) absorbing the laser radiation and a component (24) which is transparent to the laser radiation. The markings are visually and/or mechanically recognizable as a result of an irreversible change in the optical characteristics of the ink mixture (24, 26), said irreversible change being caused by the laser radiation.

IPC 8 full level
B42D 15/00 (2006.01); **B42D 15/10** (2006.01)

CPC (source: EP US)
B42D 25/29 (2014.10 - EP US); **B42D 25/351** (2014.10 - EP); **B42D 25/364** (2014.10 - EP); **B42D 25/373** (2014.10 - EP);
B42D 25/378 (2014.10 - EP US); **B42D 25/382** (2014.10 - EP US); **B42D 25/387** (2014.10 - EP); **B42D 25/41** (2014.10 - EP US);
B42D 25/43 (2014.10 - EP US); **B42D 25/435** (2014.10 - US); **B42D 2033/20** (2022.01 - EP); **B42D 2035/24** (2022.01 - EP);
B42D 2035/44 (2022.01 - EP); **Y10T 428/24876** (2015.01 - EP US)

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005108110 A1 20051117; AU 2005240277 A1 20051117; AU 2005240277 B2 20100610; CA 2562262 A1 20051117;
CA 2562262 C 20121009; CN 100506560 C 20090701; CN 1946569 A 20070411; DE 102004022080 A1 20051124; EP 1744905 A1 20070124;
EP 1744905 B1 20140709; MY 146727 A 20120914; PL 1744905 T3 20150130; RU 2006142489 A 20080610; RU 2361745 C2 20090720;
US 2009008926 A1 20090108; US 8936846 B2 20150120

DOCDB simple family (application)
EP 2005003577 W 20050405; AU 2005240277 A 20050405; CA 2562262 A 20050405; CN 200580012378 A 20050405;
DE 102004022080 A 20040505; EP 05730712 A 20050405; MY PI20051867 A 20050428; PL 05730712 T 20050405;
RU 2006142489 A 20050405; US 56853805 A 20050405