

Title (en)  
Document and method for manufacturing a document

Title (de)  
Dokument sowie Verfahren zur Herstellung eines Dokumentes

Title (fr)  
Document et procédé de fabrication d'un document

Publication  
**EP 2082894 A2 20090729 (DE)**

Application  
**EP 09405005 A 20090113**

Priority  
DE 102008005136 A 20080116

Abstract (en)  
The document (1) has a carrier layer (2) and a functional layer, where bacteriorhodopsin i.e. biological color pigment, is contained in the functional layer as a color pigment (5) such that the functional layer is constructed as a lower thermo-functional layer (3) and an upper thermo-functional layer (4). The carrier layer is arranged so as to face away from the thermo-functional layers, where the color pigment is arranged in the upper thermo-functional layer or arranged in the lower thermo-functional layer such that the thermo-functional layers are arranged one above the other. An independent claim is also included for a method for manufacturing a document.

Abstract (de)  
Das Dokument besitzt eine Trägerschicht und mindestens eine auf der Trägerschicht angeordnete Funktionsschicht. In der Funktionsschicht ist als Farbpigment Bakteriorhodopsin enthalten. Bei einem Bedrucken des Dokumentes wird im Bereich des Bakteriorhodopsins durch eine Energiezuführung eine im wesentlichen irreversible Farbänderung generiert.

IPC 8 full level  
**B42D 15/00** (2006.01); **B41M 5/28** (2006.01); **B41M 5/30** (2006.01); **B42D 15/10** (2006.01)

CPC (source: EP US)  
**B41M 5/26** (2013.01 - US); **B41M 5/28** (2013.01 - EP US); **B41M 5/286** (2013.01 - EP US); **B41M 5/30** (2013.01 - EP US);  
**B41M 5/323** (2013.01 - EP US); **B42D 25/00** (2014.10 - EP US); **B42D 2035/24** (2022.01 - EP); **Y10T 428/31993** (2015.04 - EP US)

Cited by  
EP2540500A1; US9623699B2; US9321294B2; WO2013000535A1; WO2013110565A1

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)  
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PL 2082894 T3 20120831; US 2009181261 A1 20090716; US 8187998 B2 20120529

DOCDB simple family (application)  
**EP 09405005 A 20090113**; AT 09405005 T 20090113; DE 102008005136 A 20080116; PL 09405005 T 20090113; US 35447509 A 20090115