

200 Documents

Publication numbers	Title	Current assignees
WO200236356 A1	Multilayer body with a first laser -sensitive layer and a second laser -sensitive layer and method for generation of a multilayer image in said multilayer body	U NICA TECHNOLOGY
IT8125780 D0	Method of producing an identification card	GAO GES AUTOMATION ORGANIZATION
DE10115949 A1	Invisible laser writing for use as security feature for plastic cards and devices for the detection of security marks	BOEWE CARDTEC
CA2528117 A1	Laser marking of valuable documents	MERCK
WO2012120207 A1	Method of producing a back-lit colour laser image, identity document implementing this method	LA DIGUE JEAN PIERRE, ...
AU-523997 A0	Laser marking of articles	SECURENCY INTERNATIONAL
IT8125781 D0	Identification card and method of producing it	GAO GES AUTOMATION ORGANIZATION
EP1712323 A1	Method for making a three dimensional laser tag on a transparent membrane before an in-mould injection step	INMOTEC TECHNOLOGY
WO200162509 A1	Method for producing laser -writable data carriers and data carrier produced according to this method	GIESECKE & DEVRIENT
DE102013000152 A1	Method for producing a security element having a laser -sensitive recording layer	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
EP2740608 A1	Secure laser marking personalisation	GEMALTO
WO201356779 A1	Process for producing an optically variable security element with an ink layer based on microcapsules and the thereby resulting security element	GIESECKE & DEVRIENT
WO200388144 A2	Image processing techniques for printing identification cards and documents	L 1 SECURE CREDENTIALING
EP1014201 A2	Process for making large-size composite relief printing elements using laser -based positioning followed by image-wise exposure using a laser	BASF DRUCKSYSTEME
DE102008012419 A1	Method for preparing a multi-layer composite and/or individualisation with personalization	BUNDESDRUCKEREI
WO200356500 A1	Covert variable information on id documents and methods of making same	L 1 SECURE CREDENTIALING
EP2407314 A1	Method for producing a pattern on a substrate using security ink	OBERTHUR FIDUCIAIRE
EP-343310 A1	Printing ink for plastics with enhanced lamination properties, and printing method.	SICPA
WO200295805 A2	Laser patterning of devices	FLEXENABLE

Publication numbers	Title	Current assignees
WO201356777 A1	Optically variable security element with an ink layer based on microcapsules	GIESECKE & DEVRIENT
EP2465701 A2	Security element with identification marks	GIESECKE & DEVRIENT
WO201112281 A2	Identification document having a personalized visual identifier and method for production thereof	GIESECKE & DEVRIENT MOBILE SECURITY
DE102010025044 A1	Method and device for producing a security document comprising colored perforations	BUNDESDRUCKEREI
EP1747905 A2	Security feature and method for producing it	GIESECKE & DEVRIENT
EP2444844 A2	Pattern transfer method and apparatus therefor	KOREA ADVANCED INSTITUTE OF SCIENCE & TECHNOLOGY
WO200615733 A1	Data carrier with security element and method for the production thereof	GIESECKE & DEVRIENT
EP2130682 A1	Method and device for producing a personalisation document and personalisation document	MUEHLBAUER
DE102010035890 A1	Method for producing a security document with microporous laminatable printlayer, and such a document	BUNDESDRUCKEREI
DE3314327 C1	Identity card and method for its manufacture	GAO GES AUTOMATION ORGANIZATION
US20080106002 A1	Laminated identification document	FELDMAN JOSEF
US6186067 B1	Infrared laser -imageable lithographic printing members and methods of preparing and imaging such printing members	MARK ANDY, ...
WO200016988 A1	Lithographic printing plates for use with laser imaging apparatus	MARK ANDY, ...
CN103342032 A	Laminated identification document	Joseph Feldman
FR3005436 A1	Method for manufacturing a card and card comprising at least one thermochromic pattern	FASVER
EP-716934 A1	Laser ablative recording element	KODAK
EP-894622 A2	Positive-working photosensitive composition for use with infrared laser	FUJIFILM
FI200806080 A0	Printing ink , printed product and method of marking products	TEKNOLOGIAN TUTKIMUSKESKUS VTT
WO200558608 A1	Security article with multicoloured image	NOTE PRINTING AUSTRALIA
EP2465703 A2	Structured colour-shift security element	GIESECKE & DEVRIENT
AU2003237844 A1	Identification card printed with jet inks and systems and methods of making same	L 1 SECURE CREDENTIALING
EP2246198 A1	A process for securing an identification document and secure identification document	GEMALTO
WO2008112713 A1	Nanolithography with use of viewports	NANOINK

Publication numbers	Title	Current assignees
KR100840106 B1	The security thread detectable with laser	KOREA SECURITY PRINTING & MINTING, ...
WO2006128607 A2	Data carrier and method for the production thereof	GIESECKE & DEVRIENT
WO200153113 A1	Optically variable security devices	VIAVI SOLUTIONS
EP-372274 A2	Multilayer record carrier and process for marking a multilayer record carrier	GAO GES AUTOMATION ORGANIZATION
FR2918311 A1	Security document in the form of a booklet, with an additional page revealing hidden information	OBERTHUR TECHNOLOGIES
WO200023825 A2	Laser -guided manipulation of non-atomic particles	OPTOMECH DESIGN
DE102006062281 A1	Safety element having an optically variable element	GIESECKE & DEVRIENT
WO200868053 A1	Information carrier precursor and information carrier produced therewith.	AGFA GEVAERT
DE102006016342 A1	Security element with authenticity features identifiable in a visual and tactile manner	GIESECKE & DEVRIENT
DE102007059746 A1	Method for producing a security and/or valuable document with personalised information	BUNDESDRUCKEREI, ...
AU-134298 A0	Security document having visually concealed security indicia	INNOVIA SECURITY
WO201138848 A2	Data carrier having a window	GIESECKE & DEVRIENT
WO2010141836 A2	Silicon pen nanolithography	NORTHWESTERN UNIVERSITY
WO201168002 A1	Display body and labeled article	TOPPAN PRINTING
DE102012002296 A1	Method for producing a data carrier and data carrier obtainable therefrom	GIESECKE & DEVRIENT
GB201106020 D0	Method of processing a security item	ANDREWS & WYKEHAM
WO2005108106 A1	Value document comprising a serial number	GIESECKE & DEVRIENT
WO201412657 A1	Method of producing a multilayered security element	GIESECKE & DEVRIENT
WO201058026 A2	Magnetically oriented ink on primer layer	SICPA
WO2011161661 A2	Security improvements for flexible substrates	OMARCO NETWORK SOLUTIONS
WO200227647 A1	Product with a security element	MORPHO, ...
WO2009106242 A1	Valuable document with protection against forgery by way of thermochromic indicator	GIESECKE & DEVRIENT
DE102007059747 A1	Polymer layer composite for a security and/or valuable document	BUNDESDRUCKEREI, ...
WO200168383 A1	Laminate, in particular in the form of cards and a method for producing the same	OVD KINEGRAM
WO2009136921 A1	Machine readable security elements and products containing them	HONEYWELL INTERNATIONAL
WO201158288 A1	Security document including patterns with variable optical	OBERTHUR FIDUCIAIRE

Publication numbers	Title	Current assignees
	effect	
WO200532831 A1	Security document with upconverting material	SECURENCY INTERNATIONAL
WO2011136848 A1	Ball-spacer method for planar object leveling	NANOINK
CA2095971 A1	Anti-counterfeit latent image formation object for bills, credit cards, etc. and method for making the same	NATIONAL PRINTING BUREAU, ...
FR2967089 A1	Optically variable security device for a valuable document	OBERTHUR FIDUCIAIRE
WO2013115082 A1	Resin composition for laser -engrivable flexographic printing plate, original plate for laser -engrivable flexographic printing plate and method for production thereof, and flexographic printing plate and method for production thereof	FUJIFILM
EP2511104 A1	A security document and a manufacturing method thereof	GEMALTO
WO201414509 A1	Articles, methods of validating the same, and validation systems employing decay constant modulation	HONEYWELL INTERNATIONAL
WO2009140440 A1	Height sensing cantilever	NANOINK
EP-537484 A1	Recording media with coloured image, in particular credit or identity card	GAO GES AUTOMATION ORGANIZATION
WO2010149476 A1	Security document with differentiated tactile areas, and method for manufacturing same	OBERTHUR FIDUCIAIRE
EP2168783 A1	Use of a plastic film in colour laser printing	BAYER MATERIALSCIENCE
CA2026542 A1	Optically variable element with non-holographic data and its production method	GIESECKE & DEVRIENT
FI201205633 A	Laser process alignment measuring method	TECNOMAR
DE102006050047 A1	See-through safety element with microstructures	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
WO2009147204 A2	Fiduciary or similar document comprising color block designs and copperplate printing, and manufacturing method for same	OBERTHUR FIDUCIAIRE
US20140204171 A1	Apparatus and methods for ink -based digital printing using imaging plate having regular textured surface for reduced pullback	PALO ALTO RESEARCH CENTER, ...
US20130323476 A1	Marked thermoplastic compositions, methods of making and articles comprising the same, and uses thereof	SABIC GLOBAL TECHNOLOGIES
US20030228124 A1	Apparatuses and methods for maskless mesoscale material deposition	OPTOMECH, ...
WO9531338 A1	Identity card and process for producing it	MORPHO
EP1232877 A1	Cleaning method for recycling a printing substrate by laser ablation	AGFA
US20050001419 A1	Color laser engraving and digital watermarking	DIGIMARC
CA2140462 A1	Seamless offset lithographic printing members for use with	PRESSTEK

Publication numbers	Title	Current assignees
	laser -discharge imaging apparatus	
WO2009106036 A2	Method for the production of a security and/or value document comprising protected personalized data	BUNDESDRUCKEREI
EP-216947 A1	Card-shaped data carrier and method of producing it	MAURER ELECTRONICS
WO2008110163 A2	Security and/or valuable document having at least two different security features which are positioned precisely to register	BUNDESDRUCKEREI
CA2292472 A1	Lithographic printing plate and method for its' manufacture using laser irradiation	MARK ANDY, ...
EP1008873 A1	Color filter and process for producing the same	DAI NIPPON PRINTING
FR2992256 A1	Sheet element capable of being engraved by a laser	ARJOWIGGINS SECURITY
WO200875451 A1	Laser engravable printing original plate	TOYOBO
EP1057623 A1	A method for preparing a lithographic printing plate by laser ablation of a heat-sensitive imaging element	AGFA
WO200993700 A1	Manufacturing method for seamless mold	ASAHI CHEMICAL INDUSTRY
WO200450380 A1	Laser -writable film	SCHREINER
CA2221922 A1	Self-cleaning, abrasion-resistant, laser -imageable lithographic printing contructions	PRESSTEK
DE102013002137 A1	Optically variable surface pattern	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
WO200570691 A1	Photosensitive resin composition for laser engravable printing substrate	ASAHI KASEI CHEMICALS
WO2008101807 A1	Method for producing electronic cards including at least one printed pattern	KUDELSKI
JP2001074929 A	Color filter and process for producing the same	DAI NIPPON PRINTING
WO200548182 A1	Data carrier with codes	GIESECKE & DEVRIENT MOBILE SECURITY
DE3614661 C1	Process for producing a customer, credit or identity card	WINTER WERTDRUCK
DE102010009977 A1	Security element having aligned magnetic pigments	GIESECKE & DEVRIENT
CN103048877 A	Ink -jet printing silk screen plate making method and photo-sensitive resist ink thereof	WUHAN HAILAN BIOLOGICAL TECHNOLOGY
WO9938703 A1	Printed valuable document comprising a luminescent authenticity feature	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
WO200956352 A1	Polymer layer composite for a secure and/or valuable document, and method for the production thereof	BUNDESDRUCKEREI, ...
EP1935663 A1	Data carrier with see-through window and method for producing it	GEMALTO
WO201090345 A1	Relief printing plate	FUJIFILM
WO201360831 A2		

Publication numbers	Title	Current assignees
	Method and dye mixtures for marking shape memory polymers, and shape memory polymer articles with switchable readability	BAM BUNDESANSTALT FUER MATERIALFORSCHUNG & PRUEFUNG
US20040127025 A1	Processes for fabricating conductive patterns using nanolithography as a patterning tool	NANOINK
DE19845436 A1	Gravure process for printing adjacent colour surfaces with various colour coating thicknesses as well as data substrate, printing plate and method of manufacturing a printing plate	GIESECKE & DEVRIENT
WO200997838 A1	Method for producing security elements by individualization of volume holograms and security elements produced therewith	HOLOGRAM INDUSTRIES
WO2010100360 A1	Security element for valuable document	OBERTHUR FIDUCIAIRE
WO2009106066 A1	Security and/or value document	BUNDESDRUCKEREI
CN101407264 A	Manufacturing method of locating laser anti-counterfeiting compound film	ZHEJIANG GOLDSTONE PACKING
US20150059605 A1	Resin composition for laser engraving, flexographic printing plate precursor for laser engraving and process for producing same, and flexographic printing plate and process for making same	FUJIFILM
WO201524619 A1	Printed image	MERCK
DE19747000 C1	Laserlabels and their use	TESA
US20110156317 A1	Resin composition for laser engraving, relief printing starting plate for laser engraving, process for making relief printing plate, and relief printing plate	FUJIFILM
DE19735293 A1	Value and security product with a luminescent element	BUNDESDRUCKEREI
WO2013191118 A1	Composition for bonding curable imprinting composition and substrate and semiconductor device using same	FUJIFILM
US20140272097 A1	Dna marking of previously undistinguished items for traceability	APPLIED DNA SCIENCES
RU2503767 C1	Counterfeit-protected data carrier	GOZNAK
DE102013218752 A1	Activatable value or security product, method of activation and method for producing a value or security product	BUNDESDRUCKEREI
JP08282143 A	Laser responsive lithographic printing plate original plate	TORAY INDUSTRIES
PL2009388780 A1	Markers for protection valuable liquid and solid materials	UNIVECT SP Z O O
WO200824947 A2	Replication tools and related fabrication methods and apparatus	MICROCONTINUUM
US20090057657 A1	Method for forming pattern arrays and organic devices including the pattern arrays	SAMSUNG DISPLAY
US20150035205 A1	Process for producing flexographic printing plate precursor for laser engraving, flexographic printing plate precursor for	FUJIFILM

Publication numbers	Title	Current assignees
	laser engraving, process for making flexographic printing plate, and flexographic printing plate	
DE102005052562 A1	Security element and method for the production thereof	GIESECKE & DEVRIENT
WO9914043 A1	Laser printing method and substrate	NOCOPI INT
WO2014157228 A1	Composition, cured product, stacked body, production method for underlayer film, pattern formation method, pattern, and production method for semiconductor resist	FUJIFILM
WO200964816 A1	Processes for rapid microfabrication using thermoplastics and devices thereof	UNIVERSITY OF CALIFORNIA
US20040161705 A1	Flexographic printing plate with ink -repellent non-image areas	KODAK POLYCHROME GRAPHICS, ...
US20110293896 A1	Resin composition for laser engraving, relief printing plate precursor for laser engraving and process for producing same, and relief printing plate and process for making same	FUJIFILM
EP2597108 A1	Resin composition for laser engraving, flexographic printing plate precursor for laser engraving and process for producing same, and flexographic printing plate and process for making same	FUJIFILM
WO200646279 A1	Lithographic printing plate	mitsui chemicals
CN101966784 A	Manufacturing method of laser anti-counterfeit texture label	CHEN BIFENG
EP-743177 A1	Lithographic printing plate for laser direct plate making requiring no liquid developing treatment process and printing method using the same	NIPPON PAINT
WO2011122545 A1	Laser -engrivable flexographic printing plate precursor	FUJIFILM
CN103203918 A	Laser film and manufacturing method thereof	SHANGHAI PEOPLE S PLASTIC PRINTING FACTORY
JP2009078472 A	Resin composition for laser engraving, resin printing plate precursor for laser engraving, relief printing plate and manufacturing method of relief printing plate	FUJIFILM
EP-794055 A2	Waterless planographic printing plate and method of plate making using the same	FUJIFILM
EP1728644 A1	ink -jet authentication mark for a product or product packaging	AGFA
US20060183049 A1	On-press development of high speed laser sensitive lithographic printing plates	TENG GARY G, ...
US4621040 A	Imaging element and process with laser absorptive ink barrier layer	POLAROID
CN102184674 A	Method for preparing laser rainbow code identifier	SHANDONG TAIBAO PREVENTING COUNTERFEIT PRODUCT

Publication numbers	Title	Current assignees
US20090297984 A1	Method for on-press developing high speed laser sensitive lithographic plate	TENG GARY GANGHUI
US20090291396 A1	Process for on-press developing high speed laser sensitive lithographic printing plate	TENG GARY GANGHUI
EP1281536 A2	Magnetic printing media for inkjet and laserjet	HP
US20090061363 A1	Method for on-press developing laser sensitive lithographic printing plate	TENG GARY GANGHUI
CN102700282 A	Polishing technology ensuring easy identification of laser transfer paper after bar code printing	SHANDONG TAIBAO PACKAGING PRODUCT
US5643356 A	Digital information recording media and method of using same	KIMBERLY CLARK WORLDWIDE
JP2015013436 A	Laser printing card	DAI NIPPON PRINTING
CN103481692 A	Method for marking anti-fake identification code by laser engraving at film lower-layer of composite film packing material	WUHAN LEAD LASER
CN203957577U U	Cigarette packet lining paper with laser -effect character and pattern parts	SHANDONG TAIBAO PACKAGING PRODUCT
CN101380161 A	Technique of applying temperature-sensing discolored ink in noble metal coin (badge)	CHINA BANKNOTE PRINTING & MINT
IT7850029 D0	METHOD OF MANUFACTURE OF FLAT FORMS OF PRINTING WITH THE AID OF LASER BEAMS	HOECHST
JP2004174757 A	Laser engraved printing plate	ASAHI KASEI CHEMICALS
US20110318537 A1	Resin composition for laser engraving, relief printing plate precursor for laser engraving, process for producing relief printing plate and relief printing plate	FUJIFILM
JP2004262076 A	Seamless-printing original plate capable of being subjected to laser engraving, and forming method therefor	ASAHI KASEI CHEMICALS
JP2004148587 A	Laser -carved printing original plate	ASAHI KASEI CHEMICALS
CA2053094 A1	PAPER AND INK <unknown>REIMPRIMABLES</unknown> AND ERASABLE, AND SYSTEM FOR PRINTING AND ERASING USING THIS PAPER AND THIS INK .	DIGITAL STREAM
EP-795998 A1	Producing a lithographic printing plate by sequentially exposing a thermo-sensitive imaging element by a set of radiation beams	AGFA GEVAERT
WO200584092 A2	Micrometric direct-write methods for patterning conductive material and applications to flat panel display repair	NANOINK
JP2004255812 A	Cylindrical flexographic printing original plate capable of undergoing laser engraving	ASAHI KASEI E-MATERIALS
KR100700831 B1	Laser induced thermal imaging method and fabricating method of organic light-emitting diode using the same	SAMSUNG DISPLAY
EP2095970 A1	Resin composition for laser engraving, resin printing plate	FUJIFILM

Publication numbers	Title	Current assignees
	precursor for laser engraving, relief printing plate and method for production of relief printing plate	
CN201732519U U	Laser film label	SHENZHEN YE S QIHENG TECHNOLOGICAL PRINTING
WO200270258 A1	Lithographic imaging with printing members having multiphase laser -responsive layers	PRESSTEK
JP10058636 A	Original plate for laser -sensitive lithographic plate	TORAY INDUSTRIES
EP2058123 A2	Resin printing plate precursor for laser engraving, relief printing plate and method for production of relief printing plate	FUJIFILM
CN201381030U Y	Positioning laser anti-fake complex film	ZHEJIANG GOLDSTONE PACKING
US20110217656 A1	Positive-working lithographic printing plate precursor for infrared laser and process for making lithographic printing plate	FUJIFILM
IT2001MI1889 D0	Document and method against counterfeiting and forgery of the same	FABRIANO SECURITIES
CN201842337U U	Laser rainbow code security box	SHANDONG TAIBAO PREVENTING COUNTERFEIT
US20110159438 A1	Thermally crosslinkable resin composition for laser engraving, relief printing starting plate for laser engraving and process for producing the same, and relief printing plate and process for making same	FUJIFILM
US20110159439 A1	Thermally crosslinkable resin composition for laser engraving, relief printing plate precursor for laser engraving and process for producing same, and relief printing plate and process for making same	FUJIFILM
EP1775675 A1	Method for producing a data carrier	GEMALTO
EP1260361 A2	Method for making lithographic printing plate	FUJIFILM
JP09157416 A	Plastic molding product having laser marking applied thereto	KANSAI PAINT
DE2512038 A1	Laser imagable dry planographic printing plate blank	SCOTT PAPER
WO200450262 A1	Heat-transfer label	AVERY DENNISON
CN1818786 A	Direct platemaking offset plate of ink -jetting computer	SHI SHENQUAN
EP2468423 A1	Method and apparatus for forming an image on a substrate	VIAVI SOLUTIONS
US20030162131 A1	Laser recording method for imaging materials coated on-site	KODAK GRAPHIC COMMUNICATIONS
CN103354059 A	Perspective laser holography anti-fake film with reflecting effect and preparing method thereof	SHANGHAI HONGDUN ANTI COUNTERFEIT MATERIAL
US20130133540 A1	Resin composition for laser engraving, flexographic printing	FUJIFILM

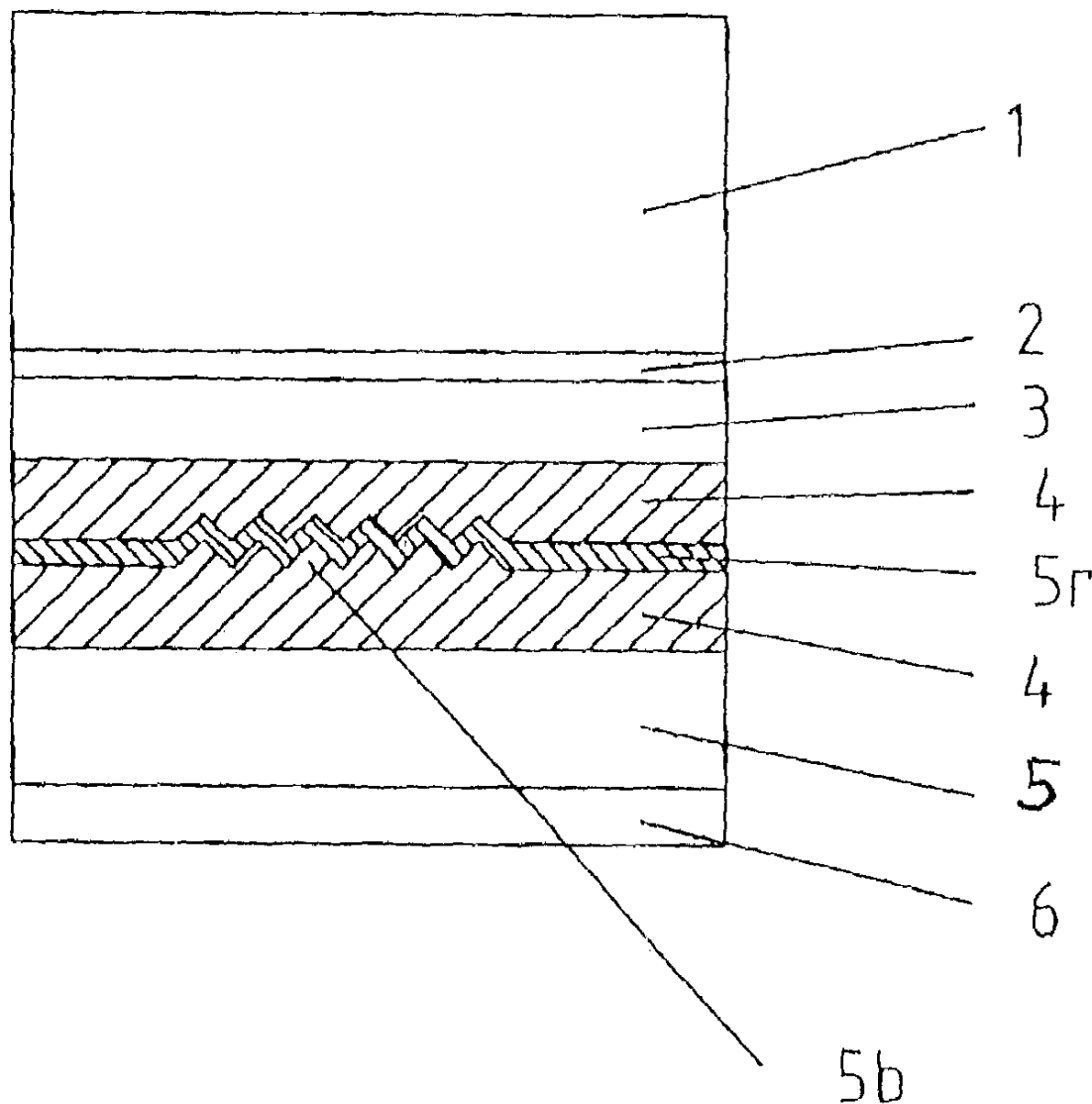
Publication numbers	Title	Current assignees
	plate precursor for laser engraving and process for producing same, and flexographic printing plate and process for making same	
JP10100361 A	Method for forming a dampening-waterless lithographic plate and method for forming an image using a dampening-waterless lithographic plate	FUJIFILM
JP11291654 A	Laser sensitive lithographic printing plate original plate and its manufacture	TORAY INDUSTRIES
WO200671732 A2	Id document structure with pattern coating providing variable security features	L 1 SECURE CREDENTIALING
WO200221215 A1	On-press development of thermosensitive lithographic plates	ROHM & HAAS ELECTRONIC MATERIALS
CN102700281 A	Environment friendly laser fine dealumination method	HUBEI UNITED TIANCHENG ANTICOUNTERFEIT TECHNOLOGY
JP2004262135 A	Photosensitive resin composition for printing original plate capable of being subjected to laser engraving	ASAHI KASEI E-MATERIALS
US20070172766 A1	Laser sensitive lithographic printing plate comprising specific acrylate monomer and initiator	TENG GARY GANGHUI

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Title

(EP1439964)

Multilayer body with a first **laser**-sensitive layer and a second **laser**-sensitive layer and method for generation of a multilayer image in said multilayer body

Images**Publication data including kind & date**

WO200236356	A1	2002-05-10	WO200236356
AU2154902	A	2002-05-15	AU200221549
WO03039888	A1	2003-05-15	WO200339888
EP1330368	A1	2003-07-30	EP1330368
DE10194517	D2	2003-08-21	DE10194517
MXPA03003909	A	2003-09-25	MX2003PA003909
CN1471477	A	2004-01-28	CN1471477
BR0115138	A	2004-02-17	BR200115138
BRPI0115138	A1	2004-02-17	BRPI0115138
US20040043308	A1	2004-03-04	US20040043308
EP1413456	A2	2004-04-28	EP1413456
EP1413456	A3	2004-05-26	EP1413456
EP1330368	B1	2004-06-30	EP1330368



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EP1439964	A1	2004-07-28	EP1439964				
DE50102764	D1	2004-08-05	DE50102764				
JP2004525992	A	2004-08-26	JP2004525992				
DK1330368	T3	2004-09-27	DK1330368T				
DE10295082	D2	2004-11-11	DE10295082				
PT1330368	E	2004-11-30	PT1330368				
ES2220830	T3	2004-12-16	ES2220830				
US20040265552	A1	2004-12-30	US20040265552				
HK1053811	A1	2005-01-28	HK1053811				
RU2004116691	A	2005-03-10	RU2004116691				
CN1608007	A	2005-04-20	CN1608007				
CN1208206	C	2005-06-29	CN1208206C				
EP1413456	B1	2006-01-04	EP1413456				
JP2006500238	A	2006-01-05	JP2006500238				
AT314937	T	2006-02-15	ATE314937				
DE50108643	D1	2006-03-30	DE50108643				
DK1413456	T3	2006-05-08	DK1413456T				
ES2256802	T3	2006-07-16	ES2256802				
RU2296378	C2	2007-03-27	RU2296378				
JP4018632	B2	2007-09-28	JP4018632				
CN100349754	C	2007-11-21	CN100349754C				
US7300694	B2	2007-11-27	US7300694				
EP1439964	B1	2007-12-19	EP1439964				
AT381445	T	2008-01-15	ATE381445				
DE50211413	D1	2008-01-31	DE50211413				
JP4091423	B2	2008-03-07	JP4091423				
ES2298375	T3	2008-05-16	ES2298375				
EP1439964	B8	2008-07-16	EP1439964				
US7403651	B2	2008-07-22	US7403651				
EP1439964	B8	2008-10-15	EP1439964				
BRPI0115138	A2	2010-05-04	BR200115138				

Abstract

(EP1439964)

A multilayer body is disclosed, comprising two **laser**-sensitive layers (4, 32). Said multilayer body is a laminated body of overlay films (30, 32), inlays (90, 90) and further overlay films (30,30). The upper overlay film (30) comprises a layer structure applied to the underside thereof by application of a hot-stamp film. The layer structure comprises a lacquer layer (50), a reflection layer (5r), a **laser**-sensitive layer (4), a background layer (5) and an adhesive layer (6). A diffraction and/or hologram structure (5b) is embodied in the lacquer layer (5c), the reflection layer (5r) and the **laser**-sensitive layer (4). The second **laser**-sensitive layer is embodied as a carbon-doped overlay film (32). A **laser**-induced, preferably coloured image component can be generated in the upper **laser**-sensitive layer (4) and a further, preferably grey-scale image generated in the carbon-doped **laser**-sensitive layer (32) thereunder by means of **laser** treatment. A **laser**-induced multilayer image can thus be produced.

Inventors

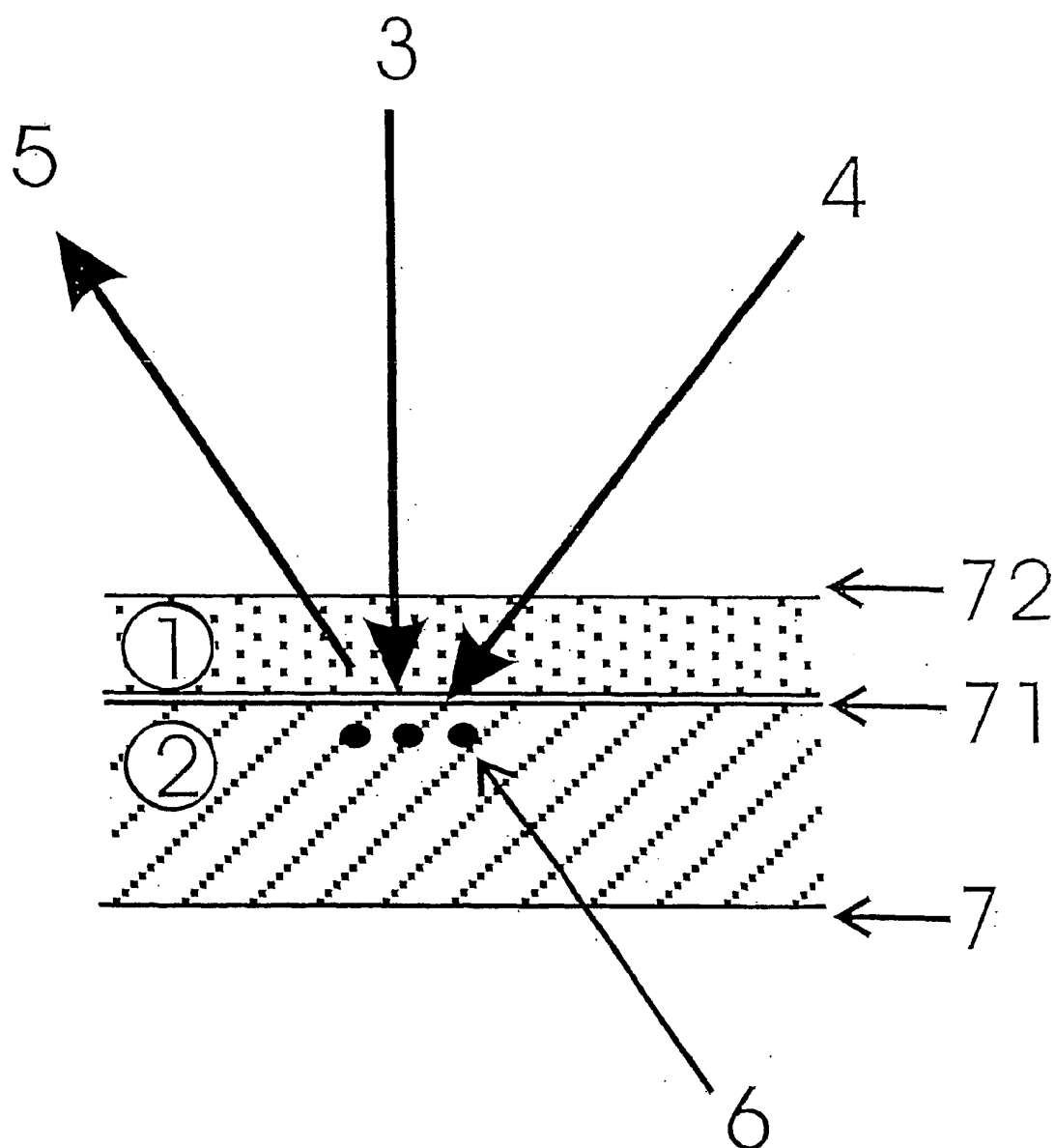
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ZINNER GERHARD

SCHUMACHER MATTHIAS

KNAACK ULRICH

Figur1:

**Publication data including kind & date**

DE10115949	A1	2002-10-02	DE10115949
WO02078965	A1	2002-10-10	WO200278965
EP1372975	A1	2004-01-02	EP1372975
EP1372975	B1	2007-01-03	EP1372975
AT350223	T	2007-01-15	ATE350223
DE50209161	D1	2007-02-15	DE50209161

**Abstract**

(EP1372975)

The invention relates to a **laser** labeling for use as a security feature for plastic cards with an overlay layer and at least one core layer or marking layer disposed below in which the security feature is inscribed. The aim of the invention is to improve the protection of such cards against forgery. To this end, the security feature is invisible to the naked eye, it is inscribed

with a **laser** in the NIR range and it is read out with a detector that is effective in the NIR range. Alternatively, it is inscribed with a **laser** in the UV range and it is read out with a detector that is effective in the UV range.

Inventors

BORMANN FRANK C

FISCHER DIRK

KAPPE FRANK

SCHUMACHER MATTHIAS

Latest standardized assignees - inventors removed

BOEWE CARDTEC

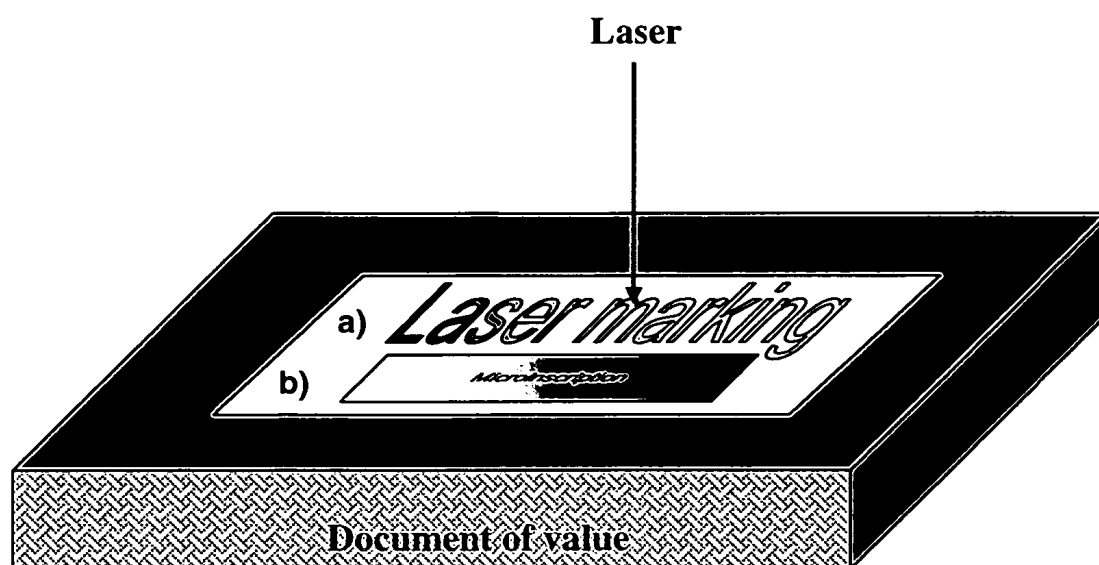
Family 4/200 - FAMPAT - ©Questel

Title

(EP1661729)

Laser marking of valuable documents

Images



Publication data including kind & date

CA2528117	A1	2006-05-30	CA2528117
EP1661729	A2	2006-05-31	EP1661729
DE102004057918	A1	2006-06-01	DE102004057918
KR20060060620	A	2006-06-05	KR20060060620
AU2005239689	A1	2006-06-15	AU2005239689
JP2006150972	A	2006-06-15	JP2006150972
US20060141391	A1	2006-06-29	US20060141391
CN1807112	A	2006-07-26	CN1807112
TW200628329	A	2006-08-16	TW200628329
EP1661729	A3	2007-02-07	EP1661729
IN1036/KOL/2005	A	2007-07-27	IN2005KO01036
CN100564058	C	2009-12-02	CN100564058C
AU2005239689	B2	2012-01-12	AU2005239689
EP1661729	B1	2013-02-13	EP1661729



Abstract

(EP1661729)

Laser marking of valuable documents comprises applying at least one printing **ink** or a printing **ink** layer system (I) to a

substrate (II), where: (I) contains a **laser** sensitive component; the printing **ink** is selectively removed by a **laser** and optionally producing micro-writings/pictures in the printing **ink** removed area.

Inventors

KLEIN SYLKE DR

WEIDEN MICHAEL DR

KRAAS WOLFGANG DR

ULLMANN KLAUS-CHRISTIAN DR

KRIETSCH BURKHARD

Latest standardized assignees - inventors removed

MERCK

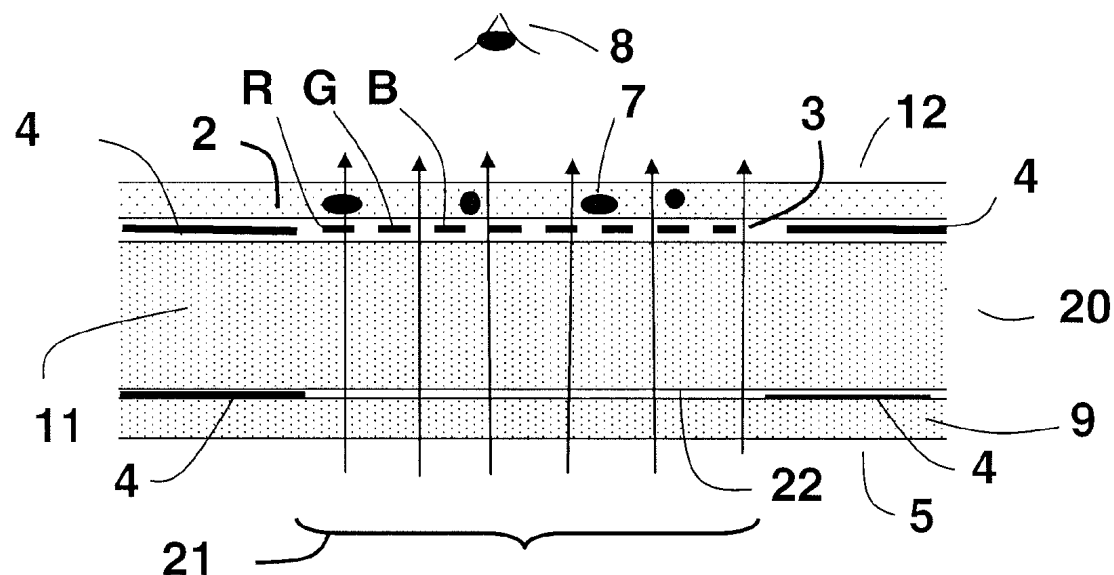
Family 5/200 - FAMPAT - ©Questel

Title

(EP2684178)

Method of producing a back-lit colour **laser** image, identity document implementing this method

Images



Publication data including kind & date

WO2012120207	A1	2012-09-13	WO2012120207
FR2972553	A1	2012-09-14	FR2972553
FR2972553	B1	2013-03-15	FR2972553
KR20130131435	A	2013-12-03	KR20130131435
US20130341900	A1	2013-12-26	US20130341900
EP2684178	A1	2014-01-15	EP2684178
JP2014511294	A	2014-05-15	JP2014511294
BR112013022852	A1	2014-10-21	BR112013022852
KR101592077	B1	2016-02-04	KR101592077
JP6069227	B2	2017-01-06	JP6069227
EP2684178	B1	2017-11-15	EP2684178
ES2658696	T3	2018-03-12	ES2658696
PL2684178	T3	2018-06-29	PL2684178
US10046590	B2	2018-08-14	US10046590
HUE038357	T2	2018-10-29	HUE038357



AU730762	B2	2001-03-15	AU-730762				
US6372394	B1	2002-04-16	US6372394				
AU730762	C	2003-11-20	AU-730762				
CN1137820	C	2004-02-11	CN1137820C				
EP0961690	B1	2004-05-26	EP-961690				
AT267712	T	2004-06-15	ATE267712				
DE69824152	D1	2004-07-01	DE69824152				
BRPI9807441	B1	2004-11-09	BR9807441				
DE69824152	T2	2005-01-27	DE69824152				
CA2281503	C	2007-06-05	CA2281503				
EP0961690	B2	2010-07-07	EP-961690				
DE69824152	T3	2012-08-02	DE69824152				

Abstract

(EP-961690)

A method of marking or forming a transparent window in an article (6), such as a security document, is provided in which areas of opacifying layers of printed **ink** (8, 10) on opposite surfaces of a polymeric film or substrate (12) are irradiated by **laser** radiation (4) of a selected wavelength. The opacifying layers (8, 10) have greater absorption characteristics for the **laser** radiation than the film or substrate (12) which is substantially transparent to the selected wavelength of the **laser** radiation so that after ablation of the area of printed matter (8) on one surface, the radiation passes through the substrate (12) substantially unaffected to ablate the area of printed matter (10) on the opposite surface. In the resultant article, the markings or windows formed by the areas of printing removed from each surface of the substrate (12) are in register, and provide a deterrent against counterfeiting.

Inventors

ZIENTEK PAUL

Latest standardized assignees - inventors removed

SECURENCY INTERNATIONAL

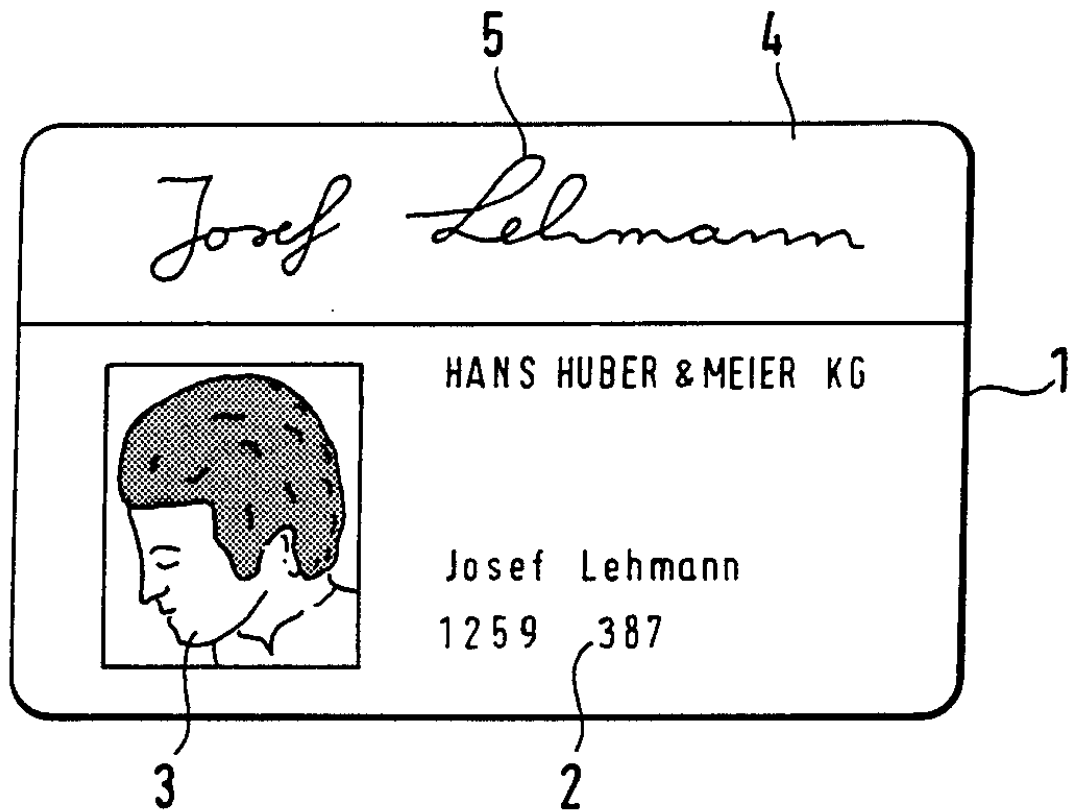
Family 7/200 - FAMPAT - ©Questel

Title

(US4596409)

Identification card and method of producing it

Images



Publication data including kind & date

IT8125781	D0	1981-12-22	IT8125781
BE891519	A	1982-04-16	BE-891519
SE8107606	L	1982-06-24	SE8107606
FR2496936	A1	1982-06-25	FR2496936
DE3048736	A1	1982-07-08	DE3048736
NL8105345	A	1982-07-16	NL8105345
GB2092519	A	1982-08-18	GB2092519
JPS57137195	A	1982-08-24	JP57137195
DE3048736	C2	1982-09-30	DE3048736
ES508754	A0	1982-12-01	ES-508754
ES8302551	A1	1982-12-01	ES8302551
GB2092519	B	1984-10-17	GB2092519
ATA510981	A	1985-09-15	AT8105109
CH655059	A5	1986-03-27	CH-655059
US4596409	A	1986-06-24	US4596409
IT1140386	B	1986-09-24	IT1140386
FR2496936	B1	1988-03-18	FR2496936
AT388898	B	1989-09-11	AT-388898
SE460718	B	1989-11-13	SE-460718
JPH0431877	B2	1992-05-27	JP92031877
NL189395	B	1992-11-02	NL-189395
JP1747794	C	1993-03-25	JP1747794
NL189395	C	1993-04-01	NL-189395



Abstract

(US4596409)

An identification card, in particular an all-plastic identification card, written on by means of a **laser**, having user-related and user-neutral data such as a name, account number, etc. present on the surface of the identification card in the form of

local discolorations of the identification card material without any transition. Due to a local increase in tensile strength, these decolorized areas have greater resistance to mechanical changes and/or chemical solvents than the surrounding areas of the identification card made of the same identification card material. Thus attempted falsification by means of mechanical and chemical means is prevented in an especially effective way, since such attempts lead to destruction of the identification card in each case. The personalization of the identification card with the freely selectable user-related data can take place by preference decentrally by means of a **laser** beam, the energy of which is controlled in such a way that the identification card material is decolorized but not destroyed.

Inventors

HOLBEIN HANS J

MAURER THOMAS

Latest standardized assignees - inventors removed

GAO GES AUTOMATION ORGANIZATION

Family 8/200 - FAMPAT - ©Questel

Title

(EP1712323)

Method for making a three dimensional **laser** tag on a transparent membrane before an in-mould injection step**Images**

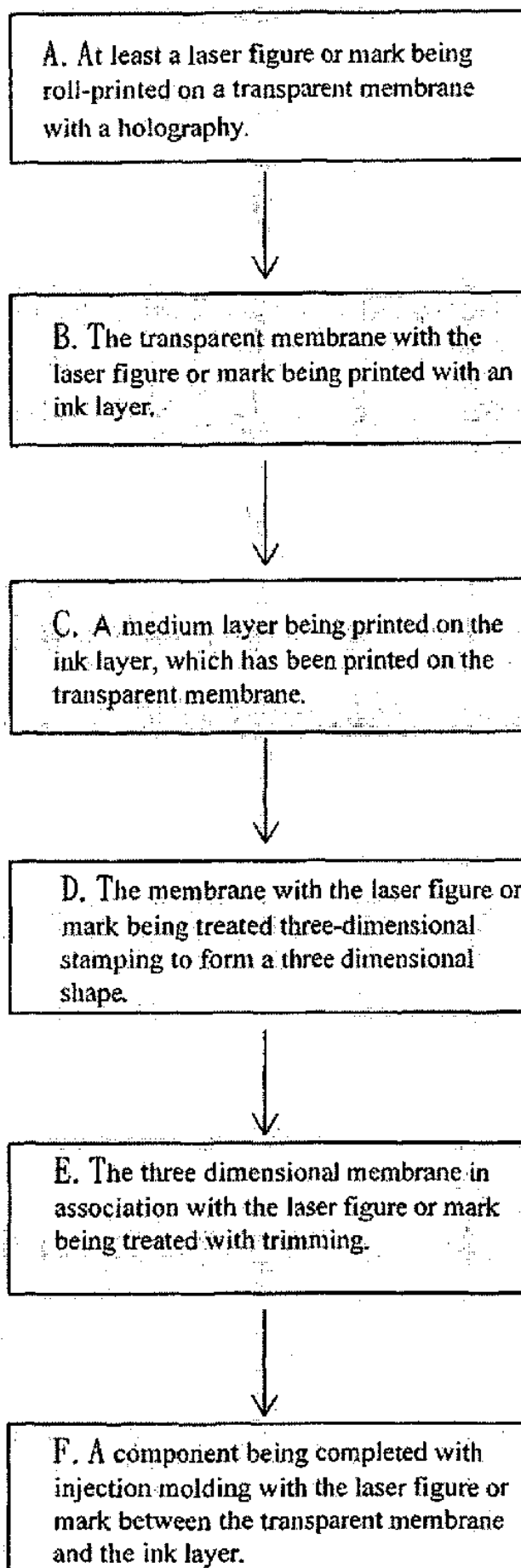


fig. 3

Publication data including kind & date[EP1712323](#)

A1 2006-10-18 EP1712323

**Abstract**

(EP1712323)

A method for making three-dimensional **laser** tag with in-mould injection (step F) allows a transparent membrane being formed with **laser** figure (step A) or mark and being stamped (step D) in advance so as to make the **laser** figures or marks providing long lastingly three-dimensional shapes corresponding to the transparent membrane. Further, base colors shown with the **laser** figure or mark is the color of the printed **ink** so that a variety of color selections can be obtained.

Inventors

LEE SHEE-SHUNG

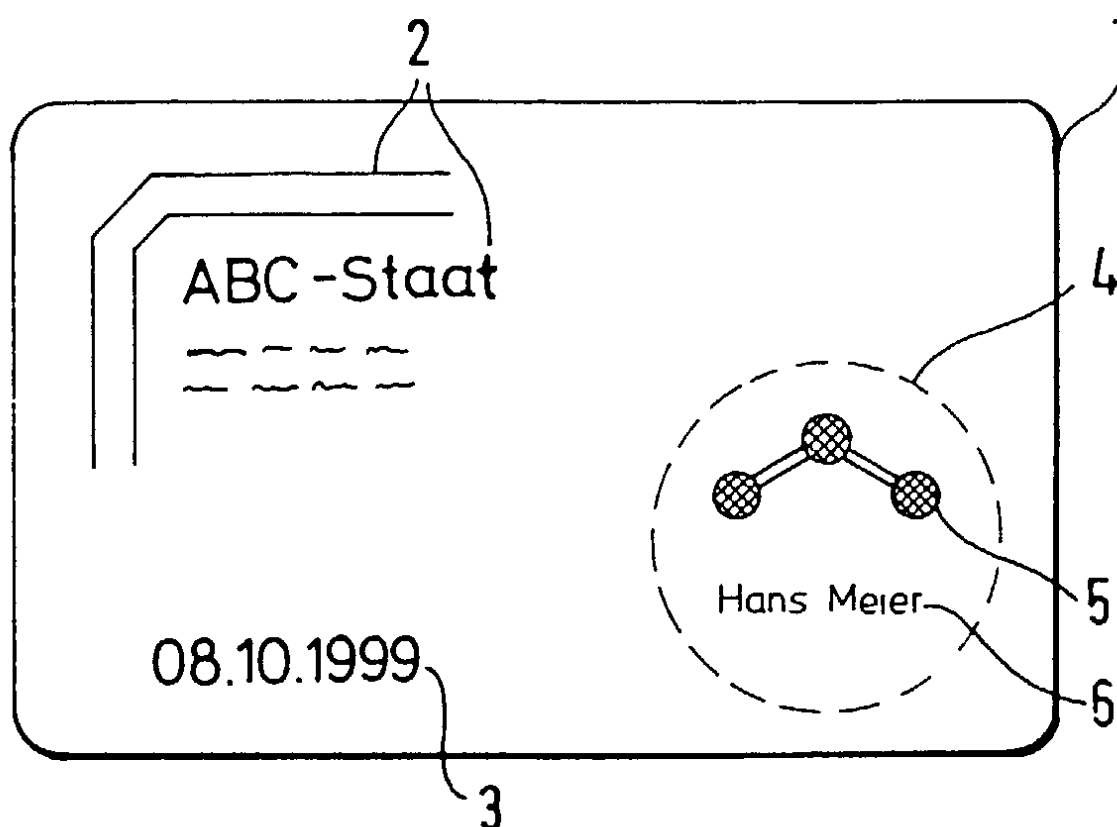
Latest standardized assignees - inventors removed

INMOTEC TECHNOLOGY

Family 9/200 - FAMPAT - ©Questel

Title

(EP1274585)

Method for producing **laser**-writable data carriers and data carrier produced according to this method**Images****Publication data including kind & date**[WO200162509](#)

A1 2001-08-30 WO200162509

[CA2401071](#)

A1 2001-08-30 CA2401071

[DE10008851](#)

A1 2001-08-30 DE10008851

[AU4415801](#)

A 2001-09-03 AU200144158

[EP1274585](#)

A1 2003-01-15 EP1274585

[CN1404443](#)

A 2003-03-19 CN1404443

[US20030136847](#)

A1 2003-07-24 US20030136847



RU2002123343	A	2004-02-20	RU2002123343				
PL357561	A1	2004-07-26	PL2001357561				
EP1274585	B1	2005-05-04	EP1274585				
AT294711	T	2005-05-15	ATE294711				
DE50106113	D1	2005-06-09	DE50106113				
DK1274585	T3	2005-08-08	DK1274585T				
PT1274585	E	2005-08-31	PT1274585				
ES2239667	T3	2005-10-01	ES2239667				
RU2267406	C2	2006-01-10	RU2267406				
US7252239	B2	2007-08-07	US7252239				
PL196736	B1	2008-01-31	PL-196736				
CA2401071	C	2009-11-03	CA2401071				
EP1274585	B2	2017-10-11	EP1274585				
DK1274585	T4	2018-01-08	DK1274585T				
ES2239667	T5	2018-02-21	ES2239667				

Abstract

(EP1274585)

The invention relates to a method for producing a data carrier which has a **laser**-markable layer and a transparent, optically variable layer which overlaps said **laser**-markable layer at least in some areas. According to the method, visible markings which at least partially overlap the optically variable layer are produced in the **laser**-markable layer after said optically variable layer has been applied. The invention also relates to a data carrier produced according to this method and to a semi-finished product such as a data carrier blank, provided for processing further according to the method.

Inventors

BRAUN ECKHARD

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

Family 10/200 - FAMPAT - ©Questel

Title

(EP2941355)

Method for producing a security element having a **laser**-sensitive recording layer**Images**

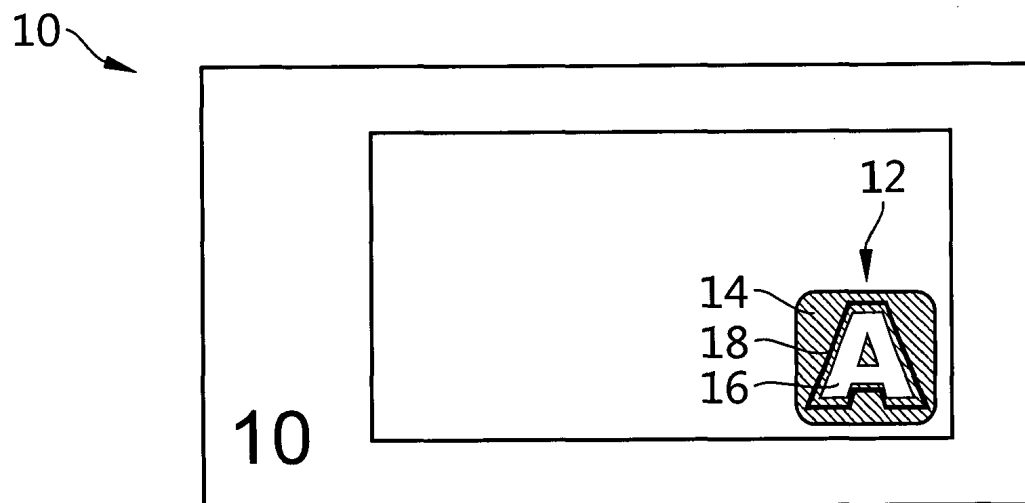


Fig. 1

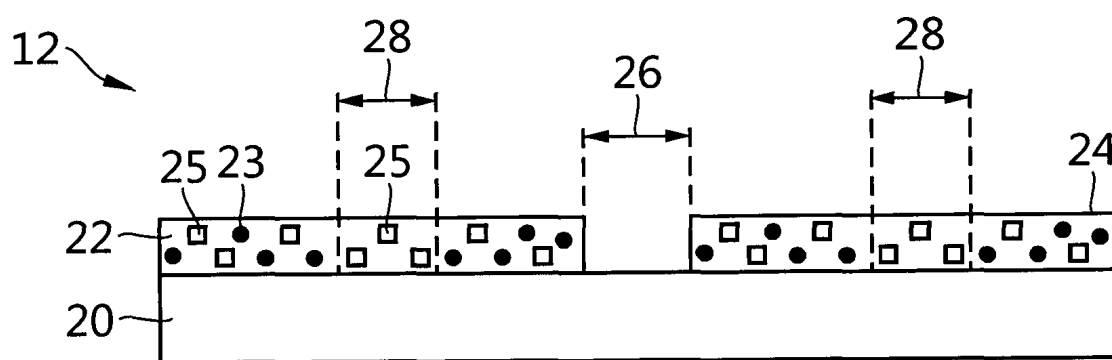


Fig. 2

Publication data including kind & date

DE102013000152	A1	2014-07-10	DE102013000152
WO2014106517	A1	2014-07-10	WO2014106517
EP2941355	A1	2015-11-11	EP2941355
EP2941355	B1	2017-09-06	EP2941355

**Abstract**

(EP2941355)

The invention relates to a method for producing a security element (12) for security papers, value documents, and other data carriers, wherein a substrate (20) is provided with a **laser**-sensitive recording layer (22) at least in some regions, which

recording layer has a visual initial appearance and is composed of an **ink** mixture that comprises at least one **laser**-absorbing mixture component, a first **laser** radiation having first **laser** parameters is applied to the **laser**-sensitive recording layer (22) in a first sub-region (26) in order to produce there a first target appearance that is changed with respect the initial appearance, a second **laser** radiation having second, different **laser** parameters is applied to the **laser**-sensitive recording layer (22) in a second sub-region (28) in order to produce there a second target appearance that is changed with respect to the initial appearance and that is different from the first target appearance, wherein the first **laser** radiation and the second **laser** radiation are produced by means of only one **laser** source (32) and only one imaging optical system, and the first sub-region (26) and the second sub-region (28) are thereby produced in register with each other.

Inventors

REINER HARALD

OTTO DANIELA

DEPTA GEORG

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

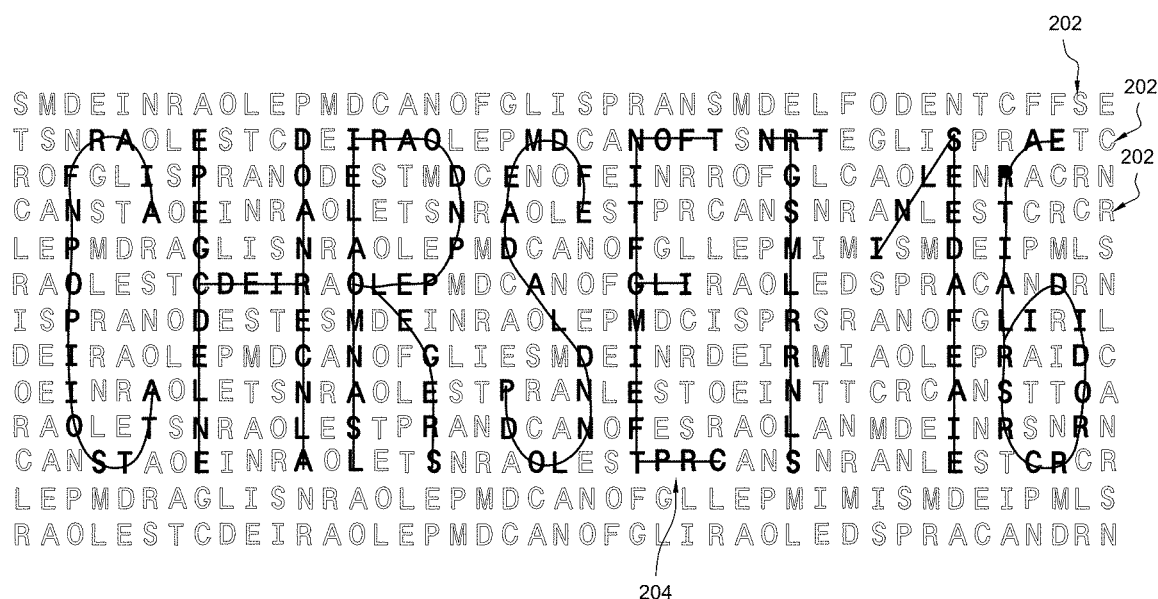
Family 11/200 - FAMPAT - ©Questel

Title

(EP2928699)

Secure **laser** marking personalisation

Images



Publication data including kind & date

EP2740608	A1	2014-06-11	EP2740608
WO2014090797	A1	2014-06-19	WO201490797
EP2928699	A1	2015-10-14	EP2928699
US20170015131	A1	2017-01-19	US20170015131
US9844970	B2	2017-12-19	US9844970
EP2928699	B1	2018-04-11	EP2928699



Abstract

(EP2928699)

The present invention relates to a method (100) for personalizing a document, said document comprising a support comprising printed patterns (201, 202), wherein said method (100) comprises generating at least a **laser** pulse on said support for carbonizing at least a printed pattern.

Inventors

LESUR JEAN-LUC

Latest standardized assignees - inventors removed

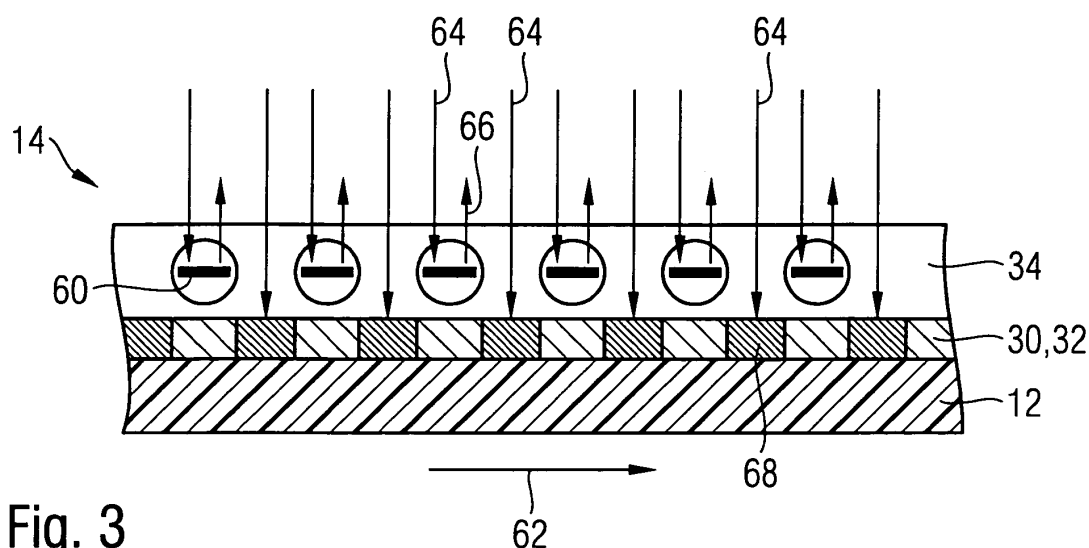
GEMALTO

Family 12/200 - FAMPAT - ©Questel

Title

(EP2768678)

Process for producing an optically variable security element with an **ink** layer based on microcapsules and the thereby resulting security element

Images**Fig. 3****Publication data including kind & date**

WO2013056779	A1	2013-04-25	WO201356779
DE102011116494	A1	2013-04-25	DE102011116494
EP2768678	A1	2014-08-27	EP2768678

**Abstract**

(EP2768678)

The invention relates to a method for producing an optically variable security element (14) having a microcapsule-based **ink** layer (34), and the thus obtained security element, wherein . U) a base layer (30, 32) is applied to a substrate . F) a microcapsule-based **ink** layer (34) is applied to the base layer (30, 32), which contains, in a binding agent, a plurality of microcapsules (36) which respectively have a capsule covering (38), a carrier liquid (40) closed in the capsule cover and a plate-shaped pigment (42; 60; 82) which can be magnetically aligned and which can be essentially freely rotated in the microcapsule (36) and can be reversibly aligned due to the effect of an external magnetic field (62), . M) an external magnetic field (62) is applied in order to align the rotatable pigments (42; 60; 82) in the microcapsules (36) at least in a sub-area of the **ink** layer (34), and . L) at least part (92) of the pigments and/or at least one sub-area (68; 94) of the base layer is modified, by **laser** exposition (64) with a marking **laser**, in the sub-area comprising the aligned pigments (60).

Inventors

BORN SCHLEGL ALEXANDER

MENDEL CHRISTOPH

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

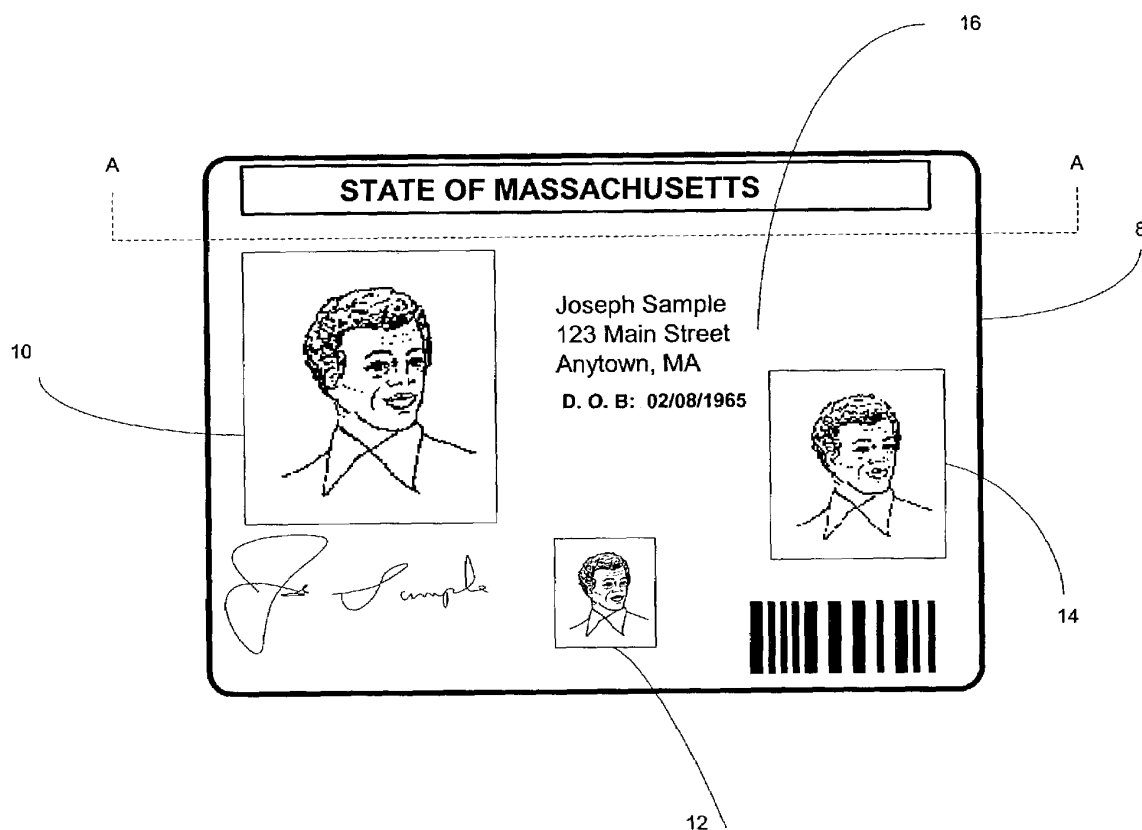
Family 13/200 - FAMPAT - ©Questel

Title

(WO200388144)

Image processing techniques for printing identification cards and documents

Images



Publication data including kind & date

WO03088144	A2	2003-10-23	WO200388144
AU2003221894	A1	2003-10-27	AU2003221894
AU2003221894	A8	2003-10-27	AU2003221894
WO03088144	A3	2004-03-18	WO200388144
US20040074973	A1	2004-04-22	US20040074973
US7815124	B2	2010-10-19	US7815124
US20110123132	A1	2011-05-26	US20110123132
US8833663	B2	2014-09-16	US8833663



Abstract

(WO200388144)

The invention relates to identification documents, and in particular to pre-printing processing covert images, such as UV or IR images, provided on such identification documents. In one implementation, the invention provides a method of processing a digital image that is to be printed on a surface of an identification document as a fluorescing-capable image to improve the quality of the image. Edges or boundaries are detected within the image, the detected edges or boundaries forming an intermediate image. The edges or boundaries within the image are emphasized, and the emphasized image is used for printing the covert image. In some implementations of the invention, a digital watermark is embedded in the covert image.

Inventors

SCHNECK NELSON
DUGGAN CHARLES F
JONES ROBERT
BI DAOSHEN

Latest standardized assignees - inventors removed

L 1 SECURE CREDENTIALING

Family 14/200 - FAMPAT - ©Questel

Title

(EP1014201)

Process for making large-size composite relief printing elements using **laser**-based positioning followed by image-wise exposure using a **laser**

Publication data including kind & date

EP1014201	A2	2000-06-28	EP1014201
DE19859631	A1	2000-07-06	DE19859631
JP2000194140	A	2000-07-14	JP2000194140
EP1014201	A3	2001-05-16	EP1014201
US6352815	B1	2002-03-05	US6352815

**Abstract**

(EP1014201)

Production of large-format composite relief printing plates comprises (a) making alignment marks on a dimensionally-stable base; (b) aligning and fixing photopolymerizable relief printing plate(s) with IR-ablatable layer on the base; (c) inscribing a mask in the IR-ablatable layer with a **laser**; (d) total exposure with actinic light; and (e) washing out unexposed photopolymerizable areas. An Independent claim is also included for a combination of photopolymerizable relief printing plates comprises a dimensionally-stable base, a layer that can be structurized with a **laser** and is insoluble in printing inks and printing plate developers, directly on the base; and photopolymerizable relief printing plate(s) with IR-ablatable layer on this.

Inventors

FEIL MARKUS

WEIDMANN ALBRECHT

TELSER THOMAS DR

Latest standardized assignees - inventors removed

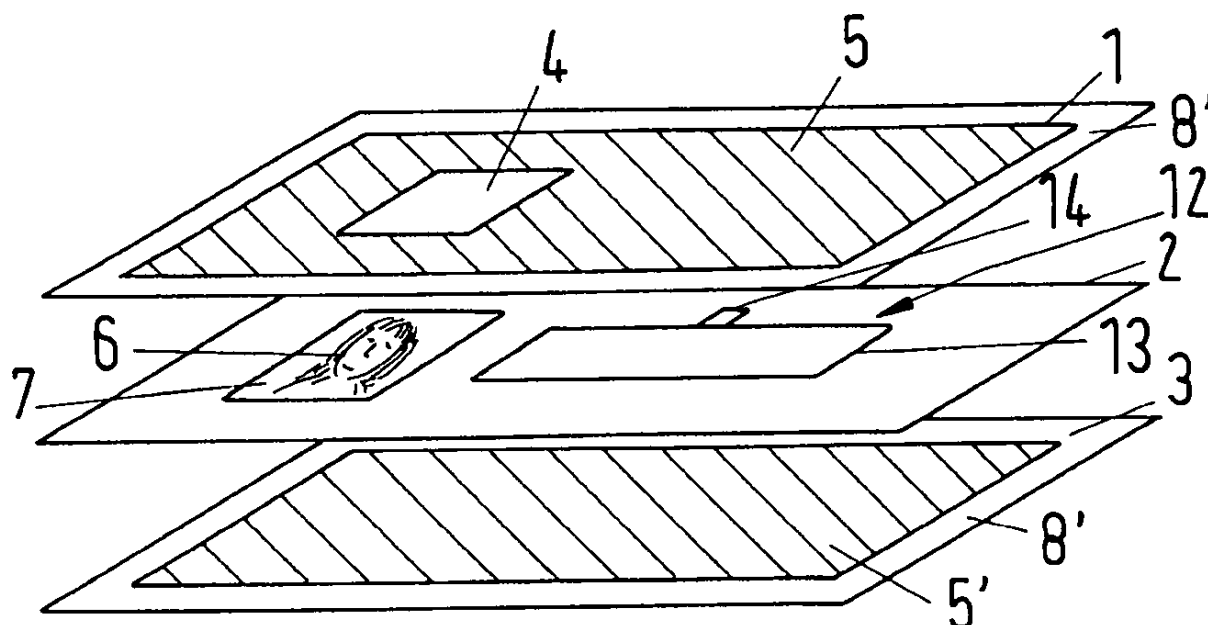
BASF DRUCKSYSTEME

Family 15/200 - FAMPAT - ©Questel

Title

(DE102008012424)

Method for preparing a multi-layer composite and/or individualisation with personalization

Images

Publication data including kind & date

DE102008012424	A1	2009-05-07	DE102008012424
DE102008012423	A1	2009-05-07	DE102008012423
DE102008012422	A1	2009-05-07	DE102008012422
DE102008012419	A1	2009-05-07	DE102008012419

**Abstract**

(DE102008012424)

The polymer structure production process involves splitting the first information (31) into at least two print extracts (36, 37, 38, 39) comprising part of the personalized information, which is printed so that the print extracts are printed onto at least two different substrate layer surfaces, with the extracts one on top of the other in the multilaminar polymer structure. The substrate layers are then collated so that their printed surfaces with the print extracts represent inner surfaces in the stack (18).

(From EP2676803 A1)

Inventors

MUTH OLIVER

PAESCHKE MANFRED

MATHEA ARTHUR

SPRINGMANN EDWARD

LEOPOLD ANDRE

HAGEMANN MICHAEL

FISCHER JOERG

DRESSEL OLAF

PFLUGHOEFFT MALTE

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

Family 16/200 - FAMPAT - ©Questel

Title

(EP1459239)

Covert variable information on id documents and methods of making same

Images



Publication data including kind & date

WO03056500	A1	2003-07-10	WO200356500
CA2471457	A1	2003-07-10	CA2471457
AU2002364255	A1	2003-07-15	AU2002364255
US20030173406	A1	2003-09-18	US20030173406
WO03056500	B1	2003-12-11	WO200356500
EP1459239	A1	2004-09-22	EP1459239
US20050161512	A1	2005-07-28	US20050161512
EP1459239	A4	2006-06-07	EP1459239
US7063264	B2	2006-06-20	US7063264
US20070152067	A1	2007-07-05	US20070152067
US7694887	B2	2010-04-13	US7694887



US7798413	B2	2010-09-21	US7798413
CA2471457	C	2011-08-02	CA2471457
EP1459239	B1	2012-04-04	EP1459239
AT552120	T	2012-04-15	ATE552120

**Abstract**

(EP1459239)

A method for manufacturing an identification document (100) is provided. A substrate is provided that is constructed and arranged to receive printing thereon. A first variable indicium (16) is printed on the substrate, where the first variable indicium is not visible to the human eye in ambient light but is visible to the human eye when viewed using a first type of light.

Inventors

BI DAOSHEN

JONES ROBERT L

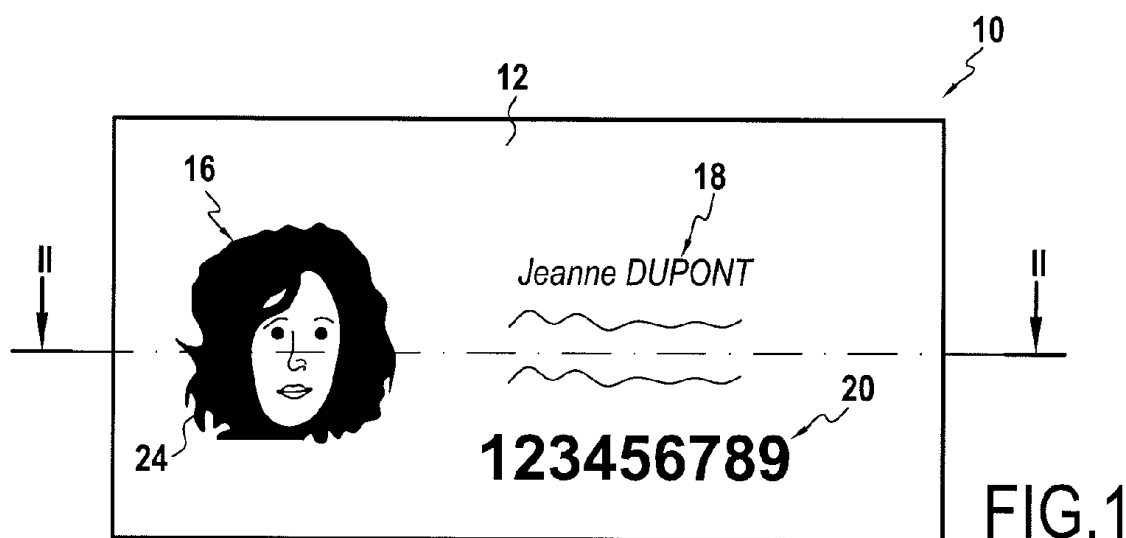
Latest standardized assignees - inventors removed

L 1 SECURE CREDENTIALING

Family 17/200 - FAMPAT - ©Questel

Title

(EP2407314)

Method for producing a pattern on a substrate using security **ink****Images****Publication data including kind & date**

EP2407314	A1	2012-01-18	EP2407314
FR2962684	A1	2012-01-20	FR2962684
FR2962684	B1	2012-08-24	FR2962684
EP2407314	B1	2015-06-17	EP2407314

**Abstract**

(EP2407314)

The method involves marking a layer that is sensitive to **laser** radiation, with a **laser** beam by ablation of the sensitive layer at beam impact points on the sensitive layer for forming a predefined thickness profile such that the profile generates a luminous intensity modulation reproducing a pattern (24) observable through a safety **ink** layer at a predefined wavelength. The safety layer is formed from a material comprising a liquid crystal **ink** e.g. OASIS(RTM: complete line of water based **ink**), optical variable **ink**(RTM: anti-counterfeiting **ink**), or iridescent **ink**. An independent claim is also included for a safety document comprising a support.

Inventors

GILLOT JULIEN

BORDE XAVIER

DEMAIMAY FLORIAN

CHANTREL CHRISTOPHE

Latest standardized assignees - inventors removed

OBERTHUR FIDUCIAIRE

Family 18/200 - FAMPAT - ©Questel

Title

(EP-343310)

Printing **ink** for plastics with enhanced lamination properties, and printing method.**Publication data including kind & date**

EP0343310	A1	1989-11-29	EP-343310
JPH01319577	A	1989-12-25	JP01319577

**Abstract**

(EP-343310)

A generally binderless offset printing **ink** for the printing of plastic cores which are subsequently laminated with plastic sheets to durably enclose the core. Due to the composition of the **ink**, the plastic sheets perfectly adhere everywhere to the core. The fixation of the **ink** takes place during thermal lamination. The printing **ink** is used in the preparation of certain security documents such as credit cards.

Inventors

AMON PHILIPPE

SNEDDON GORDON

BISSET DON

Latest standardized assignees - inventors removed

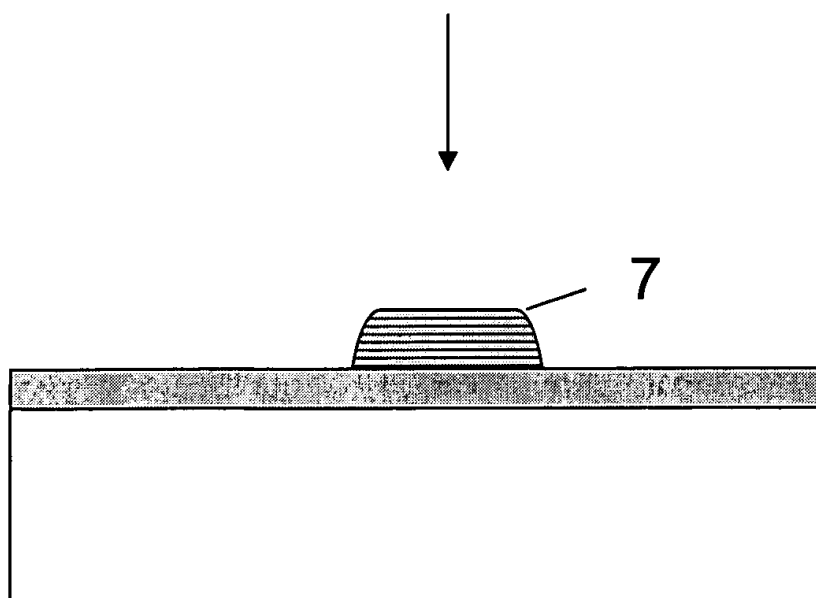
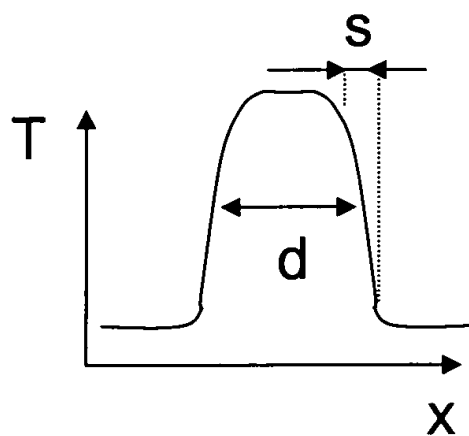
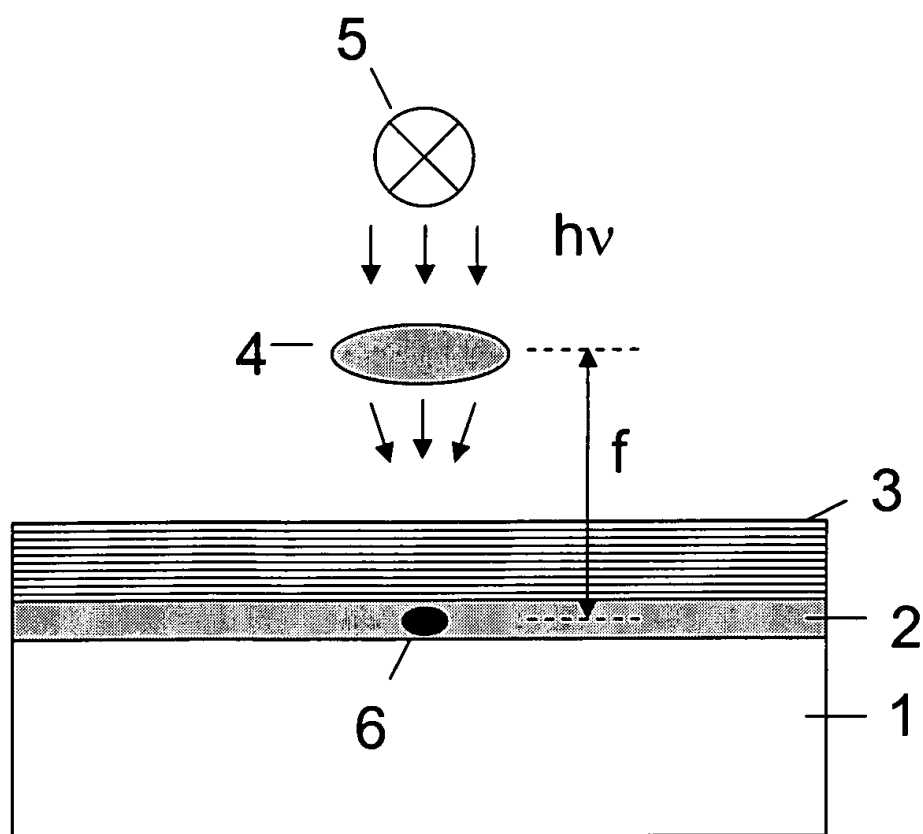
SICPA

Family 19/200 - FAMPAT - ©Questel

Title

(EP2315289)

Laser patterning of devices**Images**



Publication data including kind & date

WO02095805	A2	2002-11-28	WO200295805				
AU2002310593	A1	2002-12-03	AU2002310593				
WO02095805	A3	2003-01-23	WO200295805				
KR20040015717	A	2004-02-19	KR20040015717				
EP1393389	A2	2004-03-03	EP1393389				
CN1520618	A	2004-08-11	CN1520618				
US20040266207	A1	2004-12-30	US20040266207				
JP2005500558	A	2005-01-06	JP2005500558				
CN1292496	C	2006-12-27	CN1292496C				
TWI283011	B	2007-06-21	TWI283011				
US7244669	B2	2007-07-17	US7244669				
JP2009122681	A	2009-06-04	JP2009122681				
KR100979780	B1	2010-09-03	KR100979780				
EP2315289	A2	2011-04-27	EP2315289				
EP2315289	A3	2011-09-28	EP2315289				
JP5222453	B2	2013-03-15	JP5222453				
JP5539646	B2	2014-05-09	JP5539646				
EP1393389	B1	2018-12-05	EP1393389				

Abstract

(EP2315289)

A technique for forming on a substrate an electrical device including at least one patterned layer, the technique comprising selectively exposing material on the substrate to a beam of light so as to modify the physical properties of a first layer and bring about patterning of the first layer.

Inventors

SIRRINGHAUS HENNING

CAIN PAUL ALAN

Latest standardized assignees - inventors removed

FLEXENABLE

Family 20/200 - FAMPAT - ©Questel

Title

(EP2768676)

Optically variable security element with an **ink** layer based on microcapsules**Images**

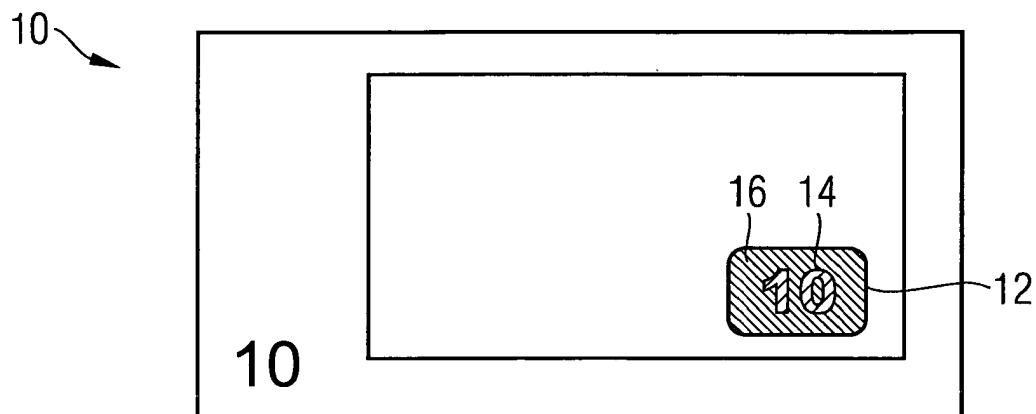


Fig. 1

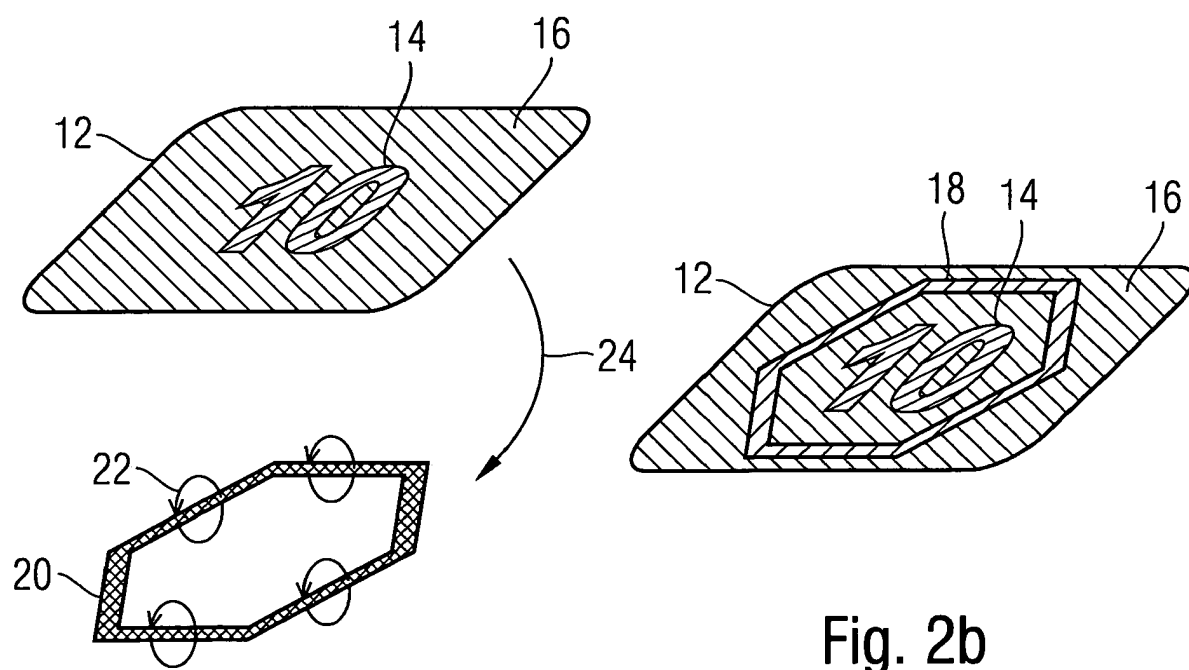


Fig. 2a

Fig. 2b

Publication data including kind & date

WO2013056777	A1	2013-04-25	WO201356777
DE102011116490	A1	2013-04-25	DE102011116490
EP2768676	A1	2014-08-27	EP2768676
EP2768676	B1	2017-06-07	EP2768676

**Abstract**

(EP2768676)

The invention relates to a process for producing an optically variable security element (12) comprising a motif region (14) in the form of patterns, characters or a coding, and a security element. i . D) a printing **ink** which contains, in a binding agent

(38), a plurality of micro-capsules (40) having respectively, a capsule shell (42), a carrier liquid (44) which is enclosed in the capsule shell (42) and a magnetic non-spherical pigment (46) which can be aligned, which can essentially freely rotate in the micro-capsule (40) and can be reversibly aligned by an external magnetic field (50), . A) the printing **ink** is applied to a base (32, 34) in order to form a micro-capsule-based **ink** layer (36), . M) in a sub-area of the **ink** layer (36) containing the motif region (14), an external magnetic field (50) is applied in order to align the rotatable pigments (46) in the micro-capsules (40), and . B) the capsule shells (42) of the micro-capsules (40) are damaged in the motif region (14) such that the carrier fluid (44) emerges from the microcapsules (56) and the pigments remain still in the damaged capsule shells (42, 54).

Inventors

BORNSCHLEGL ALEXANDER

MENGEL CHRISTOPH

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

Family 21/200 - FAMPAT - ©Questel

Title

(EP2465701)

Security element with identification marks

Images

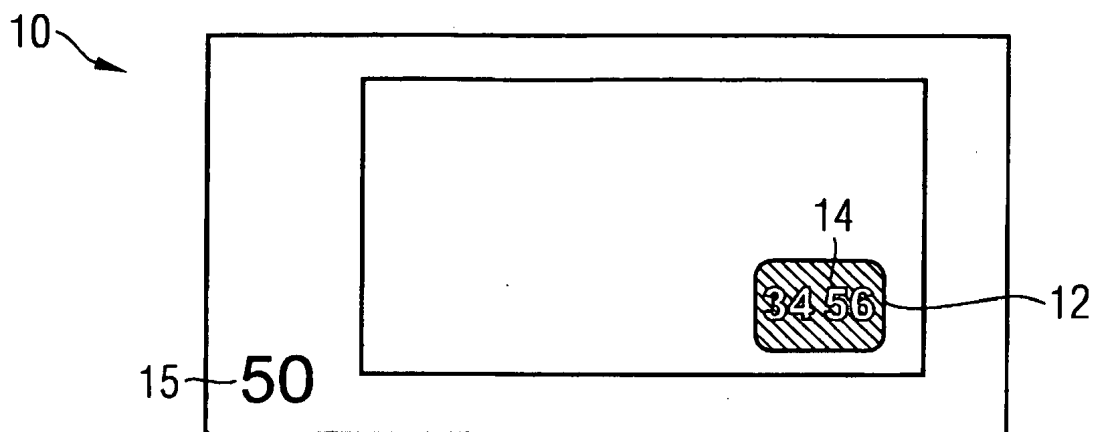


Fig. 1

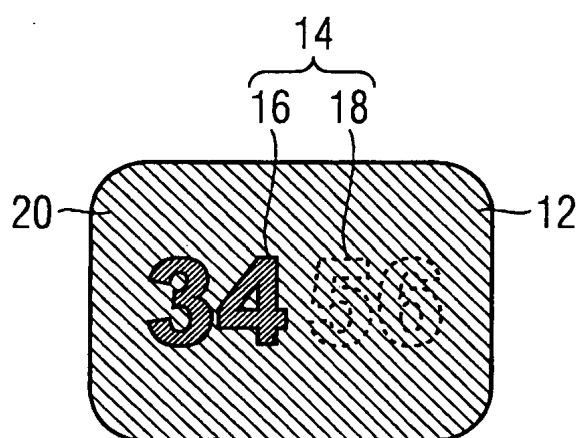


Fig. 2a

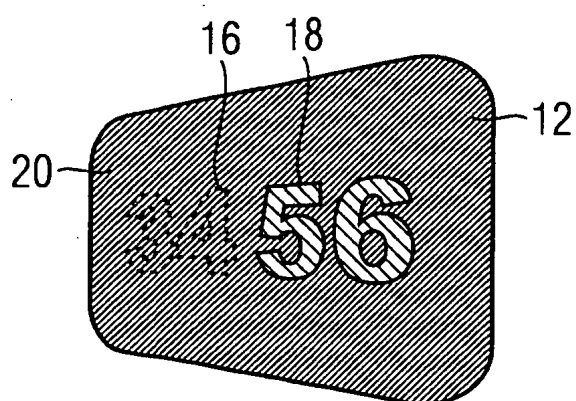


Fig. 2b

Publication data including kind & date

EP2465701	A2	2012-06-20	EP2465701
DE102010054853	A1	2012-06-21	DE102010054853
EP2465701	A3	2013-04-24	EP2465701
EP2465701	B1	2016-04-13	EP2465701
ES2582010	T3	2016-09-08	ES2582010



PL2465701

T3 2016-10-31 PL2465701

Abstract

(EP2465701)

The element (12) has an optically non-variable color layer (32) covered in a covering region of an optically variable effect layer (40) and provided with a partial region (34) with fixed color impression and another partial region (36) with a different color impression. Individualized identification (14) is produced at the covering region and the color layer to display the color impressions in the former partial region. The partial regions are aligned with each other such that variable color impression of the effect layer below a preset viewing angle corresponds to the fixed color impression. The individualized identification is provided by infrared **laser** such as carbon dioxide **laser**, neodymium-doped yttrium aluminum garnet-**laser** or neodymium doped yttrium orthovanadat-**laser**. An independent claim is also included for a method for manufacturing a safety element for securing valuable articles.

Inventors

SCHIFFMANN PETER

OTTO DANIELA DR

DEPTA GEORG DR

Latest standardized assignees - inventors removed

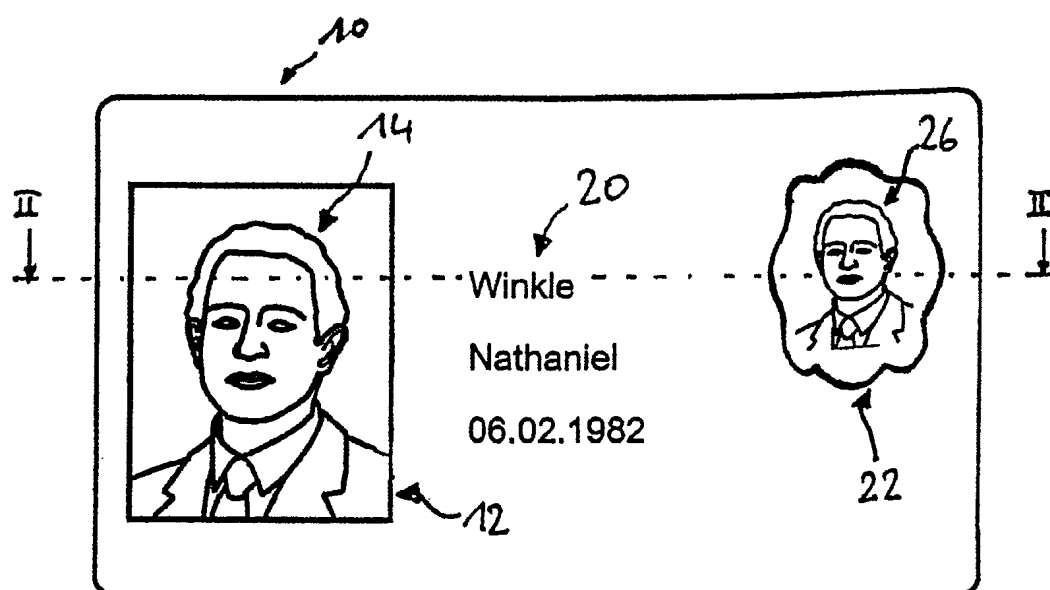
GIESECKE & DEVRIENT

Family 22/200 - FAMPAT - ©Questel

Title

(EP2459389)

Identification document having a personalized visual identifier and method for production thereof

Images**Publication data including kind & date**

WO2011012281	A2	2011-02-03	WO201112281
CA2769594	A1	2011-02-03	CA2769594
DE102009035413	A1	2011-02-03	DE102009035413
WO2011012281	A3	2011-07-21	WO201112281
US20120126525	A1	2012-05-24	US20120126525
EP2459389	A2	2012-06-06	EP2459389
EP2459389	B1	2014-01-01	EP2459389



ES2448640	T3	2014-03-14	ES2448640				
US8998264	B2	2015-04-07	US8998264				
CA2769594	C	2015-09-29	CA2769594				
EP2459389	B2	2017-12-13	EP2459389				
ES2448640	T5	2018-05-22	ES2448640				
PL2459389	T5	2018-05-30	PL2459389				

Abstract

(EP2459389)

The invention relates to an identification document (10) comprising a personalized first visual identifier (14) that is arranged in a first region (12) of the identification document (10), wherein the first region (12) is configured such that upon **laser** irradiation thereof, localized instances of darkening of the visual appearance of the identification document (10) are created, resulting from material transformations. The identification document (10) furthermore has a second visual identifier (26) that creates the visual appearance of a copy of the first visual identifier (14) and that is arranged in a second region (22) of the identification document (10), wherein the second region (22) is configured such that upon **laser** irradiation thereof, localized instances of darkening of the visual appearance of the identification document (10) are created, resulting from material transformations.

Inventors

DÖRFLER WALTER

ASSFALG ALFONS

Latest standardized assignees - inventors removed

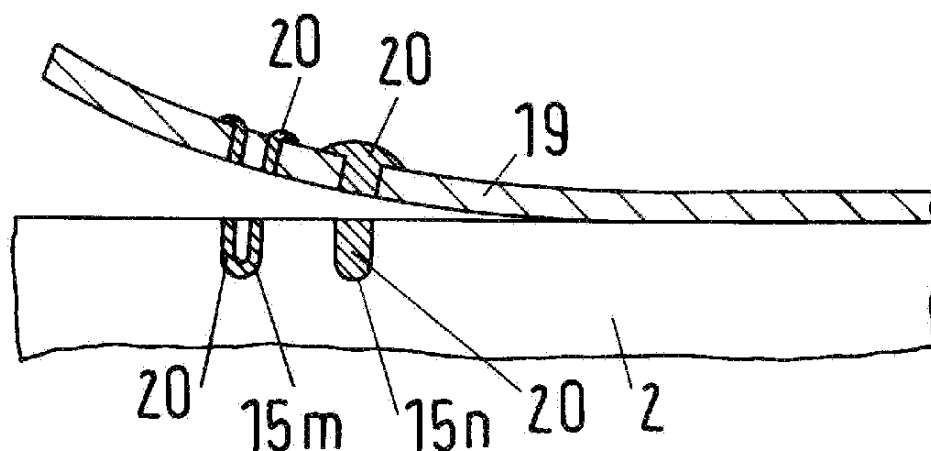
GIESECKE & DEVRIENT MOBILE SECURITY

Family 23/200 - FAMPAT - ©Questel

Title

(EP2585309)

Method and device for producing a security document comprising colored perforations

Images**Fig.8****Publication data including kind & date**

DE102010025044	A1	2011-12-22	DE102010025044				
WO2011161114	A1	2011-12-29	WO2011161114				
EP2585309	A1	2013-05-01	EP2585309				

CN103118876	A	2013-05-22	CN103118876				
EP2585309	B1	2014-10-29	EP2585309				
DE102010025044	B4	2016-01-07	DE102010025044				
CN103118876	B	2017-02-08	CN103118876B				

Abstract

(EP2585309)

The invention relates to a method and device (30) for producing a security document (1) and to a security document (1). The invention is based on the basic concept of introducing holes (15) on the surface (5) of a substrate (2) of a security document (1) and to apply an **ink** (20) in said holes. Said **ink** is preferably designed such that it comprises colorants (53) which diffuse into the substrate (2). The **ink** (20) applied by printing is introduced deeper into the document than an **ink** (20) that is printed merely onto the surface (5) and is thereby better protected from tampering and/or damage during usage.

Inventors

MATHEA ARTHUR

PAESCHKE MANFRED

PEINZE FRANZISKA

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

Family 24/200 - FAMPAT - ©Questel

Title

(EP1747905)

Security feature and method for producing it

Images

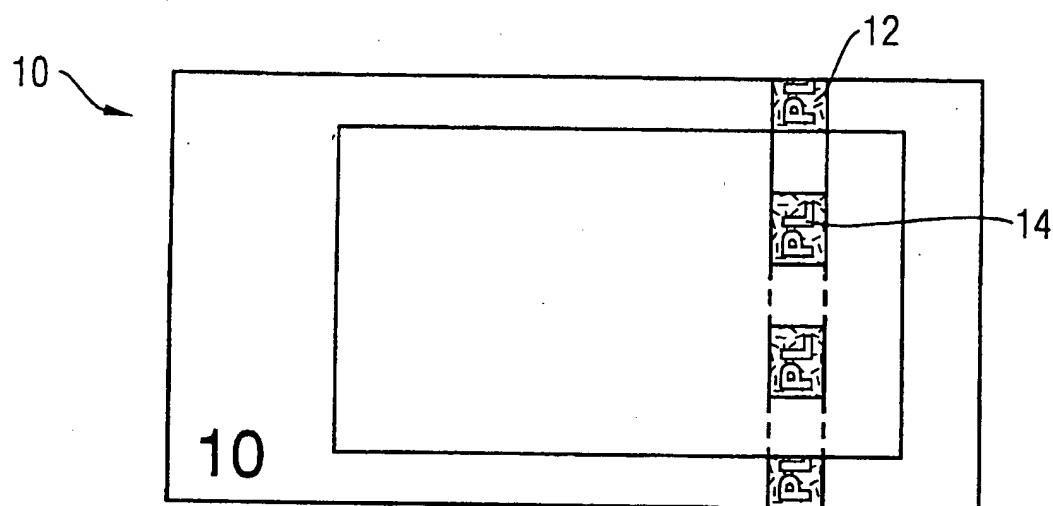


Fig. 1

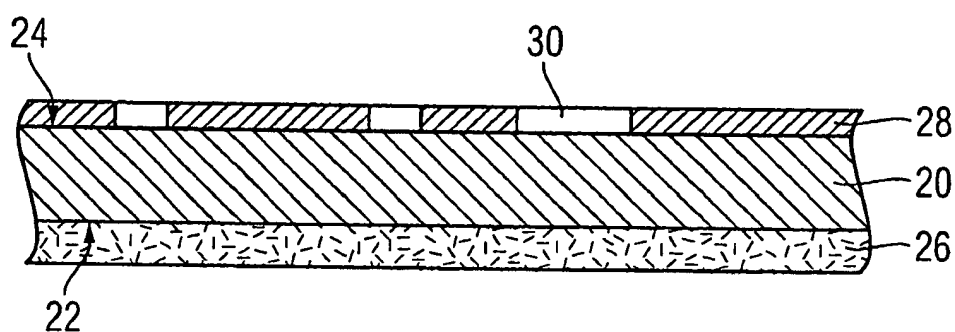


Fig. 2

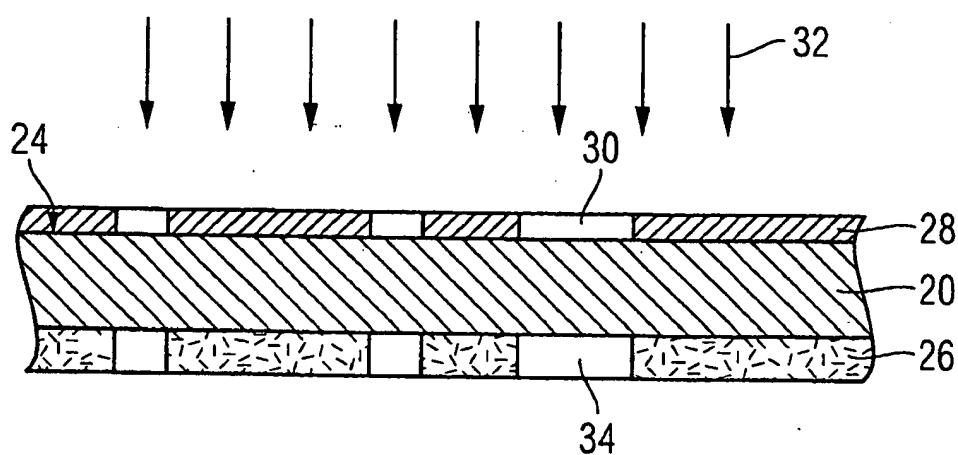


Fig. 3

Publication data including kind & date

EP1747905	A2	2007-01-31	EP1747905
DE102005034671	A1	2007-02-01	DE102005034671
EP1747905	A3	2014-07-09	EP1747905
EP1747905	B1	2016-05-04	EP1747905



Abstract

(EP1747905)

The production process is for a document having a carrier layer (20) and a covering layer (26) Some regions (34) are free of coating. A **laser** wavelength it identified to bring in the coated regions. The carrier layer with opposite first and second (24) main surfaces is prepared. The absorbent covering layer (26) is applied, followed by a mask (28) defining the coating-free regions. **Laser** radiation is then applied.

Inventors

GREGAREK ANDRÉ

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

Family 25/200 - FAMPAT - ©Questel

Title

(EP2444844)

Pattern transfer method and apparatus therefor

Images

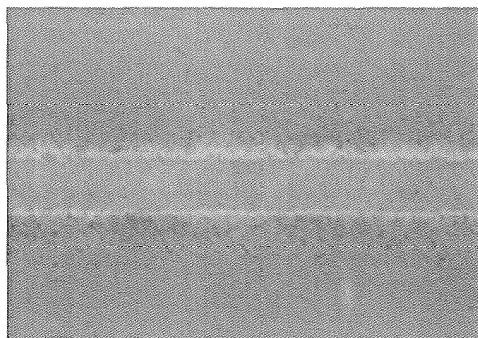


FIG. 1

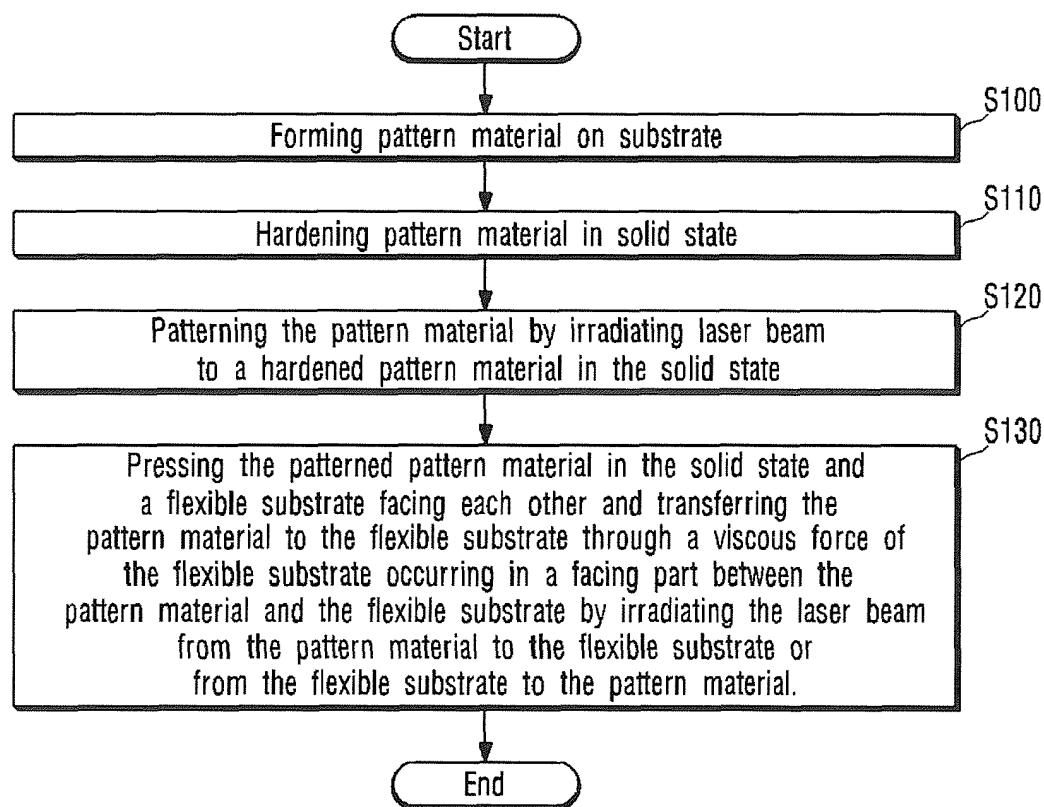


FIG. 2

Publication data including kind & date

EP2444844	A2	2012-04-25	EP2444844
EP2444844	A3	2012-05-16	EP2444844
CN102452239	A	2012-05-16	CN102452239
JP2012094855	A	2012-05-17	JP2012094855
JP5341966	B2	2013-08-16	JP5341966



Abstract

(EP2444844)

The present invention relates to methods and apparatuses for transferring pattern, a flexible display panel, a flexible solar cell, an electronic book, a thin film transistor, an electromagnetic-shielding sheet, and a flexible printed circuit board applying thereof. A pattern transfer method related to the present invention comprises: a first step of forming a pattern material on a substrate; a second step of hardening the pattern material in the solid state; a third step of patterning the pattern material by irradiating a **laser** beam to the hardened pattern material in the solid state; and a fourth step of pressing the patterned pattern material in the solid state and a flexible substrate facing each other and transferring the pattern material to the flexible substrate by a viscous force of the flexible substrate occurring in a facing part between the pattern material and the flexible substrate by irradiating the **laser** beam from the pattern material to the flexible substrate or from the flexible substrate to the pattern material.

Inventors

YANG MINYANG

KANG BONGCHUL

Latest standardized assignees - inventors removed

KOREA ADVANCED INSTITUTE OF SCIENCE & TECHNOLOGY

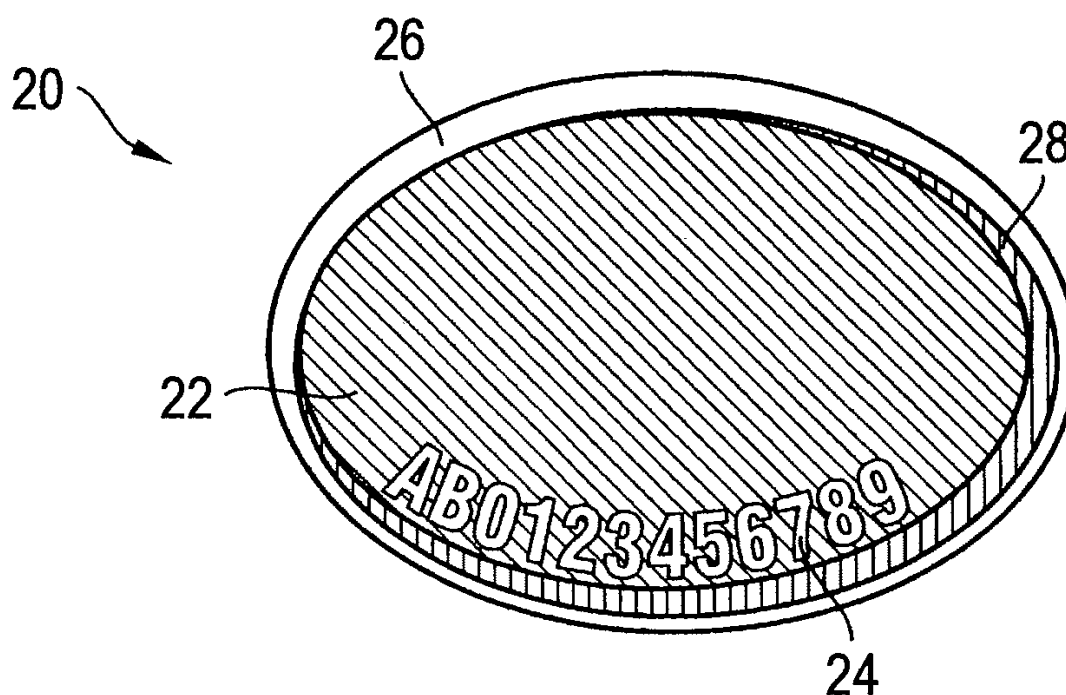
Family 26/200 - FAMPAT - ©Questel

Title

(EP1776674)

Data carrier with security element and method for the production thereof

Images



Publication data including kind & date

WO2006015733	A1	2006-02-16	WO200615733
CA2573414	A1	2006-02-16	CA2573414
DE102004038542	A1	2006-02-23	DE102004038542
EP1776674	A1	2007-04-25	EP1776674
CN1993714	A	2007-07-04	CN1993714
IN0113/KOLNP/2007	A	2007-08-31	IN2007KN00113
US20070274559	A1	2007-11-29	US20070274559
RU2007107481	A	2008-09-20	RU2007107481
RU2384884	C2	2010-03-20	RU2384884



[US8251404](#)

B2 2012-08-28 US8251404

[CN1993714](#)

B 2012-11-21 CN1993714B

[EP1776674](#)

B1 2015-03-18 EP1776674

**Abstract**

(EP1776674)

The invention relates to a data carrier, in particular a value document such as a banknote, identity card and the like comprising a security element (20) provided with a printed image (22) and a **laser** marking (24) at least partially overlapping said printed image (22). Said invention is characterised in that the security element (20) comprises a **laser** modification area (26) which at least partially overlaps the printed image (22), is registered for the **laser** marking (24) and the visual appearance of the printed image (22) is modified under effect of a **laser** beam in the area (28) of said **laser** modification area (26) overlapping the printed image (22).

Inventors

DEPTA GEORG

MAYER KARLHEINZ

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

Family 27/200 - FAMPAT - ©Questel

Title

(EP2130682)

Method and device for producing a personalisation document and personalisation document

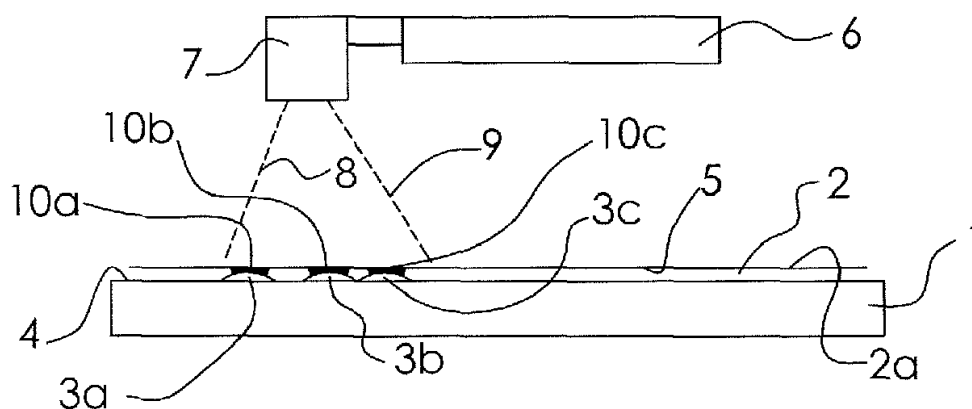
Images

Fig. 2

Publication data including kind & date[EP2130682](#)

A1 2009-12-09 EP2130682

[DE102008027162](#)

A1 2009-12-10 DE102008027162

**Abstract**

(EP2130682)

The method involves printing personalization data on a surface (4) of a substrate (1) by a light-absorbing printing **ink** (3a-3c) for producing a partially produced surface. A light-transparent foil (2) is applied on the printed surface by a laminating process for producing a laminated surface (2a). Parts of the laminated surface are irradiated by **laser** beams (8, 9), where light wavelength of the beams corresponds to a light wavelength absorbed by the printing **ink**. An energy value of the **laser** beams is adjusted such that partial absorption of the **laser** beam occurs. An independent claim is also included for a device for performing a method for manufacturing a personalization document i.e. data pages, for a passport or smartcard.

Inventors

WALTHER RONNY

WANJEK MICHAEL

Latest standardized assignees - inventors removed

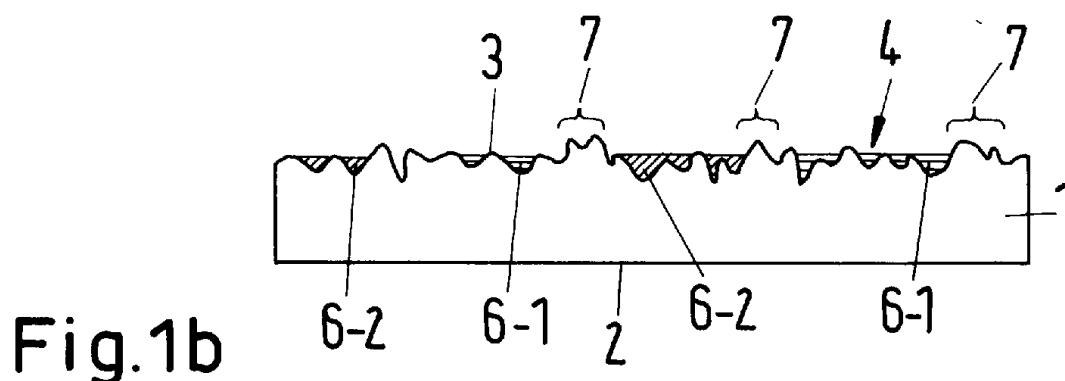
MUEHLBAUER

Family 28/200 - FAMPAT - ©Questel

Title

(EP2611613)

Method for producing a security document with microporous laminatable printlayer, and such a document

Images**Publication data including kind & date**

DE102010035890	A1	2012-03-01	DE102010035890
WO2012028451	A2	2012-03-08	WO201228451
WO2012028451	A3	2012-11-01	WO201228451
EP2611613	A2	2013-07-10	EP2611613
EP2611613	B1	2015-03-04	EP2611613

**Abstract**

(EP2611613)

The invention relates to a method for producing a security document (20), and to a security document (20). The method comprises the following steps: providing and/or producing at least one film (1) composed of a plastics material; areally printing at least one region of at least one surface (3) of the at least one film (1) using **ink** (6, 6-1, 6-2); wherein the at least one film (1) is provided and/or produced such that the at least one surface (3) acquires and/or has cavities (5) for taking up the **ink** (6, 6-1, 6-2). This yields a security document (20) comprising a document body, which comprises at least one layer composed of a plastics material produced from a film (1) and a printing with an **ink** (6, 6-1, 6-2) applied to at least one surface (3) of the film (1) forming the at least one layer, wherein the printed **ink** (6, 6-1, 6-2) is substantially arranged in cavities (5) formed in the at least one surface (3) of the film (1) forming the at least one layer.

Inventors

KRÜGER PER
 MOMBRÉE ALEXANDER
 SEIDEL RAINER
 KNEBEL MICHAEL
 EHREKE JENS
 DITTRICH HARALD
 GUTMANN ROLAND

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

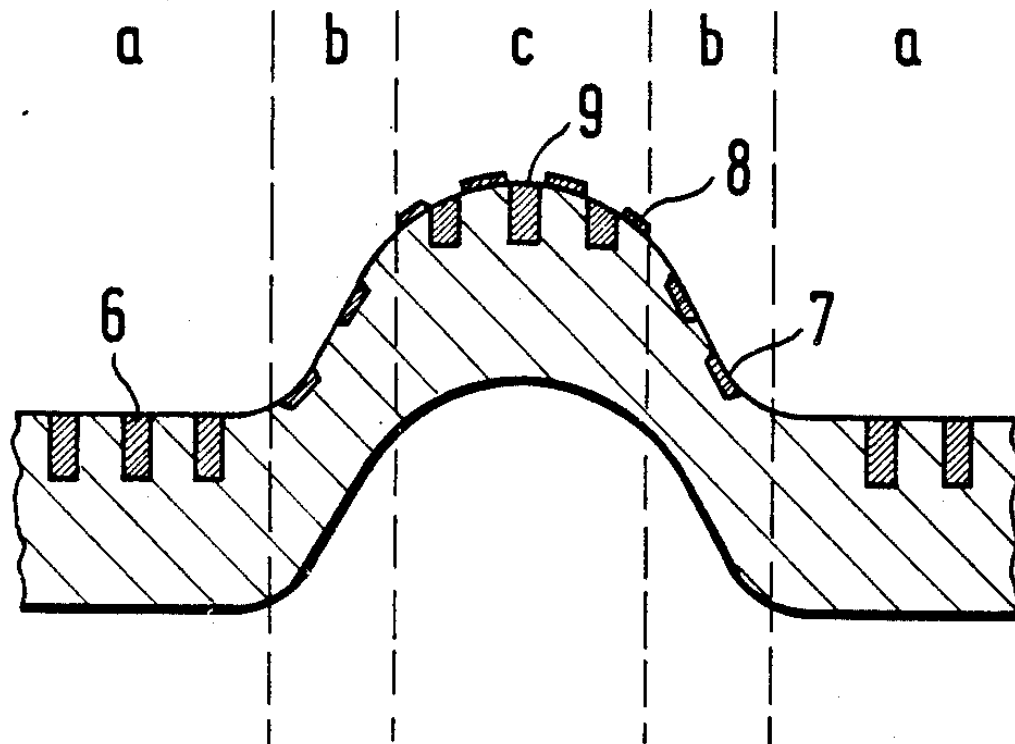
Family 29/200 - FAMPAT - ©Questel

Title

(EP-123163)

Identity card and method for its manufacture

Images



Publication data including kind & date

DE3314327	C1	1984-07-26	DE3314327
EP0123163	A2	1984-10-31	EP-123163
JPS59202580	A	1984-11-16	JP59202580
ES531718	A0	1984-12-16	ES-531718
ES8501679	A1	1984-12-16	ES8501679
EP0123163	A3	1985-11-27	EP-123163
US4597593	A	1986-07-01	US4597593
EP0123163	B1	1988-03-23	EP-123163
AT33109	T	1988-04-15	ATE033109
DE3470015	D1	1988-04-28	DE3470015
US4748452	A	1988-05-31	US4748452
JPH051518	B2	1993-01-08	JP93001518
JP1794838	C	1993-10-28	JP1794838



Abstract

(EP-123163)

An identification card with high-embossed data, in which the high-embossed data are superimposed by a security pattern which is inscribed in the identification card by means of a **laser** beam recorder. The security pattern may be present, for example, only on the high-embossed data themselves or else cover a larger area of the card. Attempted back-embossing of the high-embossed data is immediately recognizable due to distortion of the security pattern.

(From US4597593 A)

Inventors

MAURER, THOMAS

Latest standardized assignees - inventors removed

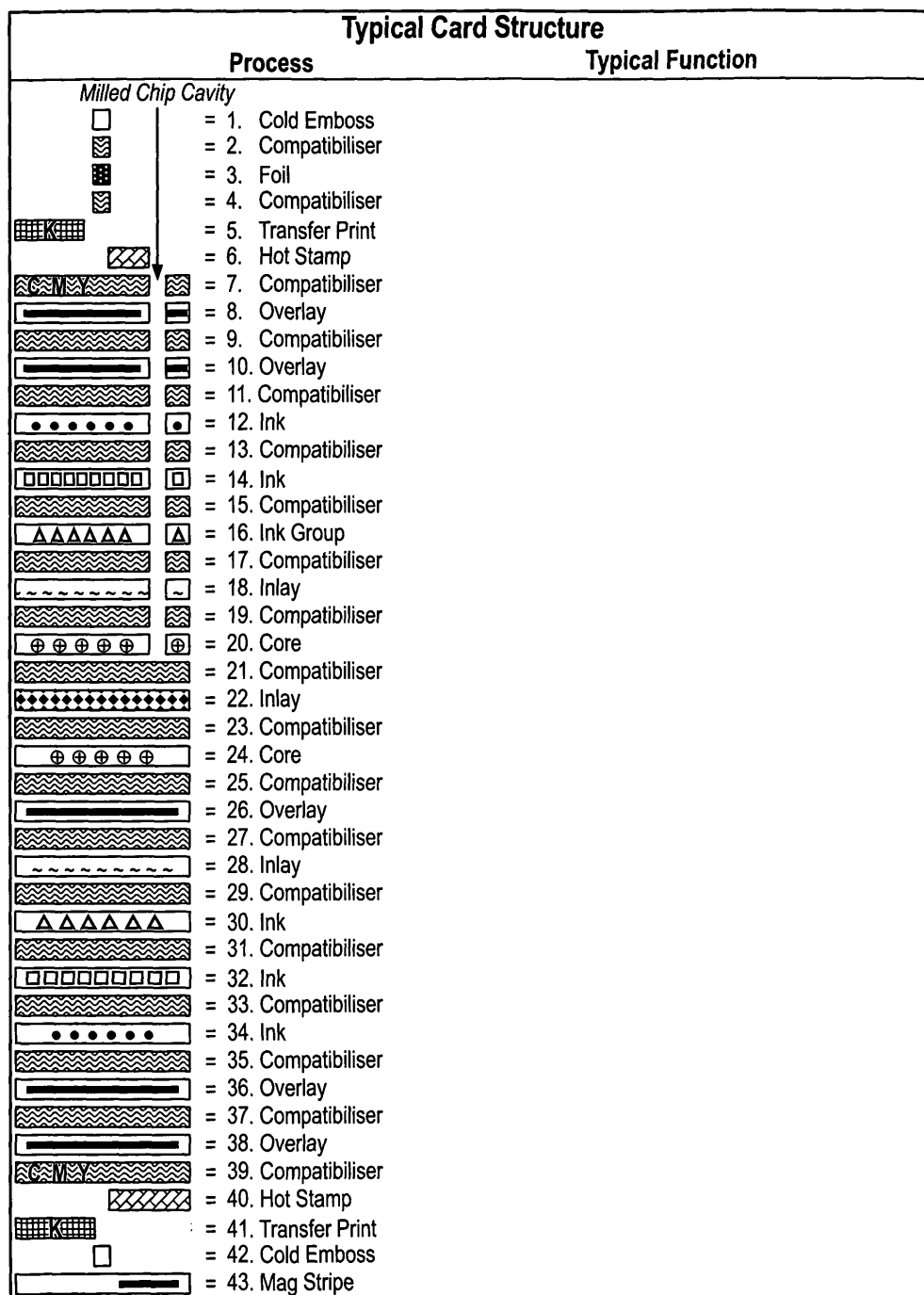
GAO GES AUTOMATION ORGANIZATION

Family 30/200 - FAMPAT - ©Questel

Title

(EP2084014)

Laminated identification document

Images**Publication data including kind & date**

US20080106002	A1	2008-05-08	US20080106002
WO2008057495	A2	2008-05-15	WO200857495
CA2668820	A1	2008-05-15	CA2668820
AU2007317875	A1	2008-05-15	AU2007317875
WO2008057495	A3	2008-09-18	WO200857495
WO2008057495	A9	2008-11-06	WO200857495



IN0874/MUMNP/2009	A	2009-05-22	IN2009MN00874				
EP2084014	A2	2009-08-05	EP2084014				
KR20090088393	A	2009-08-19	KR20090088393				
CN101573242	A	2009-11-04	CN101573242				
EP2084014	A4	2011-06-22	EP2084014				
US8304061	B2	2012-11-06	US8304061				
US20130009347	A1	2013-01-10	US20130009347				
CN101573242	B	2013-05-22	CN101573242B				
US8551387	B2	2013-10-08	US8551387				
BRPI0718653	A2	2014-03-04	BR200718653				
AU2007317875	B2	2014-03-06	AU2007317875				
HK1133234	A1	2014-03-14	HK1133234				
KR101489008	B1	2015-02-04	KR101489008				
IN270317	B	2015-12-11	IN-270317				
CA2668820	C	2016-05-24	CA2668820				
IN3487/MUMNP/2015	A	2016-07-15	IN2015MN03487				
EP2084014	B1	2017-11-22	EP2084014				

Abstract

(EP2084014)

A laminated identification document having a plurality of laminate layers and an identification image thereon. The document has a core laminate layer having an upper surface and lower surface, at least one surface of which is printed with a dot matrix pattern and at least one visually opaque or reflective laminate layer bonded to and overlaying the printed surface. Upon pitting the laminate layer portions, the dot matrix pattern printed on the core laminate is exposed to thereby form the identifying image. A **laser** markable laminated identification document having a plurality of laminate layers wherein a compatibilising layer is bonded to adjoining laminate layers, the compatibilising layer includes an imaging material that can be **laser** marked. A laminated identification document having a plurality of laminate layers and an identification image thereon, wherein at least one laminate layer is a compatibilising layer.

Inventors

LIPKIN ANATOLY

PERSINKO MARK M

Latest standardized assignees - inventors removed

FELDMAN JOSEF

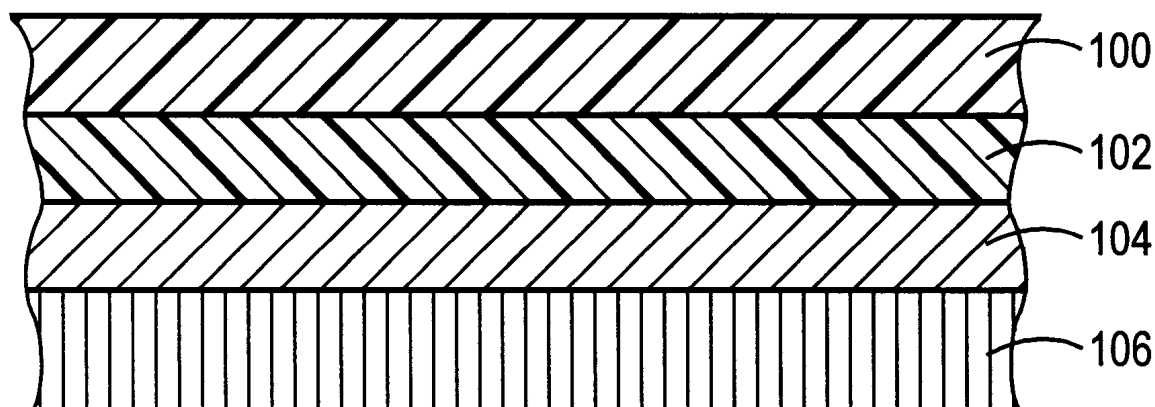
Family 31/200 - FAMPAT - ©Questel

Title

(EP1088653)

Infrared **laser**-imageable lithographic printing members and methods of preparing and imaging such printing members

Images



Publication data including kind & date

US6186067	B1	2001-02-13	US6186067				
CA2321394	A1	2001-03-30	CA2321394				
EP1088653	A2	2001-04-04	EP1088653				
AU6240600	A	2001-04-12	AU200062406				
KR20010030535	A	2001-04-16	KR20010030535				
CN1299989	A	2001-06-20	CN1299989				
JP2001296669	A	2001-10-26	JP2001296669				
EP1088653	A3	2002-01-30	EP1088653				
AU750729	B2	2002-07-25	AU-750729				
US6490975	B1	2002-12-10	US6490975				
TW514588	B	2002-12-21	TW-514588				
JP3492616	B2	2004-02-03	JP3492616				
KR100446408	B1	2004-09-01	KR100446408				
CN1182958	C	2005-01-05	CN1182958C				
EP1088653	B1	2005-11-23	EP1088653				
DE60024190	D1	2005-12-29	DE60024190				
DE60024190	T2	2006-08-03	DE60024190				
CA2321394	C	2006-09-05	CA2321394				

Abstract

(EP1088653)

Provided are methods of imaging a wet positive working lithographic printing member comprising the steps of providing a positive working printing member comprising a substrate (106), a hydrophilic layer (104), an infrared-absorbing layer, and, optionally, an **ink**-accepting surface layer (102); exposing the printing member to infrared layer imaging in an imagewise pattern removing by ablation greater than 10% by weight, and most preferably none of the infrared-absorbing layer and optional **ink**-accepting surface layer; and removing with water the **laser**-exposed areas of the infrared-absorbing layer and optional **ink**-accepting surface layer to reveal the underlying hydrophilic layer. These methods are advantageous in reducing airborne debris and vapors during **laser** imaging, in increasing the speed of **laser** imaging, and in providing excellent cleanability and image quality. The printing member may further comprise a primer layer underlying the infrared-absorbing layer with an adhesion-promoting agent present in the primer layer. Also provided are methods of preparing a wet lithographic printing member and wet positive working lithographic printing members prepared according to the methods of this invention. <IMAGE>

Inventors

RORKE THOMAS P

D AMATO RICHARD J

DUNLEY TIMOTHY J

Latest standardized assignees - inventors removed

MARK ANDY

MAI CAPITAL HOLDINGS

Family 32/200 - FAMPAT - ©Questel

Title

(EP1030784)

Lithographic printing plates for use with **laser** imaging apparatus**Images**

RORKE THOMAS P

D AMATO RICHARD J

Latest standardized assignees - inventors removed

MARK ANDY

MAI CAPITAL HOLDINGS

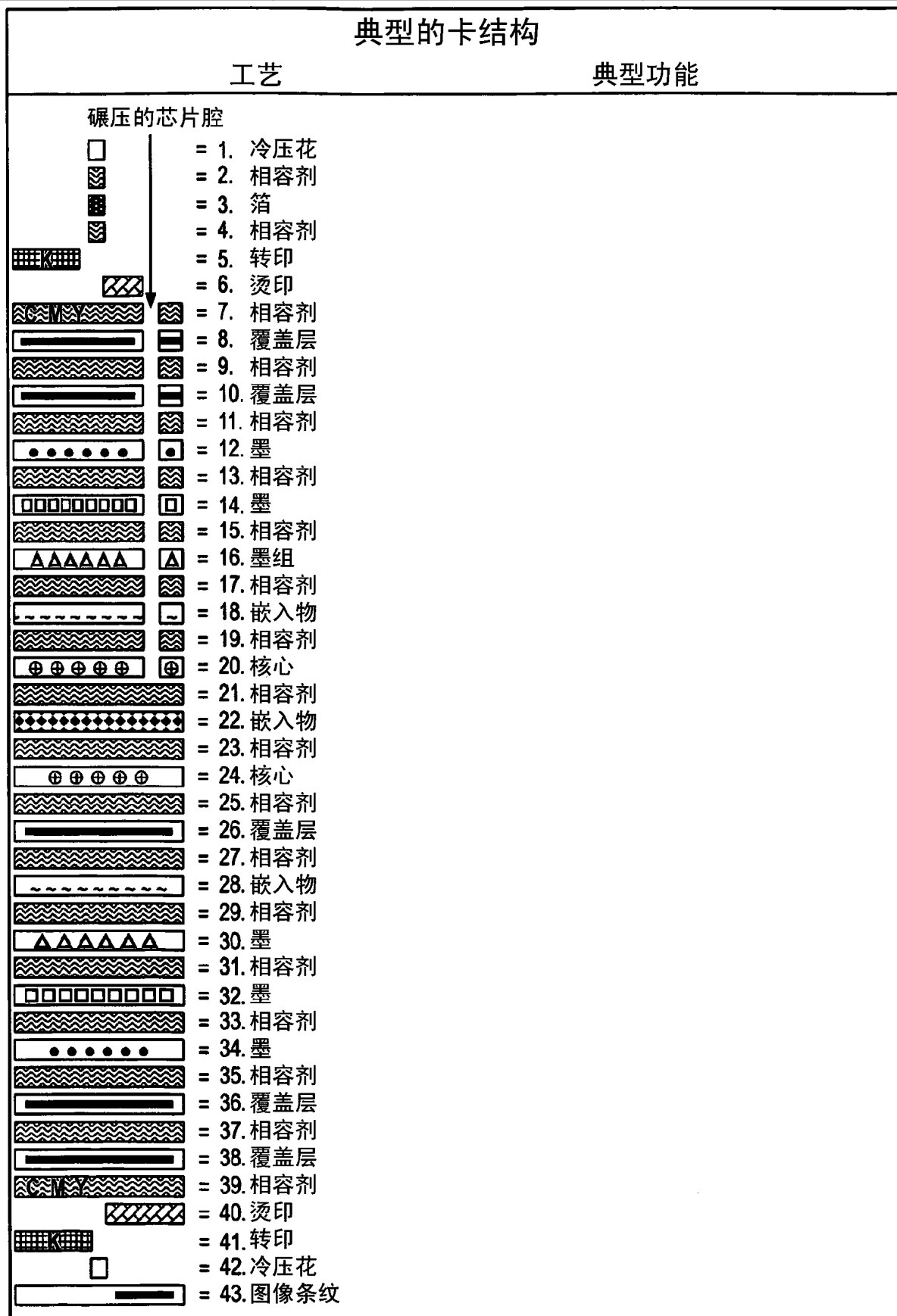
Family 33/200 - FAMPAT - ©Questel

Title

(CN103342032)

Laminated identification document

Images



Publication data including kind & date

CN103342032	A	2013-10-09	CN103342032
CN103342032	B	2016-01-06	CN103342032B



Abstract

(CN103342032B)

A laminated identification document having a plurality of laminate layers and an identification image thereon. The document has a core laminate layer having an upper surface and lower surface, at least one surface of which is printed with a dot

matrix pattern and at least one visually opaque or reflective laminate layer bonded to and overlaying the printed surface. Upon pitting the laminate layer portions, the dot matrix pattern printed on the core laminate is exposed to thereby form the identifying image. A **laser** markable laminated identification document having a plurality of laminate layers wherein a compatibilising layer is bonded to adjoining laminate layers, the compatibilising layer includes an imaging material that can be **laser** marked. A laminated identification document having a plurality of laminate layers and an identification image thereon, wherein at least one laminate layer is a compatibilising layer.

Inventors

JOSEF FELDMAN

ANATOLY LIPKIN

MARK M PERSINKO

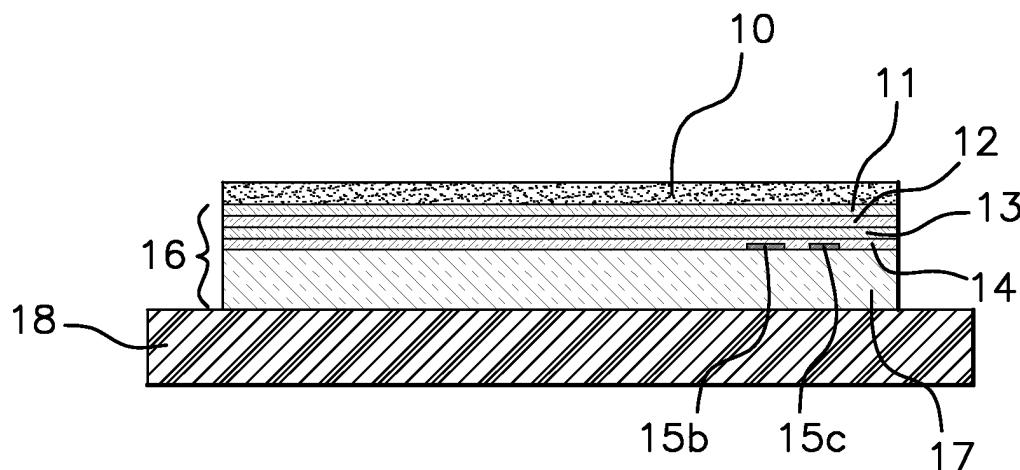
Family 34/200 - FAMPAT - ©Questel

Title

(EP3045321)

Method for manufacturing a card and card comprising at least one thermochromic pattern

Images



Publication data including kind & date

FR3005436	A1	2014-11-14	FR3005436
CA2910744	A1	2014-11-20	CA2910744
CA2910742	A1	2014-11-20	CA2910742
WO2014184482	A1	2014-11-20	WO2014184482
WO2014184481	A1	2014-11-20	WO2014184481
FR3005436	B1	2016-01-01	FR3005436
CN105283320	A	2016-01-27	CN105283320
CN105324445	A	2016-02-10	CN105324445
EP2997097	A1	2016-03-23	EP2997097
EP2996883	A1	2016-03-23	EP2996883
MA38651	A1	2016-03-31	MA--38651
US20160089920	A1	2016-03-31	US20160089920
US20160089923	A1	2016-03-31	US20160089923
MA38652	A1	2016-06-30	MA--38652
IN3258/MUMNP/2015	A	2016-07-08	IN2015MN03258
IN3257/MUMNP/2015	A	2016-07-08	IN2015MN03257



EP3045321	A1	2016-07-20	EP3045321				
MA38651	B1	2016-10-31	MA--38651				
EP2997097	B1	2017-01-25	EP2997097				
MA38652	B1	2017-01-31	MA--38652				
CN105283320	B	2017-05-17	CN105283320B				
EP2996883	B1	2017-06-28	EP2996883				
US9744789	B2	2017-08-29	US9744789				
EP3045321	B1	2017-10-18	EP3045321				
CN105324445	B	2018-06-01	CN105324445B				
US10239336	B2	2019-03-26	US10239336				

Abstract

(EP3045321)

A thermochromic **ink** composition includes, in a liquid medium, known as solvent, a dispersion of thermochromic microcapsules incorporating at least one leuco-dye and a thermoplastic binder selected from the group containing polyacrylic polyesters, polyurethanes and copolymers thereof. The composition is characterized in that the solvent is aprotic. A method for producing a card and such a card incorporating at least one thermochromic pattern produced with a thermochromic **ink** composition are also described.

(From US9744789 B2)

Inventors

PHILIPPE ERIC

BES LAURENCE

Latest standardized assignees - inventors removed

FASVER

Family 35/200 - FAMPAT - ©Questel

Title

(EP-716934)

Laser ablative recording element**Publication data including kind & date**

EP0716934	A1	1996-06-19	EP-716934			
JPH08216513	A	1996-08-27	JP08216513			
US5569568	A	1996-10-29	US5569568			
EP0716934	B1	1999-04-21	EP-716934			
DE69509199	D1	1999-05-27	DE69509199			
DE69509199	T2	1999-10-14	DE69509199			

Abstract

(EP-716934)

A **laser** dye-ablative recording element having high blue and ultraviolet contrast comprising a support having thereon a dye layer comprising a blue-absorbing dye, an ultraviolet-absorbing dye and an image dye dispersed in a polymeric binder, the dye layer having an infrared-absorbing material associated therewith to absorb at a given wavelength of the **laser** used to expose the element, the image dye being substantially transparent in the infrared region of the electromagnetic spectrum and absorbing in the region of from about 450 to about 700 nm and not having substantial absorption at the wavelength of the **laser** used to expose the element, the element having: a) an optical density of greater than about 2.0 in each of the ultraviolet and blue regions of the spectrum; and b) a sum of optical densities in the red and green regions of the spectrum of at least about 1 and up to about 3.0.

Inventors

DEBOER CHARLES DAVID

Latest standardized assignees - inventors removed

KODAK

Family 36/200 - FAMPAT - ©Questel

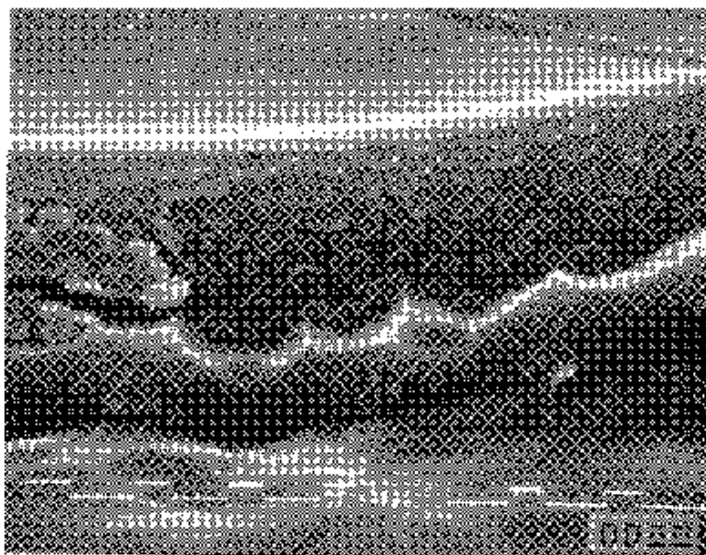
Title

(EP-894622)

Positive-working photosensitive composition for use with infrared **laser**

Images

F I G. 1

**Publication data including kind & date**

EP0894622	A2	1999-02-03	EP-894622
JP11044956	A	1999-02-16	JP11044956
EP0894622	A3	1999-05-19	EP-894622
US6143464	A	2000-11-07	US6143464



EP0894622	B1	2003-03-19	EP-894622
DE69812243	D1	2003-04-24	DE69812243
DE69812243	T2	2003-11-27	DE69812243
JP3779444	B2	2006-03-10	JP3779444

**Abstract**

(EP-894622)

Disclosed is a positive-type photosensitive composition comprising in predetermined blending proportions a substance which generates heat upon absorbing light, a resin which has phenolic hydroxyl groups and is soluble in an aqueous alkaline solution, and a copolymer comprising 10 mol % or more of at least one of acrylic derivatives having a sulfonamide group as a component for copolymerization. The above-described composition is designed for use with an infrared **laser** in a direct plate making process as a composition advantageous in that the problems of insufficient image forming ability and insufficient solvent resistance of the resin, which has phenolic hydroxyl groups and is soluble in an aqueous alkaline solution, are solved, and in that the range of locations where the photosensitive composition may be handled are not limited, and further in that the sensitivity of the photosensitive composition to the concentration of the developing solution is stable, i.e., there is a broad latitude in development.

Inventors

KAWAUCHI IKUO

Latest standardized assignees - inventors removed

FUJIFILM

Family 37/200 - FAMPAT - ©Questel

Title

(EP2356185)

Printing **ink**, printed product and method of marking products**Publication data including kind & date**

FI20086080	A0	2008-11-14	FI200806080
WO2010055210	A1	2010-05-20	WO201055210
EP2356185	A1	2011-08-17	EP2356185
CN102282225	A	2011-12-14	CN102282225
EP2356185	A4	2012-04-11	EP2356185

**Abstract**

(EP2356185)

The invention relates to a pigment **ink**, printed product and a method for marking products. According to the invention, thermoplastic carbohydrate polymer is used as the pigment of the **ink**. The printed product comprises a thermoplastic carbohydrate polymer layer manufactured by printing such **ink** on a substrate. In the method according to the invention, a substrate is printed with such **ink** and a marking is embossed on the polymeric layer formed. With the aid of the invention, embossable layers and markings can be made on substrates in a simple and cost-effective manner.

Inventors

ERHO TOMI

Latest standardized assignees - inventors removed

TEKNOLOGIAN TUTKIMUSKESKUS VTT

Family 38/200 - FAMPAT - ©Questel

Title

(EP1694515)

Security article with multicoloured image

Images

MUKE SANI

Latest standardized assignees - inventors removed

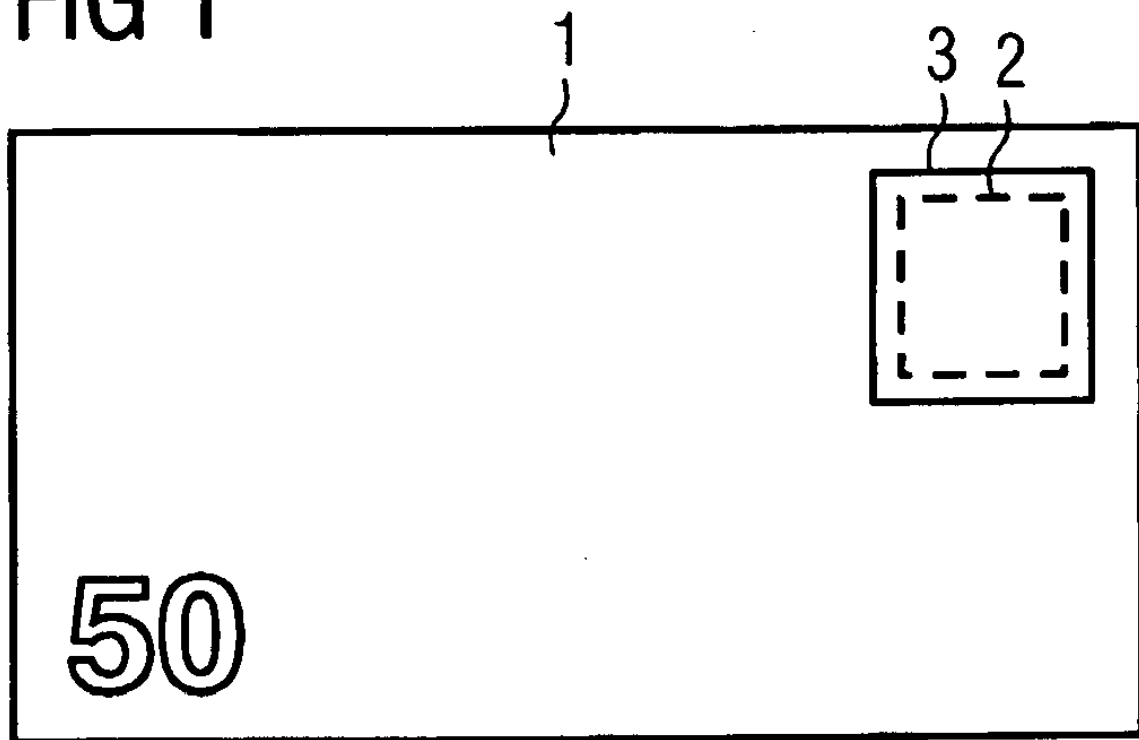
NOTE PRINTING AUSTRALIA

Family 39/200 - FAMPAT - ©Questel

Title

(EP2465703)

Structured colour-shift security element

Images**FIG 1****Publication data including kind & date**

EP2465703	A2	2012-06-20	EP2465703
DE102010054854	A1	2012-06-21	DE102010054854
EP2465703	A3	2013-04-03	EP2465703
EP2465703	B1	2016-04-06	EP2465703
ES2571352	T3	2016-05-24	ES2571352
PL2465703	T3	2016-09-30	PL2465703

**Abstract**

(EP2465703)

The security element comprises a transparent or translucent substrate (4) that is provided with front and rear surfaces. An optically variable surface layer (5) is formed at the front surface, and an optically variable back layer (6) is formed at the rear surface. The front and back layers are overlapped at an overlapping region of the substrate. Recess structures are formed in the overlap region of optically variable front layer and/or optically variable back layer. Independent claims are included for the following: (1) data carrier; and (2) manufacturing method of security element.

Inventors

SCHIFFMANN PETER

OTTO DANIELA DR

DEPTA GEORG DR

Latest standardized assignees - inventors removed

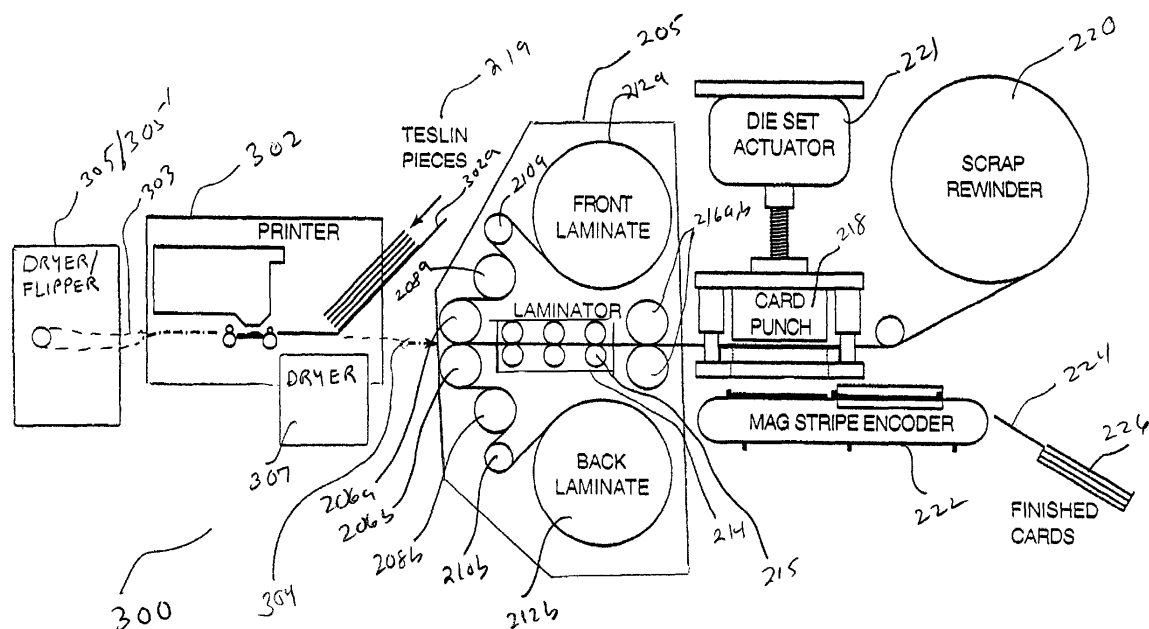
GIESECKE & DEVRIENT

Family 40/200 - FAMPAT - ©Questel

Title

(EP1504305)

Identification card printed with jet inks and systems and methods of making same

Images**Publication data including kind & date**

AU2003237844	A1	2003-11-11	AU2003237844
AU2003237844	A8	2003-11-11	AU2003237844
AU2003239402	A1	2003-11-11	AU2003239402
AU2003239402	A8	2003-11-11	AU2003239402
US20030211296	A1	2003-11-13	US20030211296
WO03096258	A2	2003-11-20	WO200396258
CA2482834	A1	2003-11-20	CA2482834
WO03095210	A2	2003-11-20	WO200395210
CA2482537	A1	2003-11-20	CA2482537
US20040066441	A1	2004-04-08	US20040066441
WO03095210	A3	2004-04-08	WO200395210
WO03096258	A3	2004-06-24	WO200396258
EP1503900	A2	2005-02-09	EP1503900
EP1504305	A2	2005-02-09	EP1504305
US20050042396	A1	2005-02-24	US20050042396
JP2005525254	A	2005-08-25	JP2005525254
JP2005525949	A	2005-09-02	JP2005525949
EP1503900	A4	2009-12-16	EP1503900
US20100020151	A1	2010-01-28	US20100020151
JP2010155240	A	2010-07-15	JP2010155240
US7824029	B2	2010-11-02	US7824029
EP1504305	A4	2011-07-27	EP1504305
US8087772	B2	2012-01-03	US8087772
JP2012025166	A	2012-02-09	JP2012025166



CA2482834	C	2012-04-03	CA2482834
JP5111650	B2	2012-10-19	JP5111650
JP5111533	B2	2012-10-19	JP5111533
EP1503900	B1	2019-04-10	EP1503900



Abstract

(EP1504305)

The present invention relates to assembling identification documents in an over-the-counter issuing environment. In one implementation of the present invention, we provide an identification document capable of being printed by an **ink** jet printer-based system in an over-the-counter environment. The identification document comprises a core layer and a first indicium. The core layer has a first surface, and the first indicium is printed directly onto at the first surface of the core layer. The first indicium is formed by a pigmented **ink** jet **ink**. The core material can have an affinity for a particular substance (e.g., water) and the pigmented jet **ink** can include that substance (e.g., an aqueous-based **ink** jet **ink**). An identification document substrate can receive pigmented **ink** jet **ink** from an **ink** jet printer without requiring a receiver layer or receiver coating on the substrate. The absence of the receiver layer allows for direct bonding of additional layers, such as laminates, to an unprinted substrate, thereby not interfering with the bonding mechanism of the laminate to the substrate. Identification documents formed in this manner can meet or exceed all AAMVA, ANSI, and ISO requirements.

Inventors

JONES ROBERT

BI DAOSHEN

MAILLOUX DENNIS

Latest standardized assignees - inventors removed

L 1 SECURE CREDENTIALING

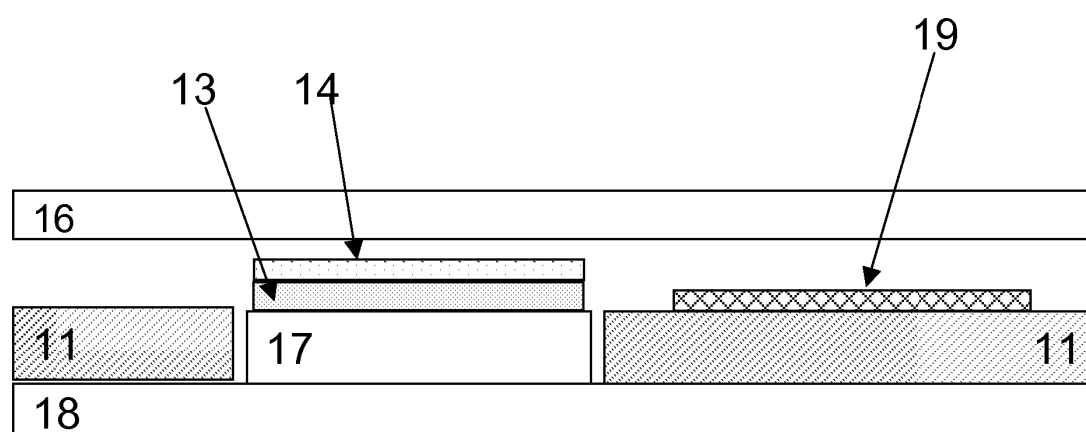
Family 41/200 - FAMPAT - ©Questel

Title

(EP2424735)

A process for securing an identification document and secure identification document

Images



Publication data including kind & date

EP2246198	A1	2010-11-03	EP2246198
WO2010125185	A2	2010-11-04	WO2010125185
WO2010/125185	A3	2011-04-21	WO2010125185
MX2011011300	A	2011-12-06	MX2011011300
US20120049506	A1	2012-03-01	US20120049506
EP2424735	A2	2012-03-07	EP2424735
BRPI1014948	A1	2012-12-04	BR201014948



EP2424735

B1 2014-12-31 EP2424735

BRPI1014948

A2 2018-07-24 BR201014948

US10259256

B2 2019-04-16 US10259256

**Abstract**

(EP2424735)

The invention relates to a process for securing an identification document and to a secure identification document. More particularly, the process uses UV sensitive **ink(s)** to define a pattern only visible under UV radiations. The process is characterized in that it comprises the following steps: printing a first layer of a transparent ablation varnish (13), printing a layer (14) of UV sensitive **ink(s)** over said first layer of transparent ablation varnish, removing parts of the layer (14) of UV sensitive **ink(s)**, by means of a **laser** beam, some remaining areas of said UV sensitive **ink(s)** defining said pattern to be revealed in color under UV radiations, and some areas, where the UV sensitive **ink(s)** has been removed and the **laser** beam has interacted with the ablation varnish (13), absorbing the UV radiations with effect of creating black color.

Inventors

NIKKILA JARMO

Latest standardized assignees - inventors removed

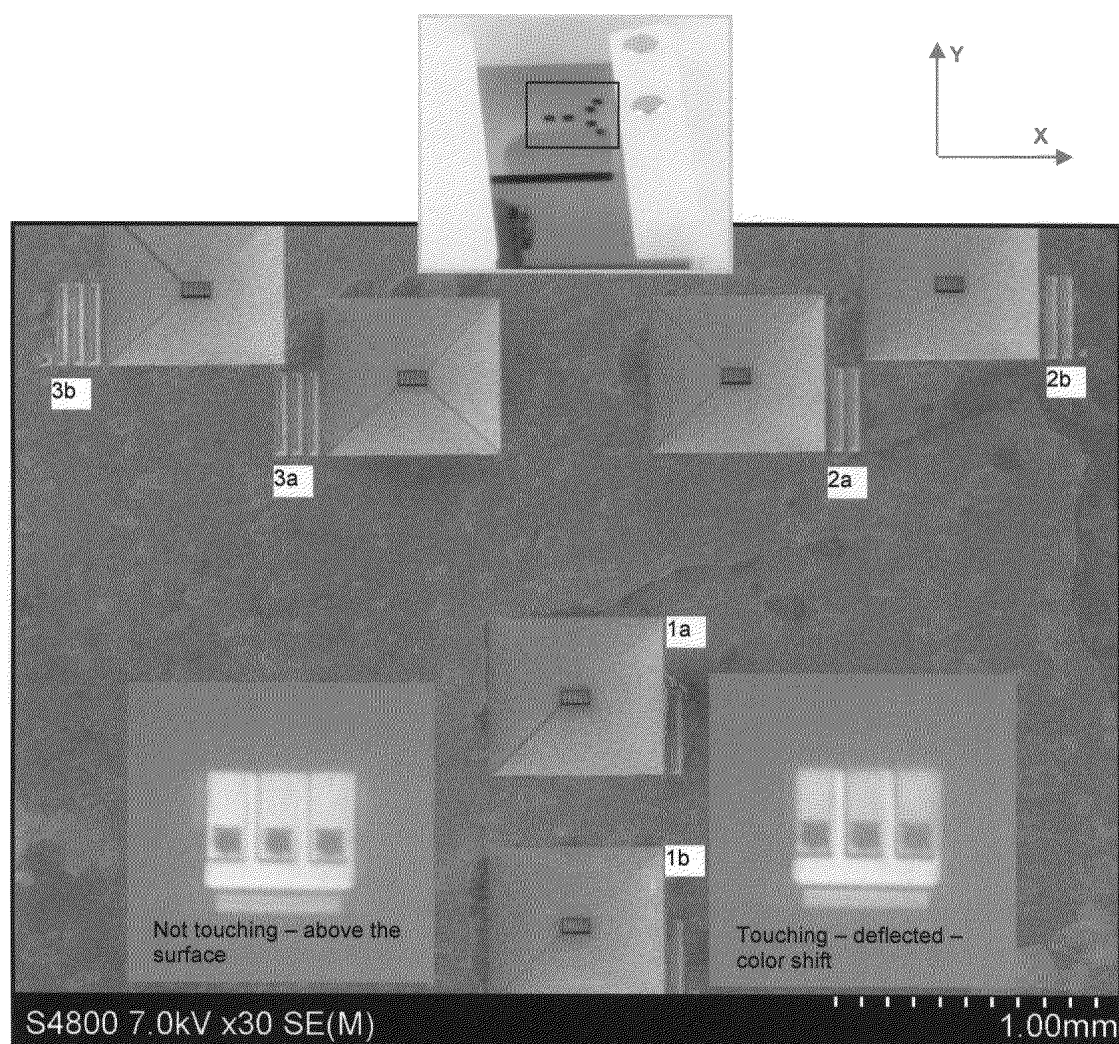
GEMALTO

Family 42/200 - FAMPAT - ©Questel

Title

(EP2130093)

Nanolithography with use of viewports

Images

Publication data including kind & date

WO2008112713	A1	2008-09-18	WO2008112713
CA2678943	A1	2008-09-18	CA2678943
AU2008225175	A1	2008-09-18	AU2008225175
TW200843867	A	2008-11-16	TW200843867
US20080309688	A1	2008-12-18	US20080309688
EP2130093	A1	2009-12-09	EP2130093
KR20100015321	A	2010-02-12	KR20100015321
JP2010521325	A	2010-06-24	JP2010521325

**Abstract**

(EP2130093)

Two dimensional arrays of cantilevers for use in transferring inks from the cantilever tip to substrates are improved with use of viewports to view the cantilevers from a far side. This improves the leveling behavior when large numbers of cantilevers are present. It also provides for better **laser** access. Bioarrays and combinatorial applications are particularly important. Massively parallel direct write printing with more than 55,000 cantilever tips can be achieved.

Inventors

HAAHEIM JASON

FRAGALA JOSEPH S

SHILE RAYMOND R

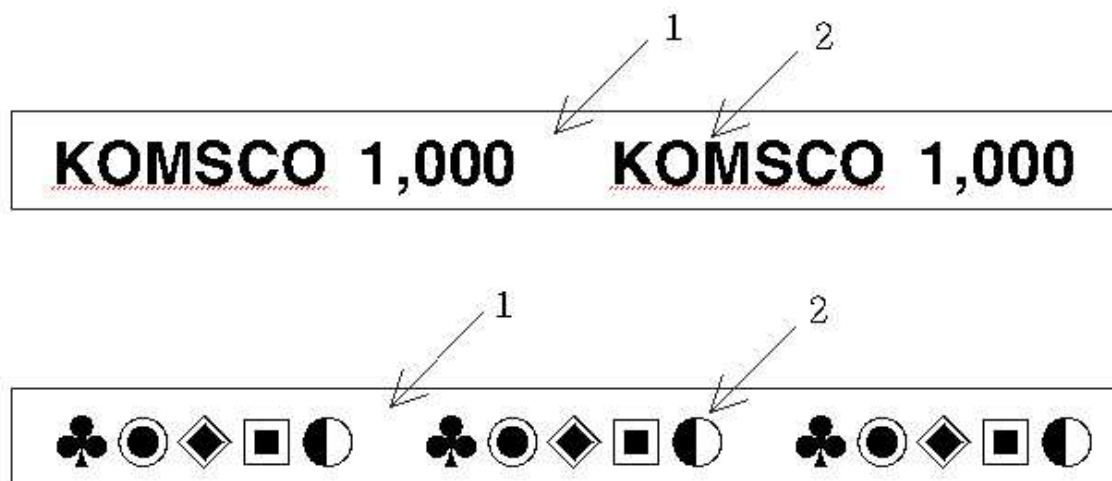
Latest standardized assignees - inventors removed

NANOINK

Family 43/200 - FAMPAT - ©Questel

Title

(KR100840106)

The security thread detectable with **laser****Images****Publication data including kind & date**

KR100840106	B1	2008-06-19	KR100840106
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**Abstract**

(KR100840106)

A **laser** sensitive security hidden line is provided to secure device sensitivity by absorbing, scattering, and reflecting a light source before the light source reaches a light receiving unit, by transiting a **laser** source reacting pigment absorbing, scattering, and reflecting a **laser** source, on a transparent synthetic resin film by printing and coating. A **laser** sensitive

security hidden line is produced by transiting a helium-neon **laser** source reacting pigment on one surface of a transparent synthetic resin film(1) used as a base material of the security hidden line, by printing or coating. The helium-neon **laser** source reacting pigment is produced by adding metallic **ink** containing aluminum powder of 10wt.% having the grain size of 10~12 micrometers, to a mixed solvent of alcohol and urethane resin varnish at the concentration of 5~15%.

Inventors

PARK, JONG - SUL

CHOI, DUG-KYU

KWON GeunWon

Jang Yoon Jin

KIM, SANG-KI

Latest standardized assignees - inventors removed

KOREA SECURITY PRINTING & MINTING

KOREA MINTING & CONSTRUCTION

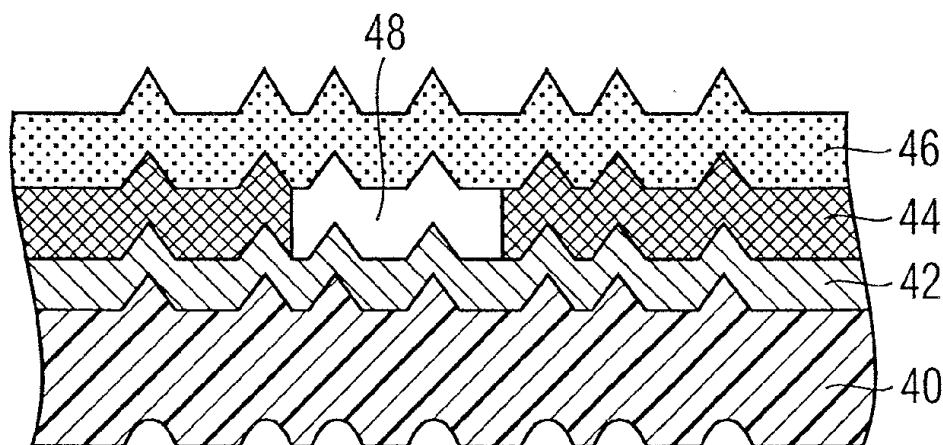
Family 44/200 - FAMPAT - ©Questel

Title

(EP1904312)

Data carrier and method for the production thereof

Images



Publication data including kind & date

WO2006128607	A2	2006-12-07	WO2006128607				
CA2607980	A1	2006-12-07	CA2607980				
AU2006254436	A1	2006-12-07	AU2006254436				
DE102005025095	A1	2006-12-07	DE102005025095				
WO2006128607	A3	2007-09-13	WO2006128607				
MX2007015133	A	2008-02-19	MX2007015133				
EP1904312	A2	2008-04-02	EP1904312				
CN101184632	A	2008-05-21	CN101184632				
IN4386/KOLNP/2007	A	2008-07-04	IN2007KN04386				
US20080250954	A1	2008-10-16	US20080250954				
JP2008542070	A	2008-11-27	JP2008542070				
ZA200710303	B	2008-12-31	ZA200710303				
RU2007147694	A	2009-07-20	RU2007147694				
RU2407651	C2	2010-12-27	RU2407651				

AU2006254436	B2	2012-05-10	AU2006254436
BRPI0613317	A2	2012-10-09	BR200613317
EP1904312	B1	2013-07-17	EP1904312
CN101184632	B	2013-07-24	CN101184632B
US8875628	B2	2014-11-04	US8875628

**Abstract**

(EP1904312)

The invention relates to a data carrier, in particular a valuable document or a security paper comprising a substrate (20) and a coating (12) which is applied thereto and in which marks embodied in the form of patterns, letters, figures, or images are introduced by **laser** radiation. According to said invention, the coating (12) comprises a **laser** radiation absorbing layer (22) and a pressure layer (24) which is placed thereon and is at least partially **laser** radiation permeable. In addition, the printed substrate is pressed by a pressure force during or after application of said at least partially **laser** radiation permeable pressure layer (24).

Inventors

DEPTA GEORG

FRANZ PETER

Latest standardized assignees - inventors removed

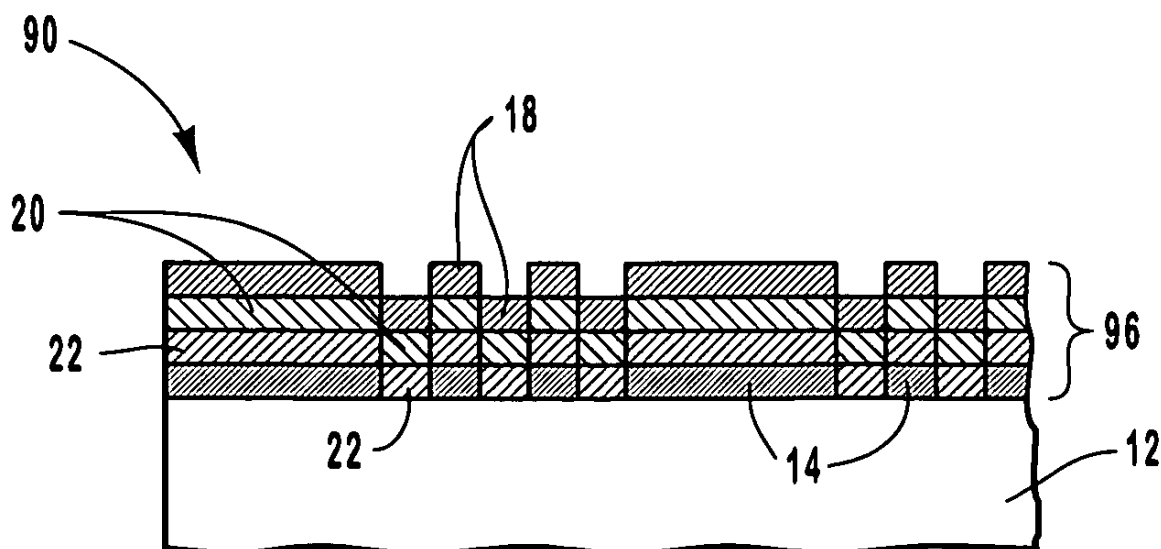
GIESECKE & DEVRIENT

Family 45/200 - FAMPAT - ©Questel

Title

(EP1849621)

Optically variable security devices

Images**Publication data including kind & date**

WO200153113	A1	2001-07-26	WO200153113
CA2397806	A1	2001-07-26	CA2397806
AU1194901	A	2001-07-31	AU200111949
KR20020071955	A	2002-09-13	KR20020071955
EP1252027	A1	2002-10-30	EP1252027
CN1423598	A	2003-06-11	CN1423598
JP2003520986	A	2003-07-08	JP2003520986
US20040101676	A1	2004-05-27	US20040101676
US20050128543	A1	2005-06-16	US20050128543



AU2001211949	B2	2005-08-18	AU2001211949				
CN1666888	A	2005-09-14	CN1666888				
CN1258448	C	2006-06-07	CN1258448C				
KR20070007975	A	2007-01-16	KR20070007975				
EP1762398	A2	2007-03-14	EP1762398				
US7224528	B2	2007-05-29	US7224528				
KR100739242	B1	2007-07-12	KR100739242				
EP1849620	A2	2007-10-31	EP1849620				
EP1849621	A2	2007-10-31	EP1849621				
KR100837593	B1	2008-06-13	KR100837593				
CA2397806	C	2009-05-05	CA2397806				
EP1849621	A3	2010-03-31	EP1849621				
CN1666888	B	2011-12-14	CN1666888B				
EP1762398	A3	2012-02-15	EP1762398				
EP1849620	A3	2013-05-01	EP1849620				
EP1849621	B1	2014-04-16	EP1849621				
EP1762398	B1	2014-04-16	EP1762398				
ES2462369	T3	2014-05-22	ES2462369				
DK1849621	T3	2014-05-26	DK1849621T				
PT1849621	E	2014-06-03	PT1849621				
EP1849620	B1	2016-03-23	EP1849620				
EP1762398	B2	2017-09-27	EP1762398				

Abstract

(EP1849621)

A security article (10) includes a light transmissive substrate (12) having a first surface and an opposing second surface, with the first surface having an optical interference pattern (14) such as a holographic image pattern or an optical diffraction pattern thereon. A color shifting optical coating (16) is formed on the substrate such as on the interference pattern or on the opposing second surface of the substrate, with the optical coating providing an observable color shift as the angle of incident light or viewing angle changes. Various processes can be utilized to form the security article (10), such as vacuum coating processes, lamination, **laser** scribing, and **laser** imaging. The security article (10) can be affixed to a variety of objects through various attachment mechanisms, such as pressure sensitive adhesives or hot stamping processes, to provide for enhanced security measures such as anticounterfeiting.

Inventors

PHILIPS ROGER W

BONKOWSKI RICHARD L

HIGGINS PATRICK K

MARKANTES CHARLES T

Latest standardized assignees - inventors removed

VIAMI SOLUTIONS

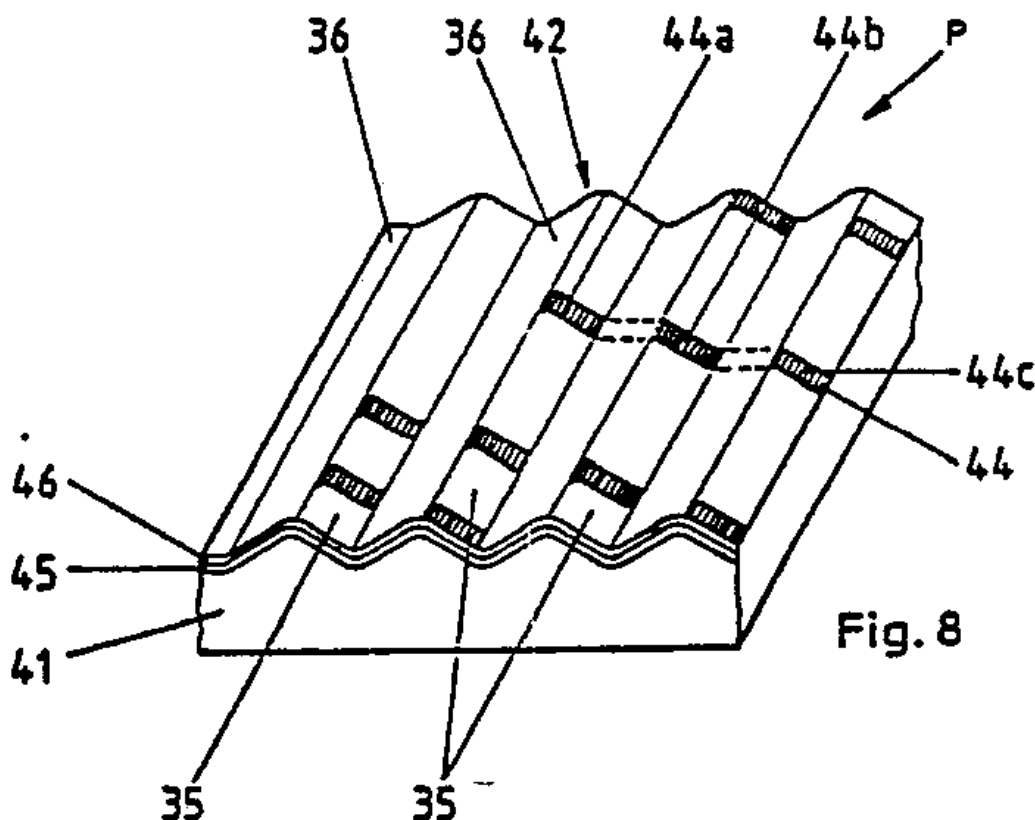
Family 46/200 - FAMPAT - ©Questel

Title

(EP-628431)

Multilayer record carrier and process for marking a multilayer record carrier

Images



Publication data including kind & date

EP0372274	A2	1990-06-13	EP-372274
DE3840729	A1	1990-06-13	DE3840729
JP02184497	A	1990-07-18	JP02184497
EP0372274	A3	1991-04-10	EP-372274
US5298922	A	1994-03-29	US5298922
EP0628431	A1	1994-12-14	EP-628431
EP0372274	B1	1995-02-15	EP-372274
AT118407	T	1995-03-15	ATE118407
DE58909000	D1	1995-03-23	DE58909000
ES2069565	T3	1995-05-16	ES2069565
EP0628431	B1	1997-06-18	EP-628431
AT154548	T	1997-07-15	ATE154548
DE3840729	C2	1997-07-17	DE3840729
DE58909804	D1	1997-07-24	DE58909804
JP2885319	B2	1999-04-19	JP2885319



Abstract

(EP-628431)

For the multi-coloured marking of identification cards and the like, the multilayer identification card receives an outer coloured layer (3) of a first colour and an inner coloured layer (2) of a second colour. While the outer coloured layer absorbs practically no **laser**-beam light used for marking, the second inner coloured layer absorbs the **laser** light. By this means, in the marking process, the material of the second coloured layer is degraded thermally, that is to say evaporated, sublimated or subjected to a chemical or physical reaction, with the consequence that the first layer is blasted away in particles by means of the formation of pressure. By this means, the second coloured layer becomes visible. Instead of the second coloured layer, provision can also be made of a transparent lacquer layer having corresponding properties, in order, as an example, to expose a multi-coloured security printed image under this transparent lacquer layer.

Inventors

MERKLE HANSJUERGEN

LASS JOSEPH

KILLAR WOLFGANG

HIERWEGER ALEXANDER

LOB ERWIN

Latest standardized assignees - inventors removed

GAO GES AUTOMATION ORGANIZATION

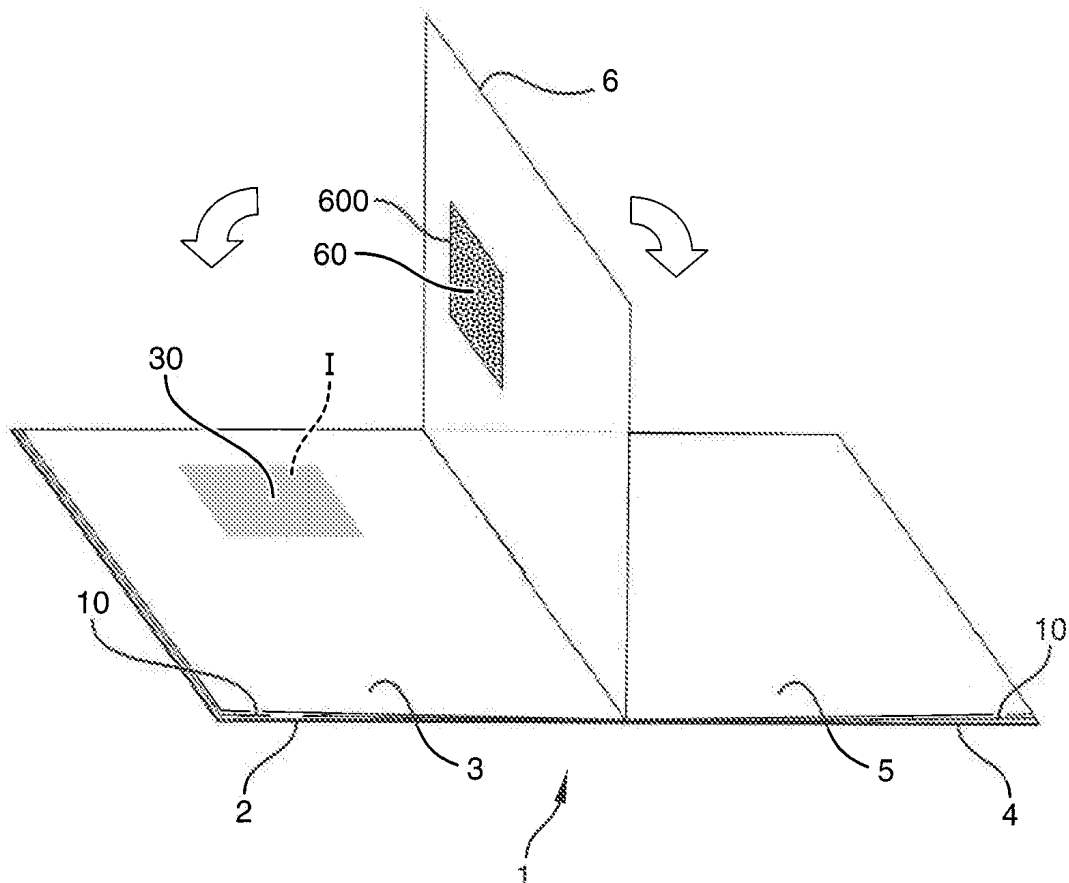
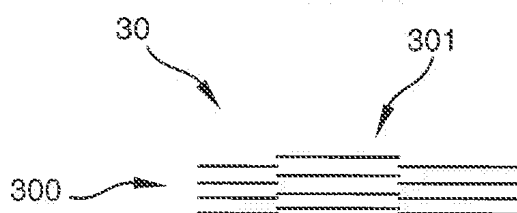
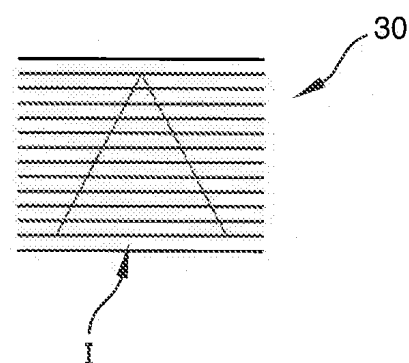
Family 47/200 - FAMPAT - ©Questel

Title

(EP2162295)

Security document in the form of a booklet, with an additional page revealing hidden information

Images

FIG. 1**FIG. 2****FIG. 3****Publication data including kind & date**

FR2918311	A1	2009-01-09	FR2918311
WO2009007282	A1	2009-01-15	WO200907282
EP2162295	A1	2010-03-17	EP2162295
FR2918311	B1	2011-01-28	FR2918311
EP2162295	B1	2016-06-08	EP2162295
ES2590338	T3	2016-11-21	ES2590338

**Abstract**

(EP2162295)

The present invention relates to a security document which has the form of a booklet (1), such as a passport, and which comprises at least one data page (3, 5) on which is presented so-called "personal" data (30, 30'), that is, data specific to its bearer, and in which at least a part of this data incorporates at least one item of hidden information (I, I') that is not discernible to the naked eye, or "hidden element", this booklet (1) comprising an additional page (6) which is as one with the latter and of which at least one area is translucent or transparent, in this area being incorporated at least one means (60, 60') of revealing said hidden information (I, I'), this additional page (6) making it possible, by pressing it against said data page (3, 5), to read through said zone, said hidden information (I, I'), with no external device and/or added energy. It is characterized in that said additional page (6) also comprises information (8) at least partially reproducing said personal data (30, 30'), on one of its faces (on the back or on the front) or both faces, covering or not all or part of said revelation means (60, 60').

Inventors

LIEBER SOPHIE

DEMAIMAY FLORIAN

BORDE XAVIER

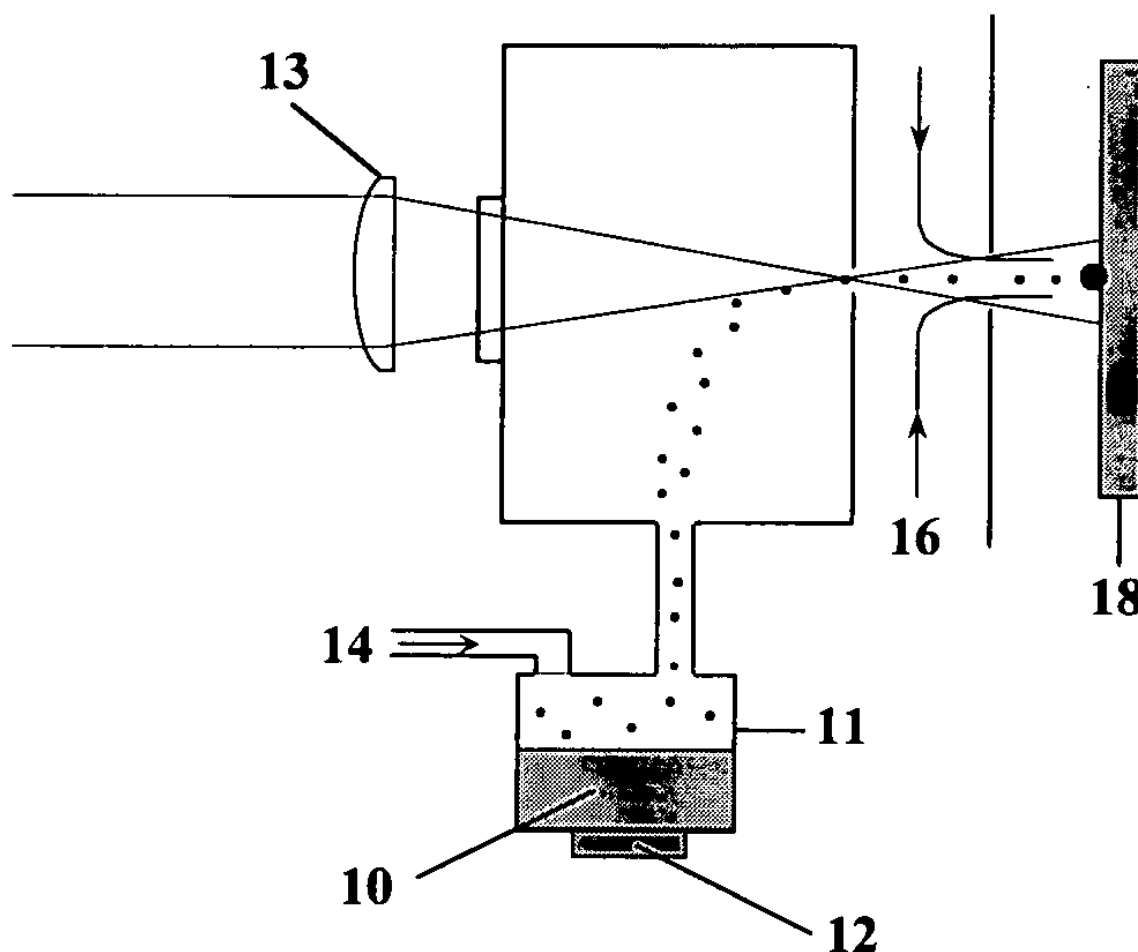
Latest standardized assignees - inventors removed

OBERTHUR TECHNOLOGIES

Family 48/200 - FAMPAT - ©Questel

Title

(EP1124649)

Laser-guided manipulation of non-atomic particles**Images**

CA2345961	A1	2000-04-27	CA2345961				
AU2842200	A	2000-05-08	AU200028422				
WO200023825	A3	2000-07-27	WO200023825				
EP1124649	A2	2001-08-22	EP1124649				
WO200204698	A2	2002-01-17	WO200204698				
AU1530402	A	2002-01-21	AU200215304				
JP2002528744	A	2002-09-03	JP2002528744				
EP1124649	A4	2002-12-04	EP1124649				
US20030048314	A1	2003-03-13	US20030048314				
WO200204698	A8	2003-03-27	WO200204698				
WO2006041657	A2	2006-04-20	WO200641657				
TW200615055	A	2006-05-16	TW200615055				
WO2006041657	A9	2006-06-29	WO200641657				
US7108894	B2	2006-09-19	US7108894				
TWI280896	B	2007-05-11	TWI280896				
WO2006041657	A3	2008-01-10	WO200641657				

Abstract

(EP1124649)

A method and device for using **laser** light to trap non-atomic size particles optically within a hollow region of a hollow core optical fiber are disclosed. Also described are a method and device for flexibly transporting the trapped particles along the fiber over long distances. The present invention allows to manipulate and guide particles made of a wide variety of materials, including biological tissue and aerosols, along the optical fibers and deposit the materials on various substrates. The **laser** guiding device (44) comprises a **laser** beam a **laser** beam source generating a **laser** beam (46), which is directed to an entrance (56) of a hollow core optical fiber (50) by a focusing lens (64). A source of the particles to be guided through the fiber provides a certain number of particles near the entrance to the fiber. The particles are then drawn into the hollow core (48) of the fiber by the focused **laser** beam, propagating along a grazing incidence path inside the fiber. **Laser** induced optical forces generated by scattering, absorption and refraction of the **laser** light by a particle traps the particle close to the center of the fiber and propels it along. Any micro-size material, including solid dielectric, semiconductor and solid particles as well as liquid solvent droplets, can be trapped in the **laser** beams and transported along optical fibers due to the net effect of exertion of these optical forces. After traveling through the length of the fiber, the particles can be either deposited on a desired substrate or into an analytical chamber, or dealt with depending on the goal of a particular application.

Inventors

RENN MICHAEL J

ODDE DAVID J

PASTEL ROBERT L

Latest standardized assignees - inventors removed

OPTOMECH DESIGN

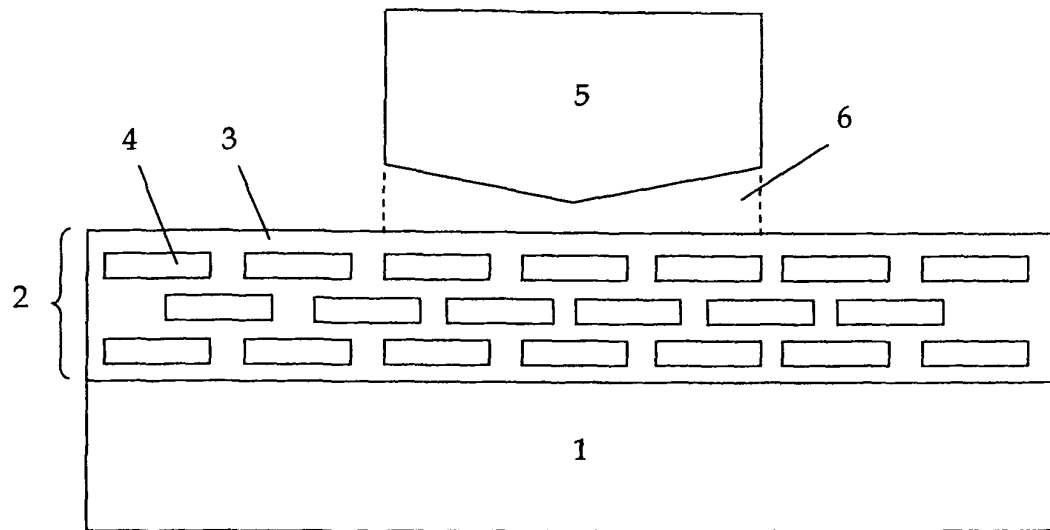
Family 49/200 - FAMPAT - ©Questel

Title

(EP2104618)

Safety element having an optically variable element

Images



Publication data including kind & date

DE102006062281	A1	2008-06-26	DE102006062281				
WO2008080499	A1	2008-07-10	WO200880499				
CA2671611	A1	2008-07-10	CA2671611				
AU2007341700	A1	2008-07-10	AU2007341700				
EP2104618	A1	2009-09-30	EP2104618				
RU2009127521	A	2011-01-27	RU2009127521				
RU2429978	C2	2011-09-27	RU2429978				
AU2007341700	B2	2013-05-09	AU2007341700				
EP2104618	B1	2013-11-27	EP2104618				
CA2671611	C	2015-08-11	CA2671611				

Abstract

(EP2104618)

The invention relates to a substrate (1) having a safety element (2) comprising at least one optically variable color (3) having pigments (4). The individual pigments have at least one multi-layer design that is capable of interference. According to the invention, the pigments (4) of the optically variable color of the safety element (2) are irreversibly modified in at least one partial region (6) by means of electromagnetic radiation (5) such that the interference effect is visually and/or mechanically clearly recognizably modified, or completely eliminated in this partial region (6).

Inventors

DOERFLER WALTER

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

Family 50/200 - FAMPAT - ©Questel

Title

(EP2091750)

Information carrier precursor and information carrier produced therewith.

Images

荧光颜色	目录 #	化学耐受性		
		溶剂	漂白	腐蚀剂
蓝色	MDP-1100-	优良	优良	优良
蓝绿色	MDP-1200-	优良	优良	优良
绿色	MDP-1300-	优良	优良	优良
黄绿色	MDP-1400-	优良	优良	优良
黄色	MDP-1600-			
橙色	MDP-1700-			
红色	MDP-1800-			
蓝紫色	MDP-1900-			

Publication data including kind & date

WO2008068053	A1	2008-06-12	WO200868053
EP2091750	A1	2009-08-26	EP2091750
CN101641220	A	2010-02-03	CN101641220
EP2091750	B1	2010-03-10	EP2091750
AT460288	T	2010-03-15	ATE460288
DE602007005277	D1	2010-04-22	DE602007005277
IN3180/CHENP/2009	A	2016-08-31	IN2009CN03180



Abstract

(EP2091750)

A receiving layer configuration having an image-receiving side and a non-image-receiving side, said receiving layer configuration comprising at least one pigment and at least one binder, wherein at least one constituent layer of said receiving layer configuration is opaque; at least the outermost layer on said image-receiving side or a layer in diffusive contact with said outermost layer on said image-receiving side is opaque and porous; said at least one opaque layer and/or at least one layer between the opaque layer nearest to said image-receiving side and said non-image-receiving side comprises luminescent fibres and/or luminescent beads; and said receiving layer configuration is capable of being rendered substantially transparent by penetration by a lacquer; an information carrier precursor comprising the above-mentioned receiving layer configuration and a rigid sheet or a support; a method for producing an information carrier comprising the steps of: providing the above-mentioned information carrier precursor; and printing an image or pattern on the receiving layer configuration of the information carrier precursor by a conventional printing process using at least one liquid printing **ink**; and an information carrier obtained according to the above-mentioned process.

Inventors

LEENDERS LUC

DAEMS EDDIE

Latest standardized assignees - inventors removed

AGFA GEVAERT

Family 51/200 - FAMPAT - ©Questel

Title

(EP2007586)

Security element with authenticity features identifiable in a visual and tactile manner

Images

PL2007586	T3	2012-11-30	PL2007586
EP2007586	B9	2013-01-09	EP2007586
MY149813	A	2013-10-14	MY-149813
EP2007586	B2	2016-10-19	EP2007586

**Abstract**

(EP2007586)

The invention relates to a security element having a transparent carrier material which has a first periodic or almost periodic dot or line printed pattern on a first side and a second periodic or almost periodic dot or line printed pattern on a second side which is substantially mirror-symmetrical to the first, wherein the second dot or line printed pattern has at least one part region, in which the dots or lines are offset in comparison with the dots or lines of the remaining second dot or line printed pattern. As a result of the fact that the first dot or line printed pattern is combined with an embossed structure which is produced by way of a recess printing method and that the first dot or line printed pattern interacts with the second dot or line printed pattern in such a way that at least one part region has a visually detectable information item which indicates the authenticity of the security element when it is looked through, the security against forging of the security element can be increased. Furthermore, the invention relates to a method for manufacturing a security element of this type, a data storage medium having a security element of this type, and the use of a security element or data storage medium of this type for product security.

Inventors

BALDUS CHRISTOF

VOIT MAX

ZERBES JÜRGEN

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

Family 52/200 - FAMPAT - ©Questel

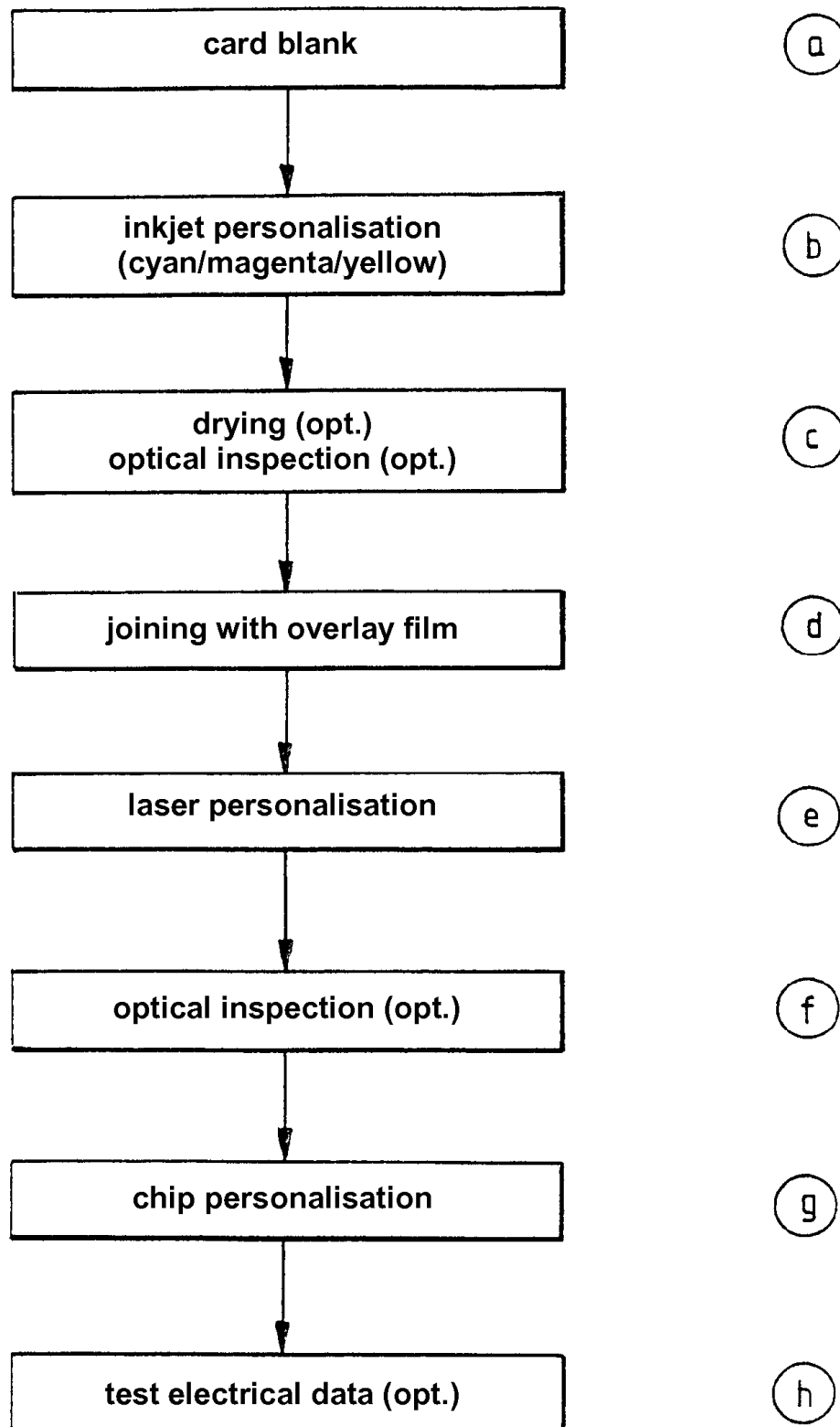
Title

(EP2214913)

Method for producing a security and/or valuable document with personalised information

Images

FIG.1



AU2008333700	A1	2009-06-11	AU2008333700				
WO2009071068	A3	2009-08-06	WO200971068				
EP2214913	A2	2010-08-11	EP2214913				
US20100304093	A1	2010-12-02	US20100304093				
CN101932455	A	2010-12-29	CN101932455				
RU2010127365	A	2012-01-20	RU2010127365				
CN101932455	B	2013-11-13	CN101932455B				
RU2526680	C2	2014-08-27	RU2526680				
EP2214913	B1	2015-02-25	EP2214913				
ES2531652	T3	2015-03-18	ES2531652				
AU2015207834	A1	2015-08-20	AU2015207834				
AU2015207834	B2	2017-06-01	AU2015207834				

Abstract

(EP2214913)

The invention relates to a method for producing a security and/or valuable document containing a polymer layer composite or consisting thereof. Said polymer layer composite is formed from a polymer layer partial composite and a polymer cover layer and the polymer layer partial composite and/or the polymer cover layer contains a **laser** sensitive component. Said method consists of the following steps: A) first personalised information is applied to the polymer layer partial composite by means of an inkjet printing method as a coloured inkjet printed layer; B) the polymer cover layer is applied to the inkjet printed layer and is joined to the polymer layer partial composite by thermal lamination; and C) second personalised information is inscribed into the polymer layer composite of the security and/or valuable document, obtained in step B), by means of **laser** engraving. The invention also relates to a security and/or valuable document that can be produced according to said method.

Inventors

HAGEMANN MICHAEL

MATHEA ARTHUR

MUTH OLIVER

PFLUGHOEFFT MALTE

FISCHER JÖRG

PUDLEINER HEINZ

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

BAYER MATERIALSCIENCE

Family 53/200 - FAMPAT - ©Questel

Title

(EP1054778)

Security document having visually concealed security indicia

Images

ZIENTEK PAUL

Latest standardized assignees - inventors removed

INNOVIA SECURITY

Family 54/200 - FAMPAT - ©Questel

Title

(EP2483082)

Data carrier having a window

Images

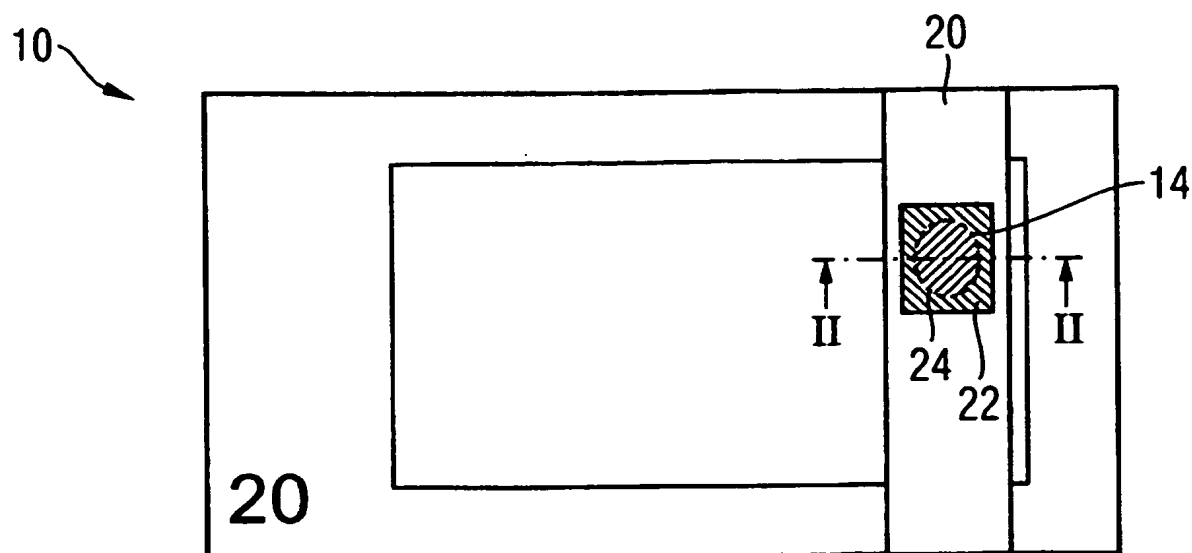


Fig. 1

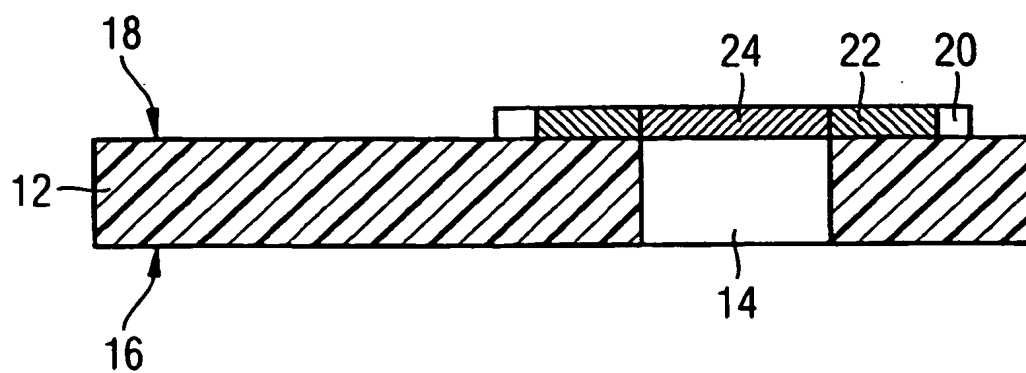


Fig. 2

WO2011038848	A2	2011-04-07	WO201138848				
CA2774819	A1	2011-04-07	CA2774819				
DE102009048145	A1	2011-04-07	DE102009048145				
WO2011038848	A3	2011-07-21	WO201138848				
CN102574413	A	2012-07-11	CN102574413				
EP2483082	A2	2012-08-08	EP2483082				
KR20120089668	A	2012-08-13	KR20120089668				
BR112012006555	A1	2012-11-06	BR112012006555				
TH118125	A	2012-11-27	TH-118125				
ZA201202342	B	2012-12-27	ZA201202342				
RU2499674	C1	2013-11-27	RU2499674				
CA2774819	C	2014-11-25	CA2774819				
CN102574413	B	2014-12-17	CN102574413B				
KR101500816	B1	2015-03-09	KR101500816				
HK1172587	A1	2015-08-21	HK1172587				
EP2483082	B1	2016-04-20	EP2483082				
IN1011/KOLNP/2012	A	2016-08-26	IN2012KN01011				
ES2581839	T3	2016-09-07	ES2581839				
PL2483082	T3	2016-10-31	PL2483082				
TH55156	B	2017-05-23	TH--55156B				

Abstract

(EP2483082)

The invention relates to a data carrier, in particular a value or security document, having a window (14), which extends from a lower face (16) to an upper face (18) of the data carrier, and a film element (20) having a security element (22) that covers the window (14) on the upper face (18) of the data carrier, wherein a portion of the security element (22) lies over the window (14) and a portion of the security element (22) lies adjacent to the window (14). According to the invention, the portion of the security element (22) lying over the window (14) has a radiation-modification region (24), which is in register with the window (14) and in which the visual appearance of the security element (22) is modified by means of electromagnetic radiation.

Inventors

GREGAREK ANDRÉ

RAHM MICHAEL

DICHTL MARIUS

HEIM MANFRED

LOCHBIHLER HANS

HOFFMÜLLER WINFRIED

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

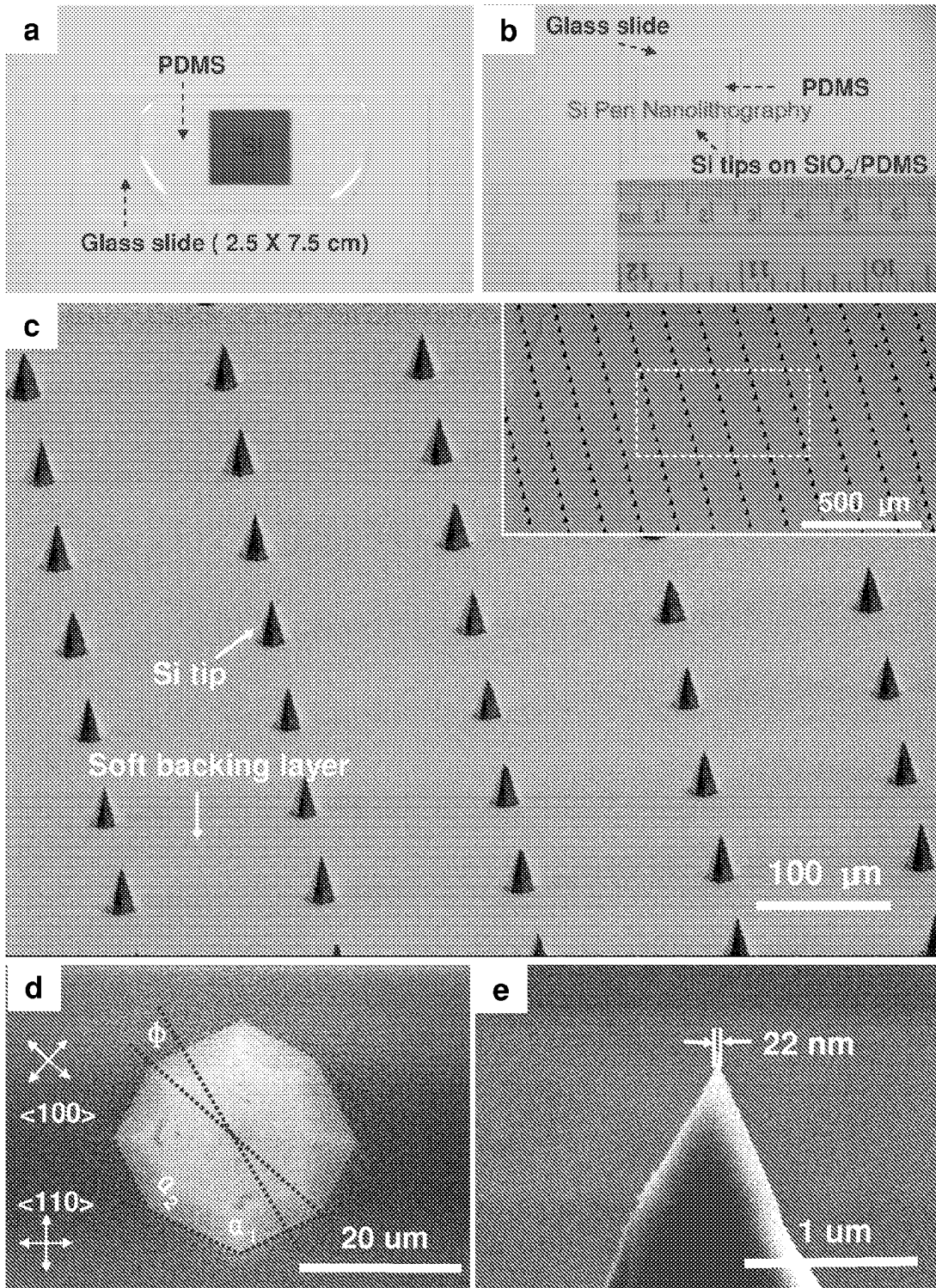
Family 55/200 - FAMPAT - ©Questel

Title

(EP2438608)

Silicon pen nanolithography

Images



Publication data including kind & date

WO2010141836	A2	2010-12-09	WO2010141836
CA2763907	A1	2010-12-09	CA2763907
WO2010141836	A3	2011-03-03	WO2010141836
AU2010256436	A1	2011-12-15	AU2010256436
KR20120026598	A	2012-03-19	KR20120026598
EP2438608	A2	2012-04-11	EP2438608
US20120167262	A1	2012-06-28	US20120167262
JP2012528736	A	2012-11-15	JP2012528736
EP2438608	A4	2015-01-07	EP2438608



US8961853

B2 2015-02-24 US8961853

Abstract

(EP2438608)

Disclosed are methods of lithography using a tip array having a plurality of pens attached to a backing layer, where the tips can comprise a metal, metalloid, and/or semi-conducting material, and the backing layer can comprise an elastomeric polymer. The tip array can be used to perform a lithography process in which the tips are coated with an **ink** (e.g., a patterning composition) that is deposited onto a substrate upon contact of the tip with the substrate surface. The tips can be easily leveled onto a substrate and the leveling can be monitored optically by a change in light reflection of the backing layer and/or near the vicinity of the tips upon contact of the tip to the substrate surface.

Inventors

MIRKIN CHAD A

SHIM WOORYOUNG

BRAUNSCHWEIG ADAM B

LIAO XING

CHAI JINAN

LIM JONG KUK

ZHENG GENGFENG

ZHENG ZIJIAN

Latest standardized assignees - inventors removed

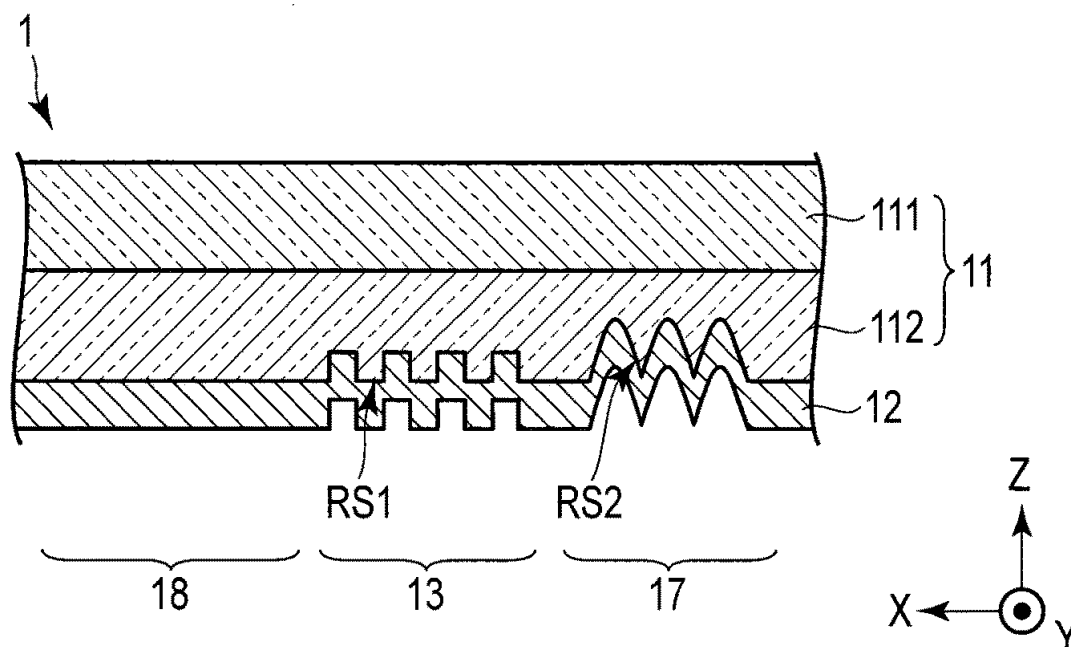
NORTHWESTERN UNIVERSITY

Family 56/200 - FAMPAT - ©Questel

Title

(EP2508922)

Display body and labeled article

Images**Publication data including kind & date**

WO2011068002

A1 2011-06-09

WO201168002

JP2011118035

A 2011-06-16

JP2011118035



JP2011164180	A	2011-08-25	JP2011164180				
JP2011209376	A	2011-10-20	JP2011209376				
JP2011218648	A	2011-11-04	JP2011218648				
JP4983948	B2	2012-05-11	JP4983948				
JP4983899	B2	2012-05-11	JP4983899				
AU2010327762	A1	2012-05-31	AU2010327762				
US20120236415	A1	2012-09-20	US20120236415				
EP2508922	A1	2012-10-10	EP2508922				
EP2508922	A4	2012-10-24	EP2508922				
CN102770787	A	2012-11-07	CN102770787				
JP5143855	B2	2012-11-30	JP5143855				
RU2012122534	A	2014-01-10	RU2012122534				
RU2535655	C2	2014-12-20	RU2535655				
JP5720099	B2	2015-04-03	JP5720099				
AU2010327762	B2	2015-08-20	AU2010327762				
CN102770787	B	2015-09-16	CN102770787B				
IN4061/DELNP/2012	A	2015-10-30	IN2012DN04061				
US9855786	B2	2018-01-02	US9855786				
US20180104975	A1	2018-04-19	US20180104975				

Abstract

(EP2508922)

Characteristic visual effects can be achieved. A display (1) includes one or more relief structures (RS1). Each relief structure (RS1) includes a smooth first reflection surface (21) and a plurality of protrusions or recesses. Each top surface of the protrusions or each bottom of the recesses is a smooth second reflection surface parallel to the first reflection surface. Each relief structure (RS1) displays a mixed color as a structural color.

Inventors

NAGANO AKIRA

NISHIHARA TAKASHI

MITSUI KAZUNARI

Latest standardized assignees - inventors removed

TOPPAN PRINTING

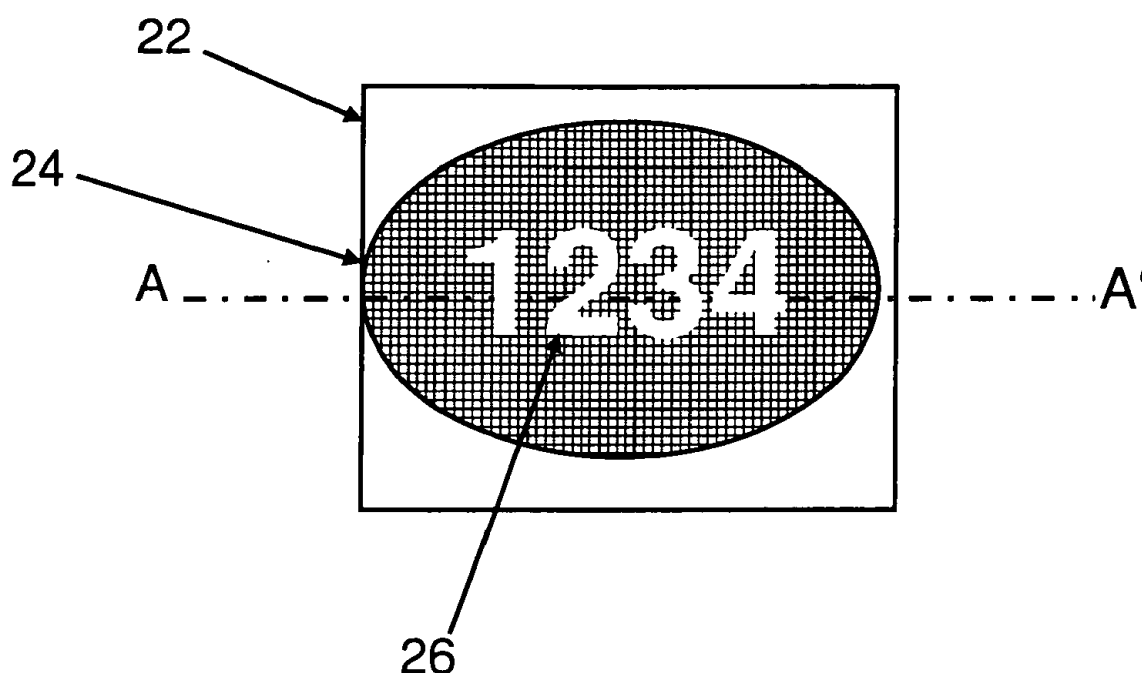
Family 57/200 - FAMPAT - ©Questel

Title

(EP2626215)

Method for producing a data carrier and data carrier obtainable therefrom

Images

FIG 2c**Publication data including kind & date**

DE102012002296	A1	2013-08-08	DE102012002296
EP2626215	A1	2013-08-14	EP2626215
EP2626215	B1	2015-06-03	EP2626215

**Abstract**

(EP2626215)

The method comprises forming a structured substrate layer (22) using a printing **ink**, applying an infra-red (IR) absorbing component on the structured substrate layer, forming a structured marking layer (24) using the printing **ink**, where colors of structured substrate layer and the marking layer are different from each other, and applying **laser** beam to a data carrier comprising a substrate so that the marking layer is produced by removing the IR-absorbing component detectable in the infrared spectral region. The method comprises forming a structured substrate layer (22) using a printing **ink**, applying an infra-red (IR) absorbing component on the structured substrate layer, forming a structured marking layer (24) using the printing **ink**, where colors of structured substrate layer and the marking layer are different from each other, and applying **laser** beam to a data carrier comprising a substrate so that the marking layer is produced by removing the IR-absorbing component detectable in the infrared spectral region and a color change of the marking layer caused by application of **laser** in the infrared region is masked by the substrate layer in a visible spectral identification. The mark layer is formed by a printing layer. The substrate layer and the marking layer comprise a high surface covering of 40-70%. The substrate layer is formed in the form of a grid and a line screen, and the mark layer is formed in the form of fine structures and patterns. The substrate layer comprises grid elements having first and second colors that are different from each other. The infra-red **laser** has a wavelength of 0.8-3 μm , is neodymium-doped yttrium aluminum garnet **laser** or neodymium-yttrium vanadate **laser**, and has a pulse rate of 30-50 kHz, a power of 10300 Watt and a velocity of 1500-10000 mm/s.

Inventors

OTTO DANIELA DR

REINER HARALD DR

Latest standardized assignees - inventors removed

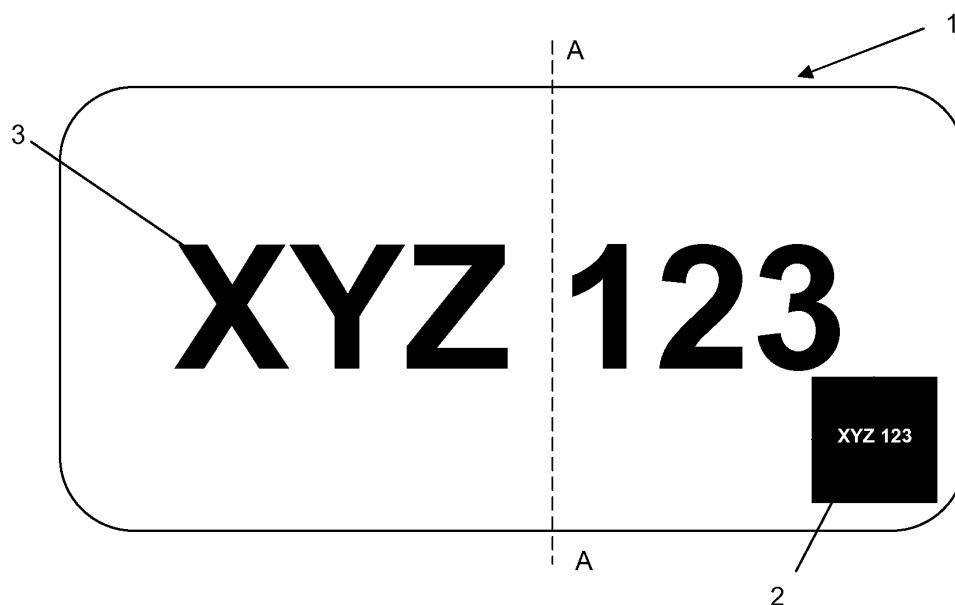
GIESECKE & DEVRIENT

Family 58/200 - FAMPAT - ©Questel

Title

(EP2695024)

Method of processing a security item

Images**Publication data including kind & date**

GB201106020	D0	2011-05-25	GB201106020
GB2489745	A	2012-10-10	GB2489745
WO2012137002	A1	2012-10-11	WO2012137002
EP2695024	A1	2014-02-12	EP2695024
US20140131990	A1	2014-05-15	US20140131990
GB2489745	B	2014-12-31	GB2489745

**Abstract**

(EP2695024)

There is disclosed a method of processing a security item 1. The security item comprises a holographic security feature 2 having at least one metallised layer. The holographic security feature 2 is applied to the reverse of a substantially transparent film through which the holographic security feature is viewed in use of the security item. The transparent film protects the holographic security feature from the environment in the finished security item. The method includes the step of applying **laser** radiation to the metallised layer of the holographic security feature through the transparent film to remove a portion of the metallisation to define a pattern of identifying information on the holographic security feature. The method has the advantage that the hologram can be customised with identifying information after manufacture of the security item.

Inventors

ZOLOTUKHIN MAXIM

Latest standardized assignees - inventors removed

ANDREWS & WYKEHAM

Family 59/200 - FAMPAT - ©Questel

Title

(EP1748904)

Value document comprising a serial number

Images

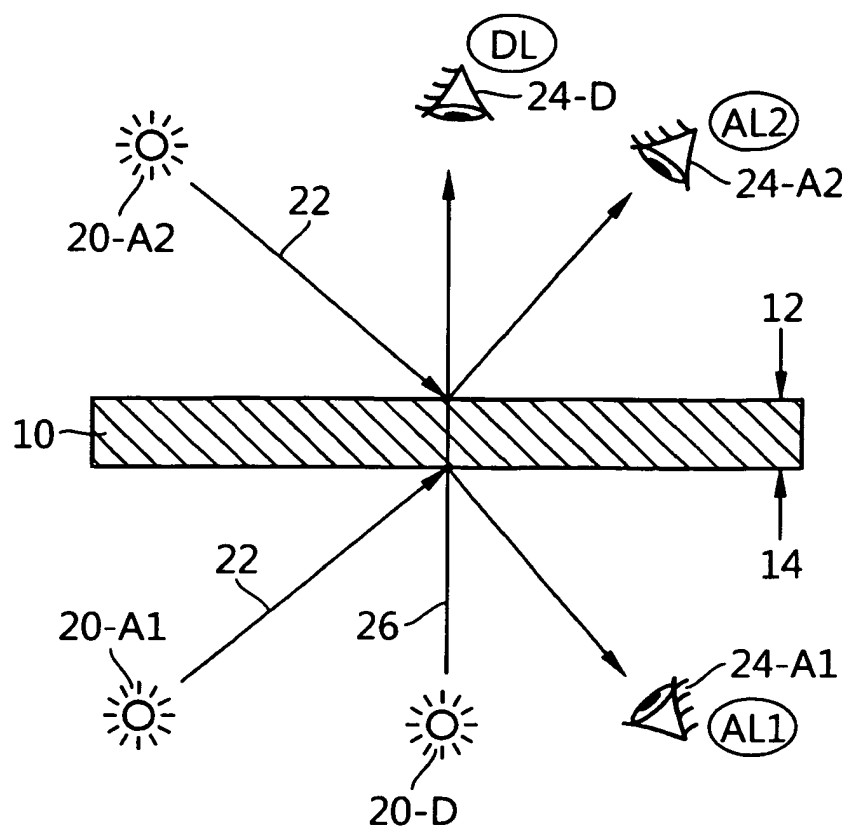


Fig. 1

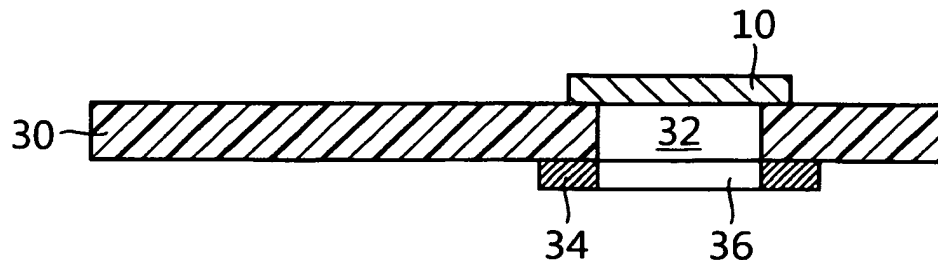


Fig. 2

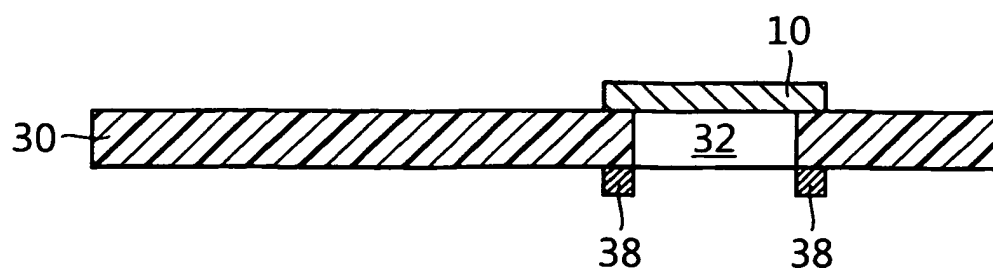


Fig. 3

Publication data including kind & date

WO2014012657

A1 2014-01-23

WO201412657

DE102012014294

A1 2014-01-23

DE102012014294

EP2874823

A1 2015-05-27

EP2874823

EP2874823

B1 2016-09-14

EP2874823



Abstract

EA201170720	A1	2011-10-31	EA201170720				
MA32816	B1	2011-11-01	MA--32816				
VN28010	A	2011-11-25	VN--28010				
US20110298207	A1	2011-12-08	US20110298207				
CO6361969	A2	2012-01-20	CO6361969				
ZA201103753	B	2012-01-25	ZA201103753				
IN0942/MUMNP/2011	A	2012-02-10	IN2011MN00942				
JP2012509780	A	2012-04-26	JP2012509780				
CU20110111	A7	2012-06-29	CU20110111				
UA102127	C2	2013-06-10	UA-102127				
AU2009317164	B2	2014-07-03	AU2009317164				
EA020704	B1	2015-01-30	EA--20704				
CN102224015	B	2015-05-13	CN102224015B				
JP5742030	B2	2015-05-15	JP5742030				
TWI487628	B	2015-06-11	TWI487628				
HK1162160	A1	2015-11-20	HK1162160				
BRPI0921876	A2	2015-12-29	BR200921876				
KR101662341	B1	2016-10-04	KR101662341				
CA2742895	C	2016-12-13	CA2742895				
MY160019	A	2017-02-15	MY-160019				

Abstract

(EP2361188)

Disclosed is a security document (D), having a substrate (S) coated with at least one first coating layer (P), and over said first coating layer (P) at least one second coating layer (I), said second coating layer (I) comprising at least one type of magnetic or magnetizable particles (F), wherein indicia are embodied in the coating layer (I) through a selective orientation of the said magnetic or magnetizable particles (F). Further disclosed is a process of making said security document.

Inventors

DESPLAND CLAUDE-ALAIN

SCHMID MATHIEU

VEYA PATRICK

Latest standardized assignees - inventors removed

SICPA

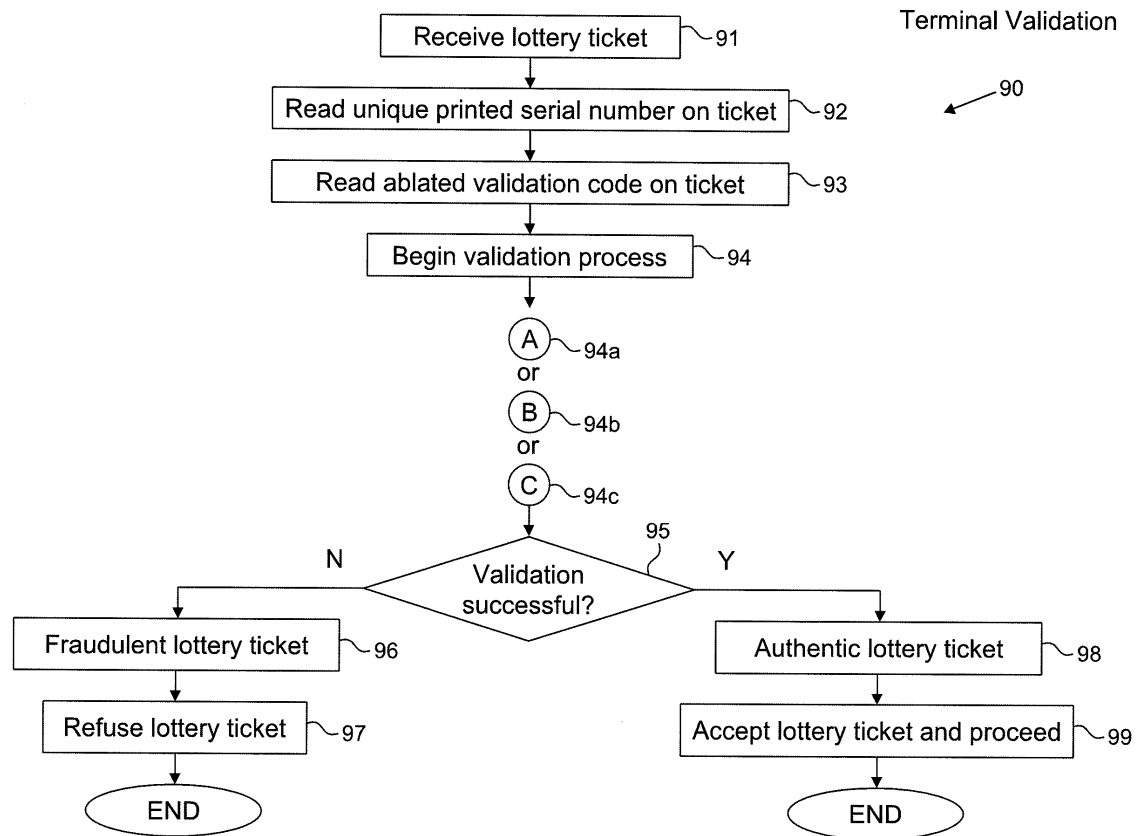
Family 62/200 - FAMPAT - ©Questel

Title

(EP2585973)

Security improvements for flexible substrates

Images



Publication data including kind & date

WO2011161661	A2	2011-12-29	WO2011161661
CA2803543	A1	2011-12-29	CA2803543
UY33466	A	2011-12-30	UY--33466
TW201217186	A	2012-05-01	TW201217186
WO2011161661	A3	2012-05-10	WO2011161661
SG186202	A1	2013-01-30	SG-186202
AU2011268515	A1	2013-01-31	AU2011268515
CN103003825	A	2013-03-27	CN103003825
KR20130034664	A	2013-04-05	KR20130034664
KR20130036354	A	2013-04-11	KR20130036354
KR20130036353	A	2013-04-11	KR20130036353
KR20130040230	A	2013-04-23	KR20130040230
BR112012032667	A1	2013-04-24	BR112012032667
EP2585973	A2	2013-05-01	EP2585973
DE212011100113	U1	2013-05-16	DE212011100113
VN33822	A	2013-05-27	VN--33822
MX2012015237	A	2013-05-30	MX2012015237
MA34394	B1	2013-07-03	MA--34394
IN0170/KOLNP/2013	A	2013-07-12	IN2013KN00170
US20130200606	A1	2013-08-08	US20130200606
CL2012003650	A1	2013-10-18	CL3650201200
JP2013541431	A	2013-11-14	JP2013541431
TH130026	A	2013-12-11	TH-130026
EA201291465	A1	2014-01-30	EA201291465



ZA201300056
AU2011268515

B 2014-05-28 ZA201300056
B2 2016-03-31 AU2011268515



Abstract

(EP2585973)

A method of creating an optical security element in a value document using a low-cost printing device of a data processing terminal is described. The method comprises: providing a flexible substrate having a pre-printed **ink** portion; wherein the pre-printed **ink** portion is provided in an unexposed state which does not provide an optical security function of the security element; configuring a variable **laser** irradiation device to determine a part of the unexposed pre-printed **ink** portion to be exposed to **laser** radiation in a machine-controlled manner, and exposing the unexposed pre-printed **ink** portion to **laser** radiation in the machine-controlled manner to create from the pre-printed **ink** portion a predefined pattern, wherein the optical characteristics of the pattern provide the optical security element.

Inventors

OMAR RALPH MAHMOUD

Latest standardized assignees - inventors removed

OMARCO NETWORK SOLUTIONS

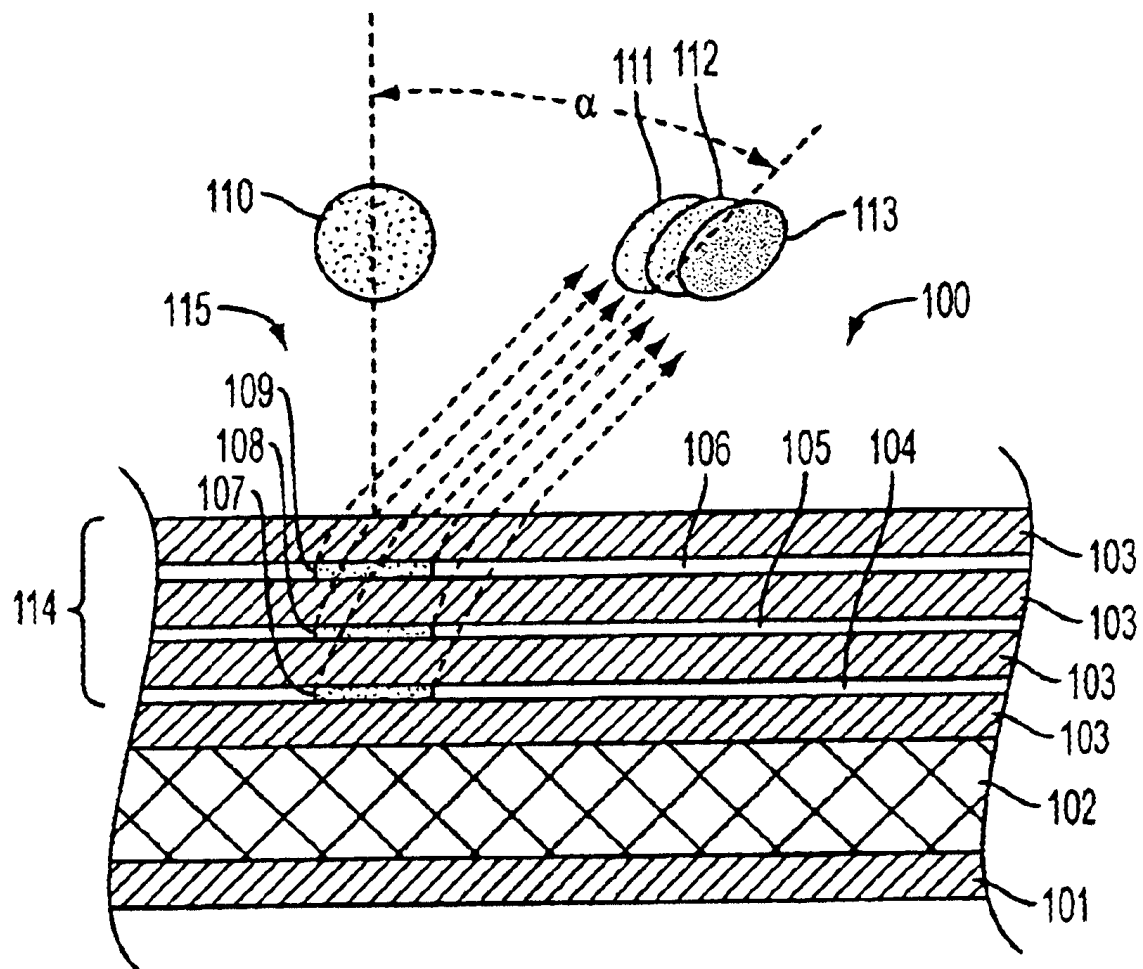
Family 63/200 - FAMPAT - ©Questel

Title

(EP1410317)

Product with a security element

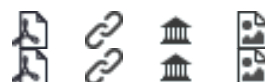
Images



Publication data including kind & date

WO200227647

A1 2002-04-04 WO200227647



AU3825702	A	2002-04-08	AU200238257				
DE10047450	A1	2002-04-11	DE10047450				
US20040007625	A1	2004-01-15	US20040007625				
EP1410317	A1	2004-04-21	EP1410317				
US6827283	B2	2004-12-07	US6827283				

Abstract

(EP1410317)

The invention relates especially to a method for producing a product that is secure against fraud, i.e. a security product. The inventive method for producing a security product with a high degree of protection against fraud or tampering is characterised as follows: in a first step, a non-personalised and/or non-individualised support is provided with a non-personalised and/or non-individualised security element (100); in a second step and/or in further steps, the non-personalised and/or non-individualised support and the non-personalised and/or non-individualised security element (100) are personalised and/or individualised; a structure (101) that is optically effective in the security element (100) produces at least two especially, colour effects; at least one of the colour effects (106, 107) only appears within a certain angular range in relation to a vertical to the surface of the security element; and a personalisable and/or individualisable layer (102) that is provided in the security element (100) and/or a personalised and/or individualised layer that is provided in the security element (100) shows personalisation and/or individualisation information.

Inventors

KAPPE FRANK

FISCHER DIRK

FANNASCH LOTHAR

HENNEMEYER-SCHWENKER MICHAEL

SCHUMACHER MATTHIAS

Latest standardized assignees - inventors removed

MORPHO

U NICA TECHNOLOGY

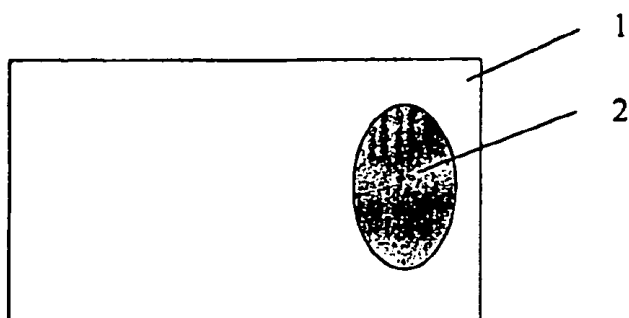
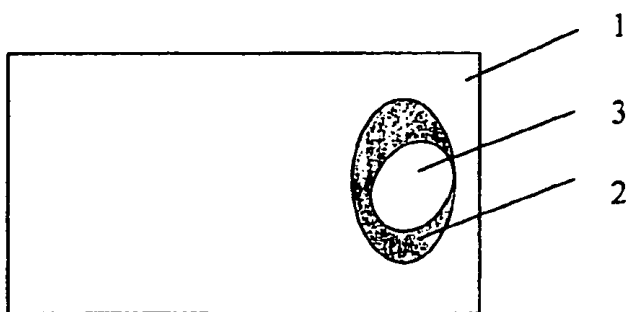
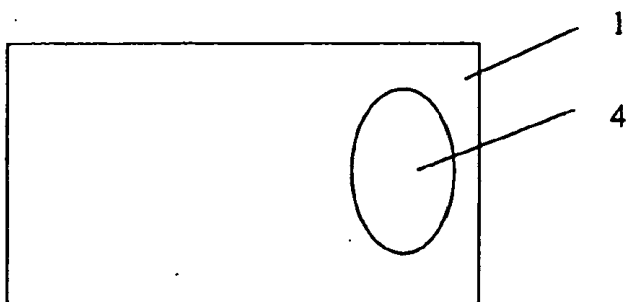
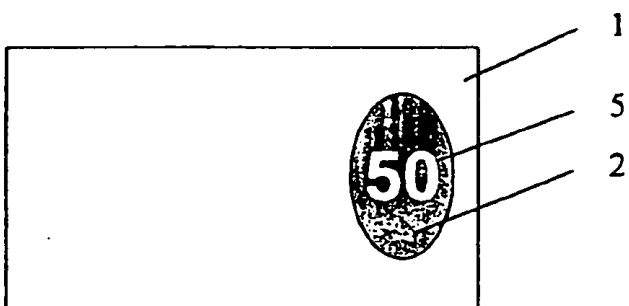
Family 64/200 - FAMPAT - ©Questel

Title

(EP2248111)

Valuable document with protection against forgery by way of thermochromic indicator

Images

Fig. 1**Fig. 1a****Fig. 1b****Fig. 1c****Fig. 1d****Publication data including kind & date**

WO2009106242	A1	2009-09-03	WO2009106242
CA2716892	A1	2009-09-03	CA2716892
DE102008011299	A1	2009-09-03	DE102008011299
EP2248111	A1	2010-11-10	EP2248111
CN101960495	A	2011-01-26	CN101960495
RU2010139579	A	2012-04-20	RU2010139579



RU2511575

C2 2014-04-10 RU2511575

CN101960495

B 2014-12-31 CN101960495B



EP2248111

B1 2016-07-13 EP2248111

Abstract

(EP2248111)

The invention relates to a security element having at least one thermochromic colour layer. The thermochromic colour layer is overlaid on a first item of information such that the first item of information is not visible. Only when a first type of heat is input into the thermochromic colour layer does the first item of information become visible. According to the invention, the thermochromic colour layer is not only overlaid on the first item of information, but also on a second item of information. The second item of information is not visible either within a specific temperature range, for example at the usual ambient temperature or at room temperature. Only when another type of heat input, which preferably differs from the first type of heat input, into the thermochromic colour layer is effected, does the second item of information become visible. According to the invention, in the case of the first type of heat input, the colour changes in another geometric distribution or another geometric pattern than in the case of the second type of heat input.

Inventors

REINER HARALD

MAYER KARLHEINZ

Latest standardized assignees - inventors removed

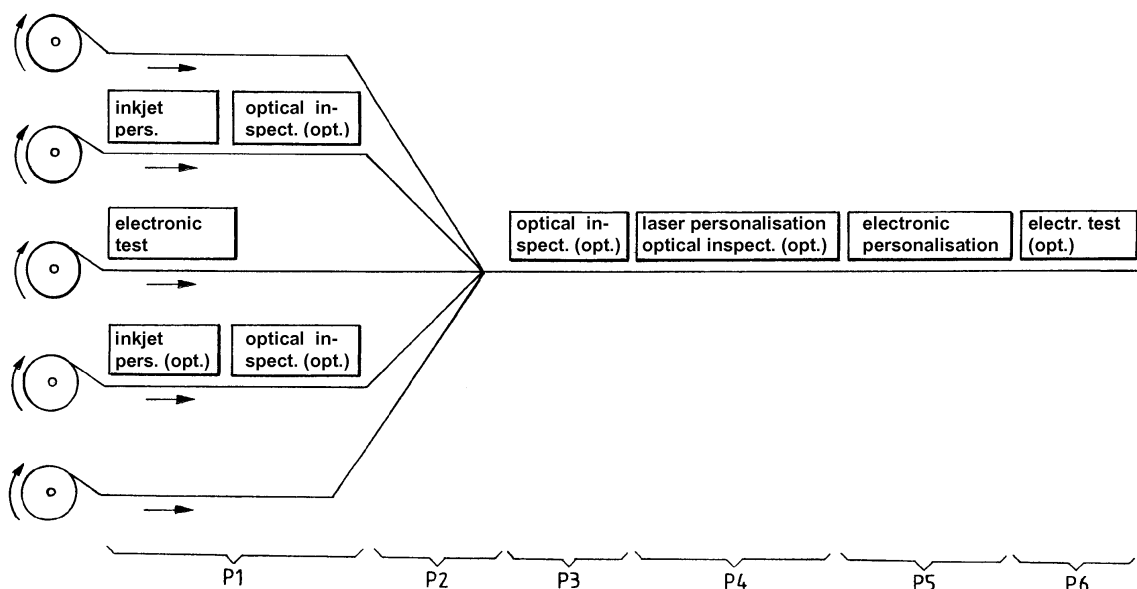
GIESECKE & DEVRIENT

Family 65/200 - FAMPAT - ©Questel

Title

(EP3000607)

Polymer layer composite for a security and/or valuable document

Images**Publication data including kind & date**

DE102007059747

A1 2009-06-10 DE102007059747

WO2009071067

A2 2009-06-11 WO200971067

WO2009071067

A3 2009-08-06 WO200971067

WO2009071067

A9 2009-09-24 WO200971067



EP2214912	A2	2010-08-11	EP2214912				
US20100260985	A1	2010-10-14	US20100260985				
CN101888932	A	2010-11-17	CN101888932				
RU2010127366	A	2012-02-10	RU2010127366				
US8404333	B2	2013-03-26	US8404333				
CN101888932	B	2013-05-29	CN101888932B				
RU2497684	C2	2013-11-10	RU2497684				
EP2214912	B1	2015-11-25	EP2214912				
EP3000607	A1	2016-03-30	EP3000607				

Abstract

(EP3000607)

The invention relates to a method for producing a polymer layer composite that comprises a plurality of polymer layers and at least one polymer layer contains a **laser**-sensitive component, said method consisting of the following steps: A) first personalized information is applied to at least one of the polymer layers by means of an inkjet printing method as a colored inkjet printed layer, B) the polymer layer with the colored inkjet printed layer is then joined to the other polymer layers, the polymer layer with the colored inkjet printed layer being arranged between two other polymer layers, C) second personalized information is inscribed into the polymer layer composite obtained in step B) by means of **laser** engraving. The invention also relates to a thus obtained polymer layer composite, a security and/or valuable document comprising a polymer layer composite of said type and to a method for producing a security and/or valuable document of said type.

(From US8404333 B2)

Inventors

HAGEMANN MICHAEL

MATHEA ARTHUR

MUTH OLIVER

PFLUGHOEFFT MALTE

FISCHER JÖRG

PUDLEINER HEINZ

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

COVESTRO DEUTSCHLAND

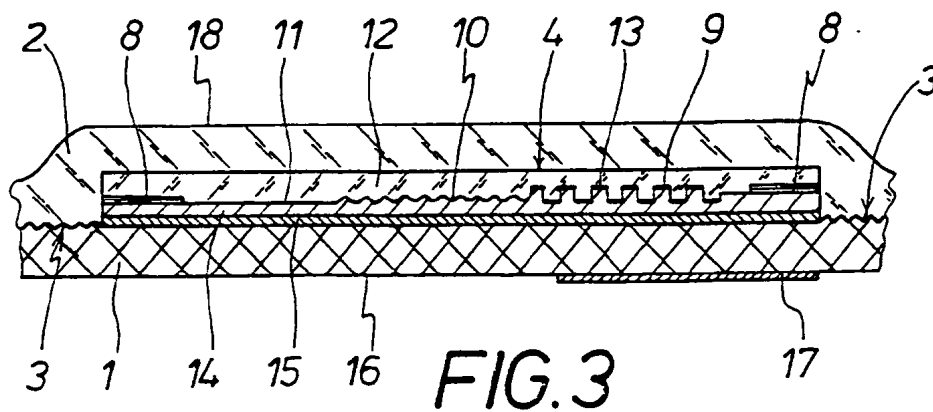
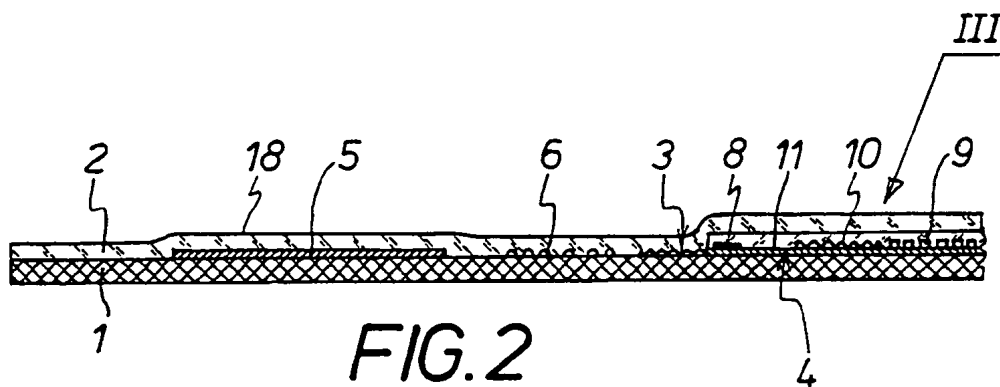
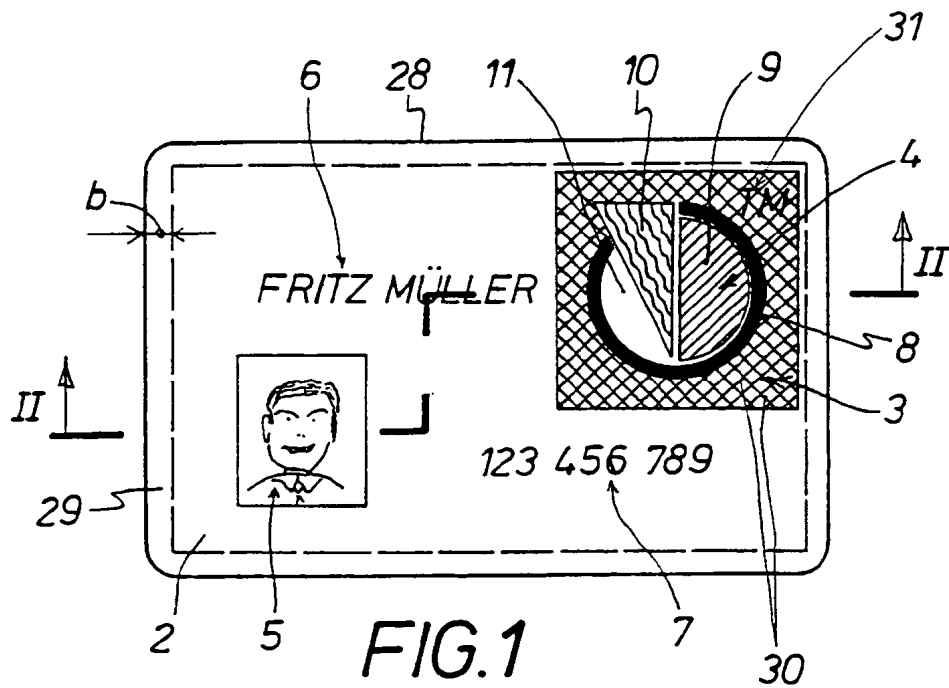
Family 66/200 - FAMPAT - ©Questel

Title

(EP1263610)

Laminate, in particular in the form of cards and a method for producing the same

Images



Publication data including kind & date

WO200168383	A1	2001-09-20	WO200168383
DE10013410	A1	2001-09-20	DE10013410
AU5221601	A	2001-09-24	AU200152216
KR20020084207	A	2002-11-04	KR20020084207



EP1263610	A1	2002-12-11	EP1263610				
CN1418151	A	2003-05-14	CN1418151				
JP2003526550	A	2003-09-09	JP2003526550				
CN1230313	C	2005-12-07	CN1230313C				
KR100706077	B1	2007-04-11	KR100706077				
EP1263610	B1	2008-10-08	EP1263610				
AT410316	T	2008-10-15	ATE410316				
DE50114387	D1	2008-11-20	DE50114387				
ES2315280	T3	2009-04-01	ES2315280				
DE10013410	B4	2011-05-05	DE10013410				
JP4925543	B2	2012-02-17	JP4925543				

Abstract

(EP1263610)

The invention relates to a laminate, in particular in the form of cards, e.g. identity cards, credit cards, or similar. Said laminate comprises at least two films that are rigidly attached to one another, having security elements and optionally, identification elements, which are visible through one of the films, sandwiched therebetween. At least one security element is configured as a three-dimensional structure, with an optically diffractive effect. The aim of the invention is to improve the durability of a laminate of this type and make forgeries more difficult. To achieve this, the films which enclose the security and optionally, identification elements lie directly adjacent to one another, covering a portion of at least 25 % of the total surface area of the laminate and at least 50 % of a continuous surface area containing detailed elements with a width or point size of less than 5 mm, whereby said adjacent films consist of a polycarbonate of a substantially consistent composition and are fused together in the vicinity of their contact surfaces.

Inventors

GRIEBEL THOMAS

BREHM LUDWIG

HANSEN ACHIM

Latest standardized assignees - inventors removed

OVD KINEGRAM

Family 67/200 - FAMPAT - ©Questel

Title

(EP2271504)

Machine readable security elements and products containing them

Images

Latest standardized assignees - inventors removed

HONEYWELL INTERNATIONAL

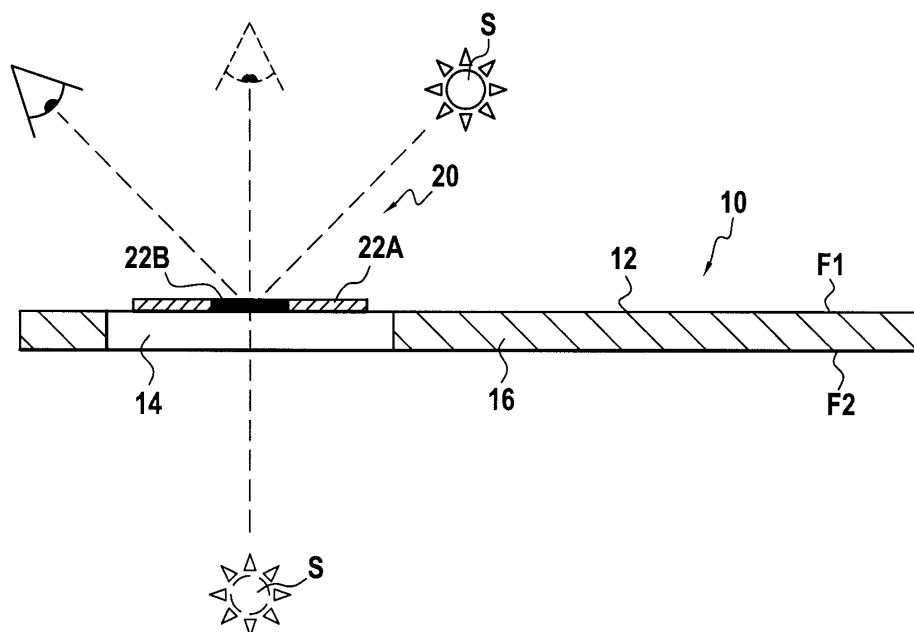
Family 68/200 - FAMPAT - ©Questel

Title

(EP2501554)

Security document including patterns with variable optical effect

Images



Publication data including kind & date

WO20111058288	A1	2011-05-19	WO2011158288
CA2778842	A1	2011-05-19	CA2778842
FR2952585	A1	2011-05-20	FR2952585
AU2010317769	A1	2011-10-27	AU2010317769
EP2501554	A1	2012-09-26	EP2501554
CN102725149	A	2012-10-10	CN102725149
BR112012011559	A1	2012-12-11	BR112012011559
ZA201203057	B	2013-01-30	ZA201203057
RU2012125057	A	2013-12-27	RU2012125057
AU2010317769	B2	2014-09-18	AU2010317769
RU2556492	C2	2015-07-10	RU2556492
CN102725149	B	2015-09-09	CN102725149B
EP2501554	B1	2015-09-16	EP2501554
BR112012011559	A2	2016-06-28	BR112012011559



Abstract

(EP2501554)

The invention relates to a document (10) which includes a substrate (12) and a security element (20) including first (22A) and second (22B) patterns supported by the substrate (12), the substrate (12) also including a translucent or transparent

area (14), with the first and second patterns (22A, 22B) at least partially extending therein. The first and second patterns (22A, 22B) are suitable for producing, inside the transparent area (14), at least first and second colours respectively when observing the document (10) by reflection and for switching said first and second colours when observing the document (10) being sent.

Inventors

HAMON SÉBASTIEN

GILLOT JULIEN

BORDE XAVIER

Latest standardized assignees - inventors removed

OBERTHUR FIDUCIAIRE

Family 69/200 - FAMPAT - ©Questel

Title

(EP1675726)

Security document with upconverting material

Images

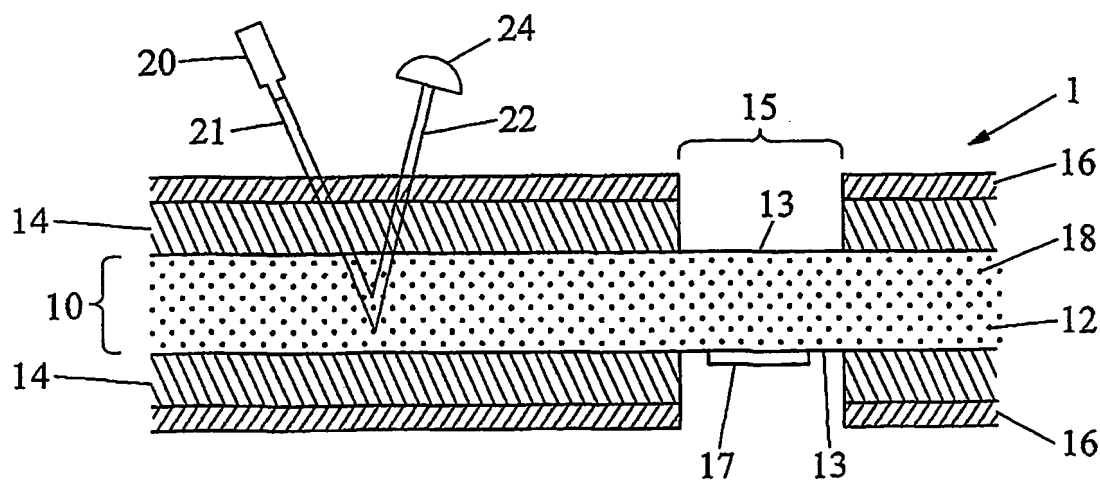


Fig. 1

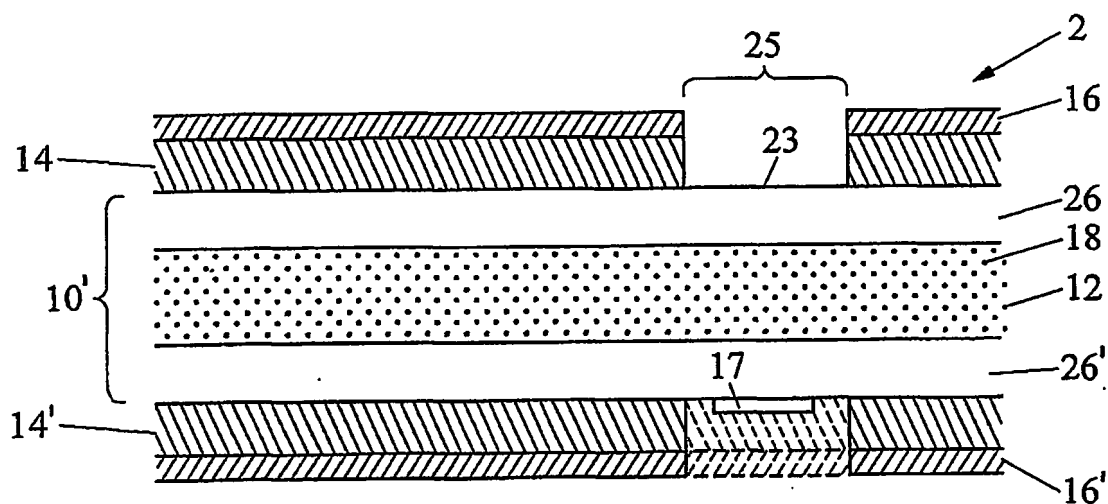


Fig. 2

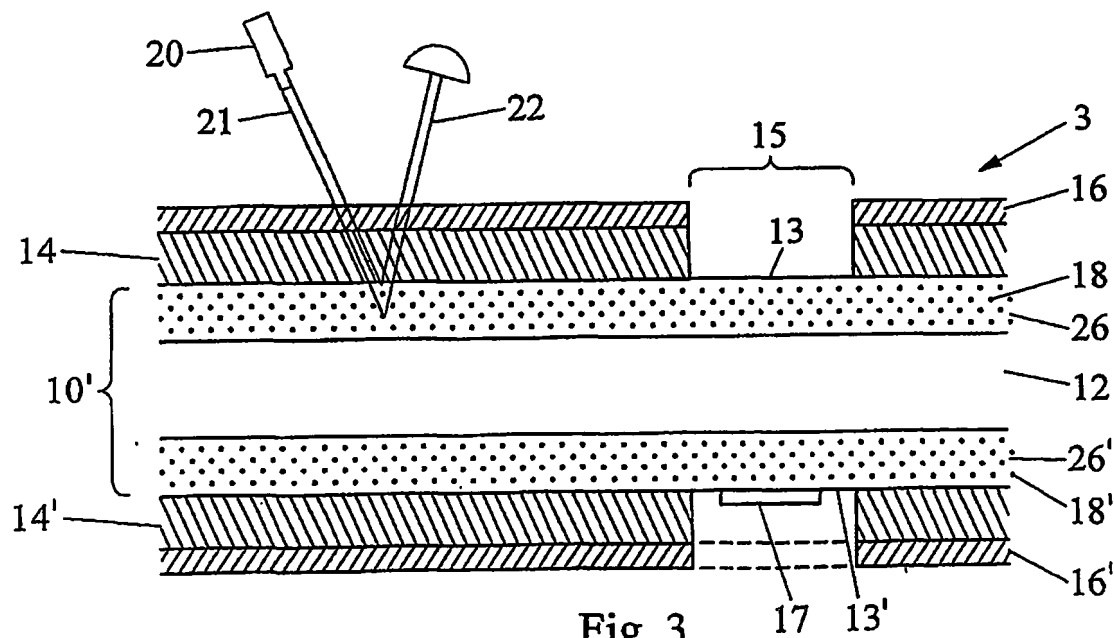


Fig. 3

Publication data including kind & date

WO2005032831	A1	2005-04-14	WO200532831
AU2004278049	A1	2005-04-14	AU2004278049
MXPA06003891	A	2006-07-03	MX2006PA003891
EP1675726	A1	2006-07-05	EP1675726
CN1867456	A	2006-11-22	CN1867456



BRPI0415205	A	2006-12-05	BR200415205				
BRPI0415205	A1	2006-12-05	BRPI0415205				
US20070054067	A1	2007-03-08	US20070054067				
IN2491/DELNP/2006	A	2007-08-24	IN2006DN02491				
ZA200602886	B	2007-10-31	ZA200602886				
RU2006115591	A	2007-11-27	RU2006115591				
CN100413698	C	2008-08-27	CN100413698C				
VN0007234	B	2008-10-27	VN---7234B				
IN250150	B	2011-12-16	IN-250150				
BRPI0415205	A2	2012-05-15	BR200415205				

Abstract

(EP1675726)

A security document (1) comprises a substrate (10) including at least one layer of. polymeric material (12, 26) and containing an upconverting fluorescent material (18), and at least one coating (14) containing a refractive pigment applied to the substrate (10). When the security document is exposed to electromagnetic radiation of a particular wavelength, e.g. infra-red, the upconverting material (18) emits a signal of electromagnetic radiation of a shorter wavelength, e.g. visible light, and the coating (14) containing the refractive pigment enhances the signal.

Inventors

POWER GARY FAIRLESS

Latest standardized assignees - inventors removed

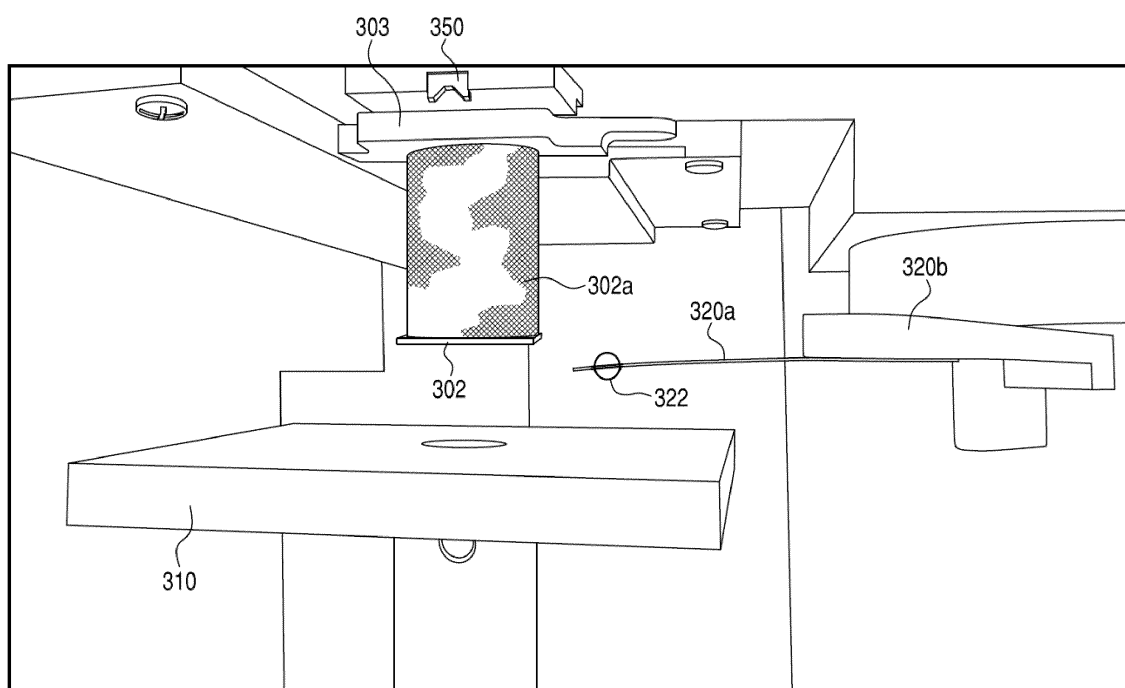
SECURENCY INTERNATIONAL

Family 70/200 - FAMPAT - ©Questel

Title

(EP2564272)

Ball-spacer method for planar object leveling

Images**Publication data including kind & date**

WO2011136848	A1	2011-11-03	WO2011136848				
US20110268883	A1	2011-11-03	US20110268883				

US20110268882	A1	2011-11-03	US20110268882				
CA2794720	A1	2011-11-03	CA2794720				
WO2011139337	A2	2011-11-10	WO2011139337				
CA2794903	A1	2011-11-10	CA2794903				
TW201200877	A	2012-01-01	TW201200877				
WO2011139337	A9	2012-01-05	WO2011139337				
TW201209707	A	2012-03-01	TW201209707				
WO2011139337	A3	2012-03-08	WO2011139337				
AU2011245669	A1	2012-11-29	AU2011245669				
AU2011249007	A1	2012-11-29	AU2011249007				
EP2564272	A2	2013-03-06	EP2564272				
EP2564270	A1	2013-03-06	EP2564270				
KR20130073896	A	2013-07-03	KR20130073896				
KR20130073895	A	2013-07-03	KR20130073895				
JP2013530387	A	2013-07-25	JP2013530387				
JP2013533460	A	2013-08-22	JP2013533460				

Abstract

(EP2564272)

An apparatus for leveling an array of microscopic pens with respect to a substrate surface is provided. The apparatus includes an array of microscopic pens; a substrate having a substrate surface; a controllable arm comprising a spherical ball on an end thereof; a force sensor configured to measure a force exerted on the array or the substrate surface at each of the plurality of positions; one or more actuators configured to drive the array and/or the substrate to vary a relative distance and a relative tilting between the array and the substrate surface; and a controller configured to determine a planar offset of the array with respect to the substrate and initiate a leveling of the array with respect to the substrate based on the planar offset. Methods are also provided.

Inventors

BUSSAN JOHN EDWARD

HAAHEIM JASON R

MOSKAL JOHN

SOLHEIM EDWARD R

VAL-KHVALABOV VADIM

NELSON MICHAEL R

AMRO NABIL A

VAKIL JAVAD M

Latest standardized assignees - inventors removed

NANOINK

Family 71/200 - FAMPAT - ©Questel

Title

(EP-581414)

Anti-counterfeit latent image formation object for bills, credit cards, etc. and method for making the same

Images

FIG. 1(a)

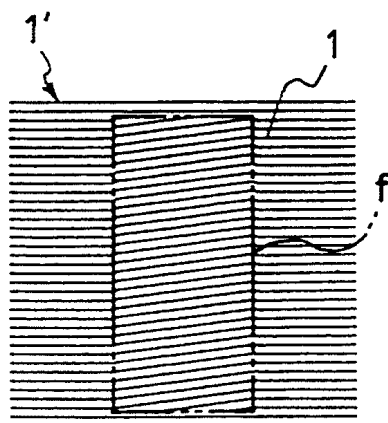


FIG. 1(b)

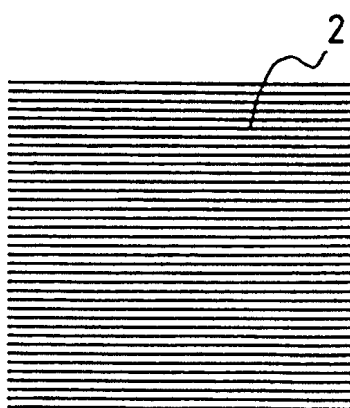


FIG. 1(c)

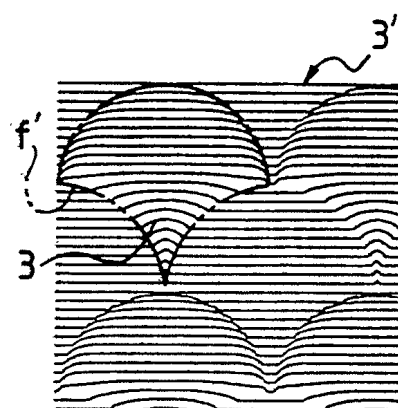


FIG. 2

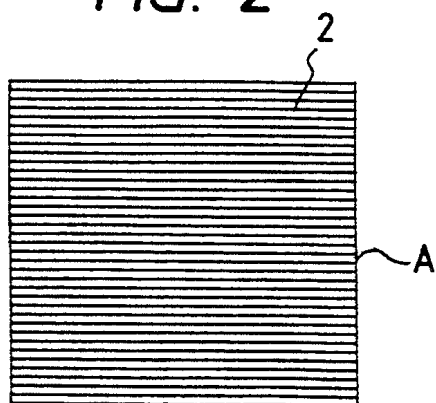


FIG. 3(a)

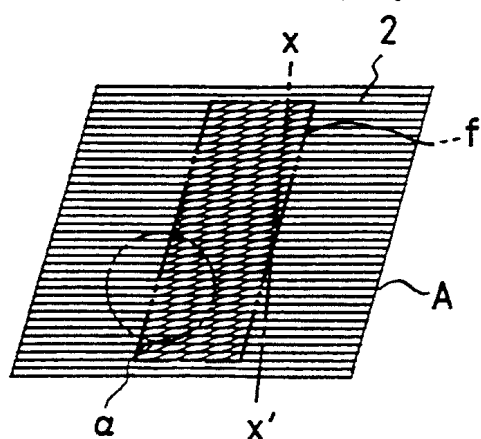
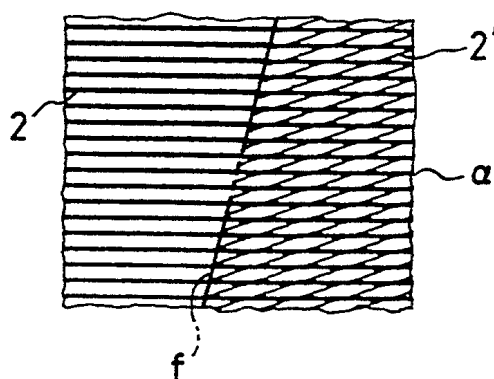


FIG. 3(b)



Publication data including kind & date

CA2095971	A1	1993-12-05	CA2095971
AU3865393	A	1993-12-09	AU9338653
JP05339900	A	1993-12-21	JP05339900
KR19940000248	A	1994-01-03	KR19940000248
EP0581414	A1	1994-02-02	EP-581414
US5437897	A	1995-08-01	US5437897
AU669698	B2	1996-06-20	AU-669698



US5582103	A	1996-12-10	US5582103				
JP2615401	B2	1997-05-28	JP2615401				
RU2091239	C1	1997-09-27	RU2091239				
EP0581414	B1	1997-10-15	EP-581414				
AT159201	T	1997-11-15	ATE159201				
DE69314566	D1	1997-11-20	DE69314566				
ES2109435	T3	1998-01-16	ES2109435				
GR3025068	T3	1998-01-30	GR3025068				
DE69314566	T2	1998-02-19	DE69314566				
DK0581414	T3	1998-03-30	DK-581414T				
CA2095971	C	1999-02-16	CA2095971				
KR0174285	B1	1999-04-01	KR100174285				
EP0581414	B2	2004-06-30	EP-581414				
DE69314566	T3	2004-09-30	DE69314566				

Abstract

(EP-581414)

An anti-counterfeit latent image formation object for bills, bank notes, security papers, credit cards, passports, valuable printing matters, and the like comprising a main body, a plurality projections and recesses means formed on the main body in such a manner as to exhibit various kinds of patterns, in which the various kinds of patterns comprise straight image lines forming a pattern, a relief pattern, or a combination of the pattern and the relief pattern; a plurality of straight lines printed on an upper surface of the projections and recesses at predetermined spaces, the straight lines being printed in different colors from that of the main body itself. The patterns consisting of letters, figures, etc. can be visually recognized only when the anti-counterfeit latent image formation object is viewed from an adequate angle. A method for making the anti-counterfeit latent image formation object is also disclosed.

Inventors

TANAKA TOSHINORI

NISHIYAMA SATORU

KOYAMA MASA HARU

Latest standardized assignees - inventors removed

NATIONAL PRINTING BUREAU

NATIONAL PRINTING BUREAU ADMINISTRATIVE AGENCY JAPAN

NATIONAL PRINTING BUREAU INCORPORATED ADMINISTRATIVE AGENCY JAPAN

Family 72/200 - FAMPAT - ©Questel

Title

(EP2637875)

Optically variable security device for a valuable document

Images

Inventors

GILLOT JULIEN

BORDE XAVIER

Latest standardized assignees - inventors removed

OBERTHUR FIDUCIAIRE

Family 73/200 - FAMPAT - ©Questel

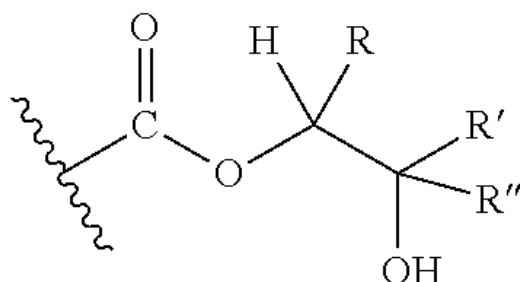
Title

(EP2810784)

Resin composition for **laser**-engravable flexographic printing plate, original plate for **laser**-engravable flexographic printing plate and method for production thereof, and flexographic printing plate and method for production thereof

Images

(1)

**Publication data including kind & date**

WO2013115082	A1	2013-08-08	WO2013115082
JP2013176977	A	2013-09-09	JP2013176977
CN104093572	A	2014-10-08	CN104093572
JP5628943	B2	2014-10-10	JP5628943
US20140338550	A1	2014-11-20	US20140338550
EP2810784	A1	2014-12-10	EP2810784
EP2810784	A4	2015-09-23	EP2810784
IN6435/CHENP/2014	A	2016-07-01	IN2014CN06435

**Abstract**

(EP2810784)

To provide a resin composition for a **laser**-engravable flexographic printing plate that has excellent removability for engraving residue generated when **laser**-engraving a printing plate precursor and that can give a flexographic printing plate that is excellent in terms of non-tackiness, hardness, printing durability, and halftone shape. A resin composition for a **laser**-engravable flexographic printing plate, the resin composition that comprises (Component A) a polyurethane resin having a group represented by Formula (1), (Component B) an ethylenically unsaturated compound, and (Component C) a polymerization initiator wherein in the Formula, R and R'' independently denote a hydrogen atom or an alkyl group, R' denotes an alkyl group, R and R' may be linked to form a ring, and the wavy line portion denotes the position of bonding.

Inventors

SATO HIROSHI

Latest standardized assignees - inventors removed

FUJIFILM

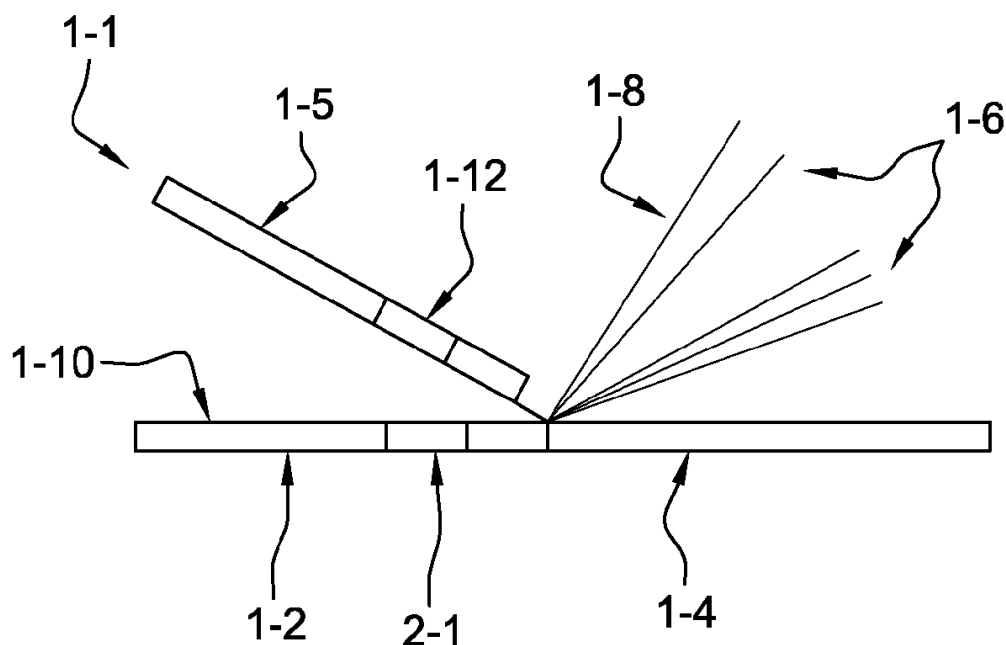
Family 74/200 - FAMPAT - ©Questel

Title

(EP2697074)

A security document and a manufacturing method thereof

Images



Publication data including kind & date

EP2511104	A1	2012-10-17	EP2511104
CA2832294	A1	2012-10-18	CA2832294
WO2012140228	A1	2012-10-18	WO2012140228
BR112013025853	A1	2014-01-07	BR112013025853
EP2697074	A1	2014-02-19	EP2697074
US20140131989	A1	2014-05-15	US20140131989
JP2014515707	A	2014-07-03	JP2014515707
BR112013025853	A2	2016-12-20	BR112013025853
JP2017213905	A	2017-12-07	JP2017213905
JP6362739	B2	2018-07-25	JP6362739



Abstract

(EP2697074)

A security document (1-1), comprising at least a first layer (2-2) and a second layer (2-4) above the first layer (2-2), the second layer (2-4) being of optically variable **ink**, and one or more personalization elements, the second layer (2-4) comprising one or more wholly **ink** free areas (2-12, 2-16, 2-21) that are optically variable elements of the one or more personalization elements and/or one or more partly **ink** free areas (2-14) that are optically variable elements of the one or more personalization elements.

Inventors

POHJOLA TEEMU
KORHONEN MAILA
NIKKILA JARMO

Latest standardized assignees - inventors removed

GEMALTO

Family 75/200 - FAMPAT - ©Questel

Title

(EP2874821)

Articles, methods of validating the same, and validation systems employing decay constant modulation

Images

US20100147820	A1	2010-06-17	US20100147820				
WO2010011398	A4	2010-07-29	WO201011398				
WO2010011397	A4	2010-08-05	WO201011397				
US20100235954	A1	2010-09-16	US20100235954				
EP2291849	A2	2011-03-09	EP2291849				
JP2011523047	A	2011-08-04	JP2011523047				
US8261368	B2	2012-09-04	US8261368				
US8393011	B2	2013-03-05	US8393011				

Abstract

(EP2291849)

A device comprising at least one cantilever comprising at least one piezoresistor is described, where the cantilevers comprise silicon nitride or silicon carbide and the piezoresistors comprise doped silicon. Methods for making and using such a device are also provided.

Inventors

FRAGALA JOSEPH S

HENNING ALBERT K

SHILE RAYMOND ROGER

Latest standardized assignees - inventors removed

NANOINK

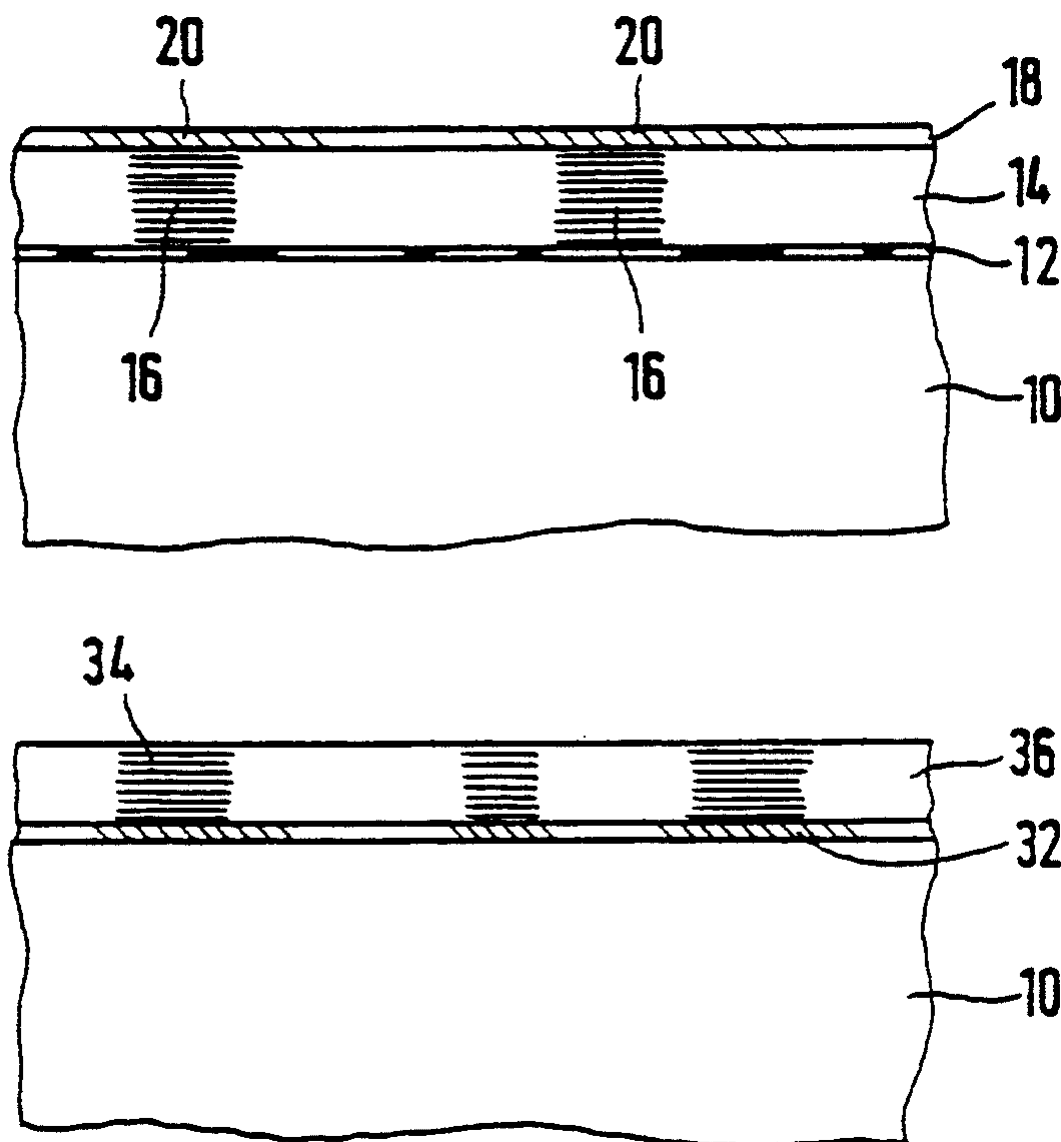
Family 77/200 - FAMPAT - ©Questel

Title

(EP-537484)

Recording media with coloured image, in particular credit or identity card

Images



Publication data including kind & date

EP0537484	A1	1993-04-21	EP-537484
DE4134539	A1	1993-04-22	DE4134539
JP05229289	A	1993-09-07	JP05229289
US5350198	A	1994-09-27	US5350198
US5435599	A	1995-07-25	US5435599
EP0537484	B1	1998-12-02	EP-537484
AT173982	T	1998-12-15	ATE173982
DE59209577	D1	1999-01-14	DE59209577
ES2123530	T3	1999-01-16	ES2123530
DK0537484	T3	1999-04-12	DK-537484T
JP3426266	B2	2003-07-14	JP3426266



Abstract

(EP-537484)

The invention relates to a recording medium which is provided with pictorial information in a forgery-proof and high-resolution form, and to a process for its production. The pictorial information is broken down into a light/dark portion and a coloured portion. The light/dark portion, which determines the visual impression, is introduced into the recording medium in a high-resolution form. The coloured pictorial information is superimposed congruently on this portion, so that an integral overall impression is produced. In order to guarantee security against forgery, one of the portions of the pictorial information is introduced into the card structure in a substantially forgery-proof manner.

Inventors

BERNECKER OTTO DR

Latest standardized assignees - inventors removed

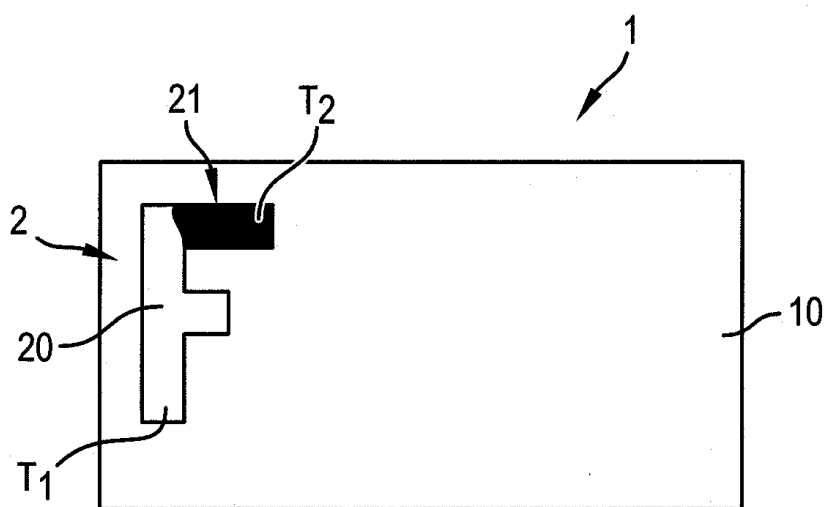
GAO GES AUTOMATION ORGANIZATION

Family 78/200 - FAMPAT - ©Questel

Title

(EP2445726)

Security document with differentiated tactile areas, and method for manufacturing same

Images**Publication data including kind & date**

WO2010149476	A1	2010-12-29	WO2010149476
FR2947209	A1	2010-12-31	FR2947209
FR2947209	B1	2011-07-22	FR2947209
AR077224	A1	2011-08-10	AR--77224
EP2445726	A1	2012-05-02	EP2445726
EP2445726	B1	2014-10-08	EP2445726

**Abstract**

(EP2445726)

The present invention relates in particular to a security document (1), such as an identity card or passport, which comprises, on a substrate (10), at least one datum (2) that is visible to the naked eye, such as text or an image, said piece of data consisting of at least one first region (20) having a first colour (T1), and at least one second region (21) having a second colour (T2) that other than the first, said datum being covered with an impression of transparent or translucent material forming a raised tactile element. The invention is characterised in that said impression of transparent or translucent material placed over said first region (20) has a thickness and/or a covering percentage and/or a brightness and/or is made according to a different graphic design than that (or those) of the impression (31) of transparent or translucent material placed over said second region (21), said difference being visibly perceptible.

Inventors

GILLOT JULIEN

BORDE XAVIER

DEMAIMAY FLORIAN

Latest standardized assignees - inventors removed

OBERTHUR FIDUCIAIRE

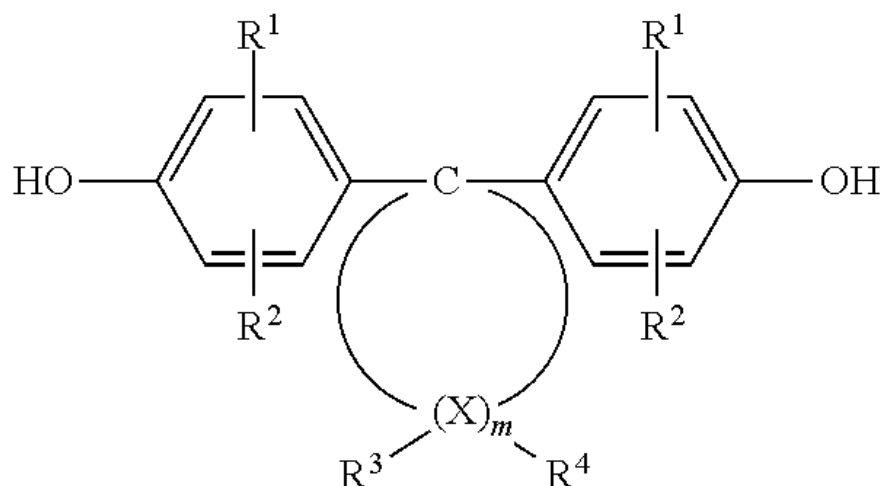
Family 79/200 - FAMPAT - ©Questel

Title

(EP2340174)

Use of a plastic film in colour **laser** printing**Images**

(Ia)

**Publication data including kind & date**

EP2168783	A1	2010-03-31	EP2168783
WO2010034409	A1	2010-04-01	WO201034409
TW201024341	A	2010-07-01	TW201024341
KR20110071066	A	2011-06-28	KR20110071066
EP2340174	A1	2011-07-06	EP2340174
CN102164753	A	2011-08-24	CN102164753
US20110206908	A1	2011-08-25	US20110206908
JP2012503787	A	2012-02-09	JP2012503787

**Abstract**

(EP2340174)

The invention relates to the use of a plastic film as a printable medium in colour **laser** printing, special plastic films for use in colour **laser** printing and to their use for producing security and value documents and plastic moulded parts.

Inventors

TZIOVARAS GEORGIOS

YESILDAG MEHMET-CENGIZ

KUENZEL ROLAND

POPHUSEN DIRK W

PUDLEINER HEINZ

LINDNER MANFRED

Latest standardized assignees - inventors removed

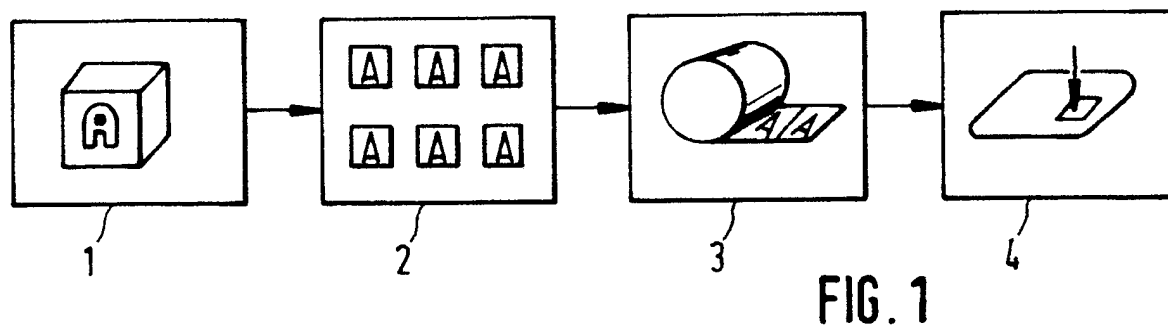
BAYER MATERIALSCIENCE

Family 80/200 - FAMPAT - ©Questel

Title

Optically variable element with non-holographic data and its production method

Images



CA2026542	A1	1991-03-29	CA2026542
EP0420261	A2	1991-04-03	EP-420261
AU6370890	A	1991-04-11	AU9063708
JP03185485	A	1991-08-13	JP03185485
EP0420261	A3	1993-02-03	EP-420261
AU648992	B2	1994-05-12	AU-648992
SG46291	A1	1998-02-20	SG--46291
EP0892362	A2	1999-01-20	EP-892362
EP0892362	A3	1999-01-27	EP-892362
EP0420261	B1	1999-03-24	EP-420261
AT178152	T	1999-04-15	ATE178152
DE59010867	D1	1999-04-29	DE59010867
ES2129019	T3	1999-06-01	ES2129019
EP1132862	A2	2001-09-12	EP1132862
CA2026542	C	2002-06-11	CA2026542
EP1229492	A1	2002-08-07	EP1229492
EP1132862	A3	2002-08-14	EP1132862
EP1241618	A1	2002-09-18	EP1241618
EP1241022	A1	2002-09-18	EP1241022
JP2003121625	A	2003-04-23	JP2003121625
EP1241618	B1	2004-03-24	EP1241618
AT262710	T	2004-04-15	ATE262710
DE59010937	D1	2004-04-29	DE59010937
EP1241022	B1	2004-09-08	EP1241022
AT275482	T	2004-09-15	ATE275482
DE59010939	D1	2004-10-14	DE59010939
ES2217223	T3	2004-11-01	ES2217223
EP0892362	B1	2005-01-19	EP-892362
EP1501045	A1	2005-01-26	EP1501045
AT287561	T	2005-02-15	ATE287561
DE59010940	D1	2005-02-24	DE59010940
ES2223997	T3	2005-03-01	ES2223997
JP2005125802	A	2005-05-19	JP2005125802
ES2232905	T3	2005-06-01	ES2232905
EP1229492	B1	2005-06-15	EP1229492
AT298116	T	2005-07-15	ATE298116



DE59010944	D1	2005-07-21	DE59010944
ES2240595	T3	2005-10-16	ES2240595
EP1501045	B1	2007-11-14	EP1501045
AT378651	T	2007-11-15	ATE378651
DE59010945	D1	2007-12-27	DE59010945
ES2293146	T3	2008-03-16	ES2293146
JP4139816	B2	2008-06-13	JP4139816

**Abstract**

(EP1501045)

Non-holographic data is produced in suitable layers of the optically-variable element, using a **laser**. The recording takes the form of a refractive structure disturbance. An independent claim is included for the corresponding method.

Inventors

HECKENKAMP CHRISTOPH

STENZEL GERHARD

KAULE WITTICH

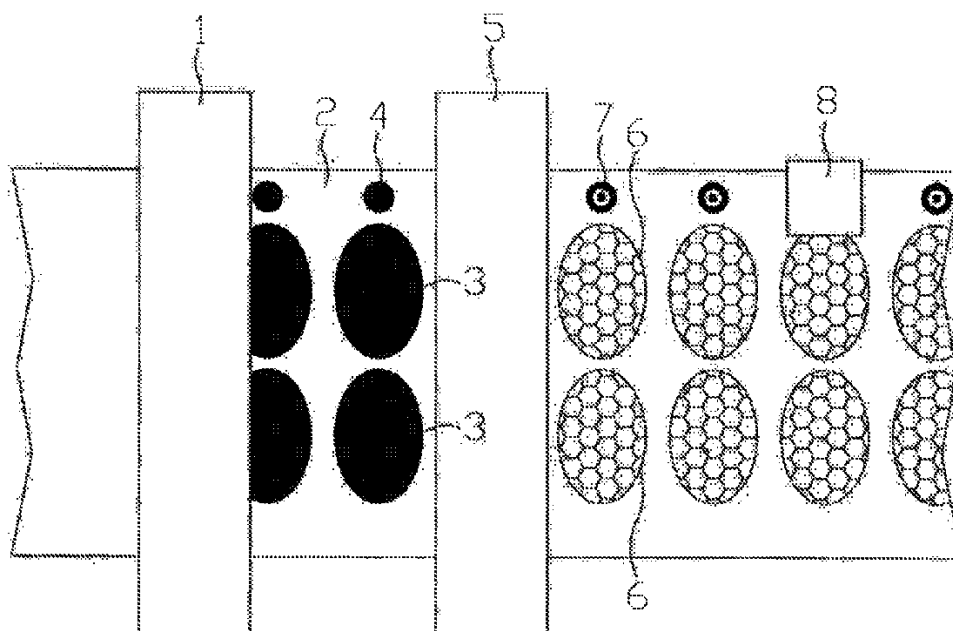
Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

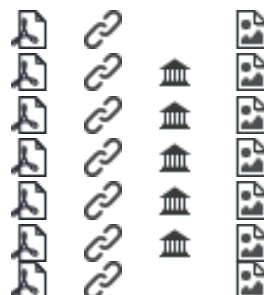
Family 81/200 - FAMPAT - ©Questel

Title

(EP2671664)

Laser process alignment measuring method**Images****Publication data including kind & date**

FI20125633	A	2013-03-19	FI201205633
BR102013012776	A1	2013-07-09	BR102013012776
EP2671664	A2	2013-12-11	EP2671664
US20130328994	A1	2013-12-12	US20130328994
JP2013257309	A	2013-12-26	JP2013257309
CN103481662	A	2014-01-01	CN103481662



FI124325	B	2014-06-30	FI-124325				
RU2013125608	A	2014-12-10	RU2013125608				
US9030512	B2	2015-05-12	US9030512				
RU2552906	C2	2015-06-10	RU2552906				
BR102013012776	A2	2016-09-13	BR102013012776				
JP6013967	B2	2016-09-30	JP6013967				
EP2671664	A3	2017-02-01	EP2671664				
CN103481662	B	2017-04-12	CN103481662B				

Abstract

(EP2671664)

A **laser** process alignment measuring method applicable to a reel-to-reel manufacturing process including a **laser** process stage, wherein before at least one **laser** process stage, on the base or carrier material of the web (2) are made marks, patterns or surfaces (4, 9) with printing **ink**, on which the **laser** beam used can make a mark (7, 10), for example, by removing or changing the printing **ink**, whereby at the **laser** process stage, another mark is plotted with the **laser** beam on the said mark printed with printing **ink**, and the position of the mark printed with printing **ink** (4, 9) and the mark plotted with the **laser** (7, 10) are read optically to measure the alignment of the printing **ink** stage and the **laser** process stage.

Inventors

MARTTILA TOM

Latest standardized assignees - inventors removed

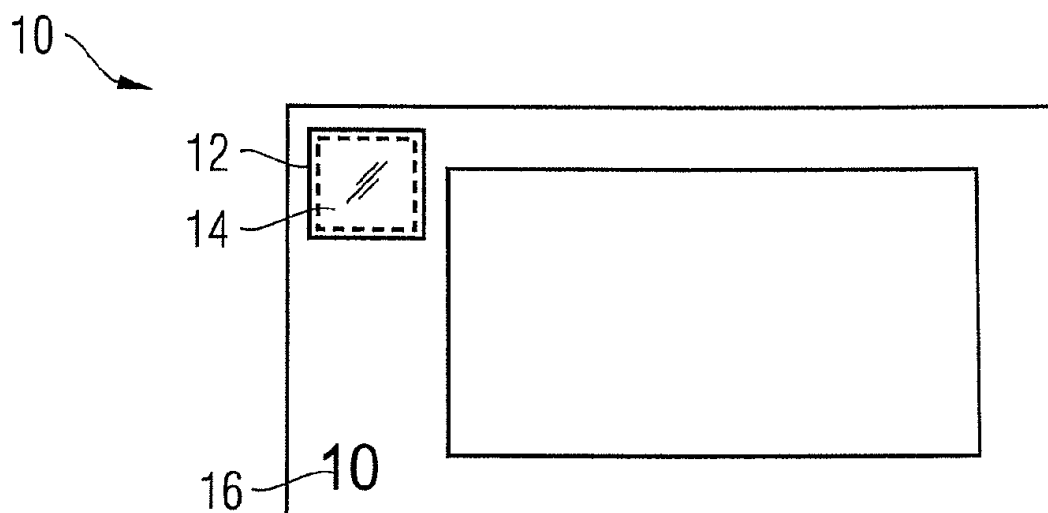
TECNOMAR

Family 82/200 - FAMPAT - ©Questel

Title

(EP2939845)

See-through safety element with microstructures

Images**Publication data including kind & date**

DE102006050047	A1	2008-04-30	DE102006050047				
WO2008049533	A2	2008-05-02	WO2008049533				
WO2008049533	A3	2009-01-15	WO2008049533				
EP2091756	A2	2009-08-26	EP2091756				
CN101528474	A	2009-09-09	CN101528474				

US20100194091	A1	2010-08-05	US20100194091				
RU2009119034	A	2010-11-27	RU2009119034				
CN101528474	B	2012-05-23	CN101528474B				
RU2452627	C2	2012-06-10	RU2452627				
US8534708	B2	2013-09-17	US8534708				
EP2091756	B1	2015-05-13	EP2091756				
EP2939845	A2	2015-11-04	EP2939845				
EP2939845	A3	2016-04-13	EP2939845				
EP2939845	B1	2018-05-02	EP2939845				

Abstract

(EP2939845)

The transparent security element (12) has a microstructure having a visual appearance (26,28) that is dependent on the viewing angle upon inspection. The microstructure is formed from an arrangement of multiple structure elements having a characteristic structure spacing of 1 micro meters or more. The transparent security element has a total thickness of 50 micrometers or less. The transparent security element has a transparent or translucent substrate (20) and a marking layer applied on the substrate, which has the micro structure. An independent claim is also included for a method for manufacturing the transparent security element.

(From DE102006050047 A1)

Inventors

HEIM MANFRED

DICHTL MARIUS

RAHM MICHAEL

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

Family 83/200 - FAMPAT - ©Questel

Title

(EP2318217)

Fiduciary or similar document comprising color block designs and copperplate printing, and manufacturing method for same

Images

FIG. 1

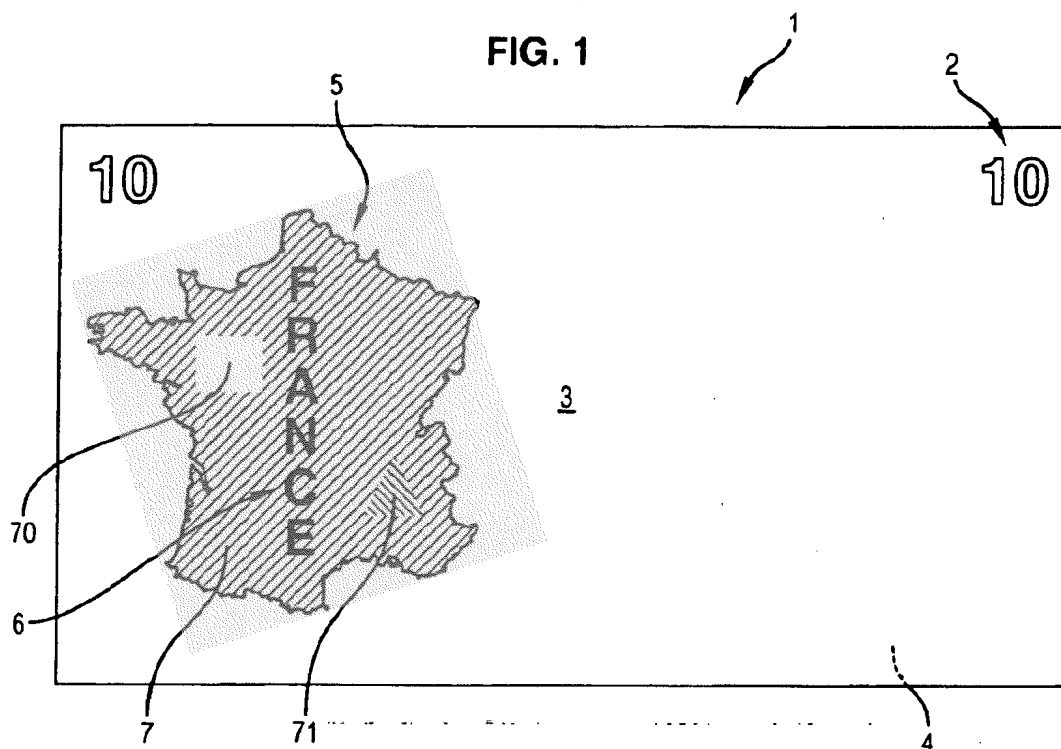


FIG. 2

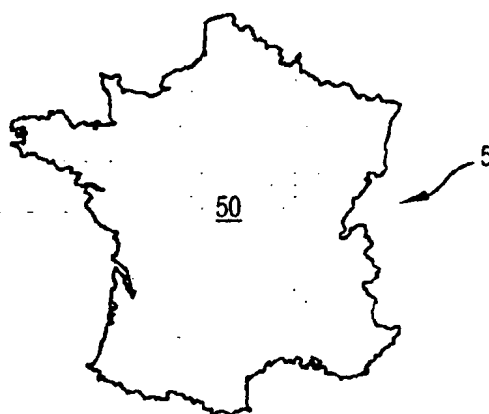


FIG. 3

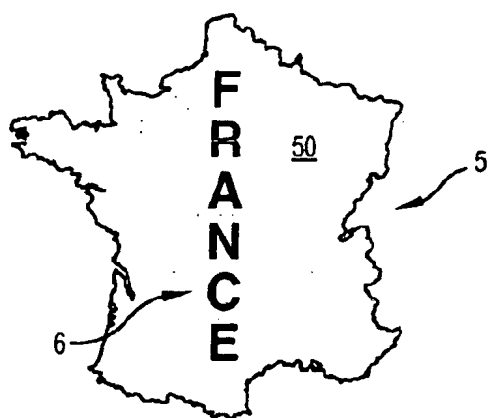
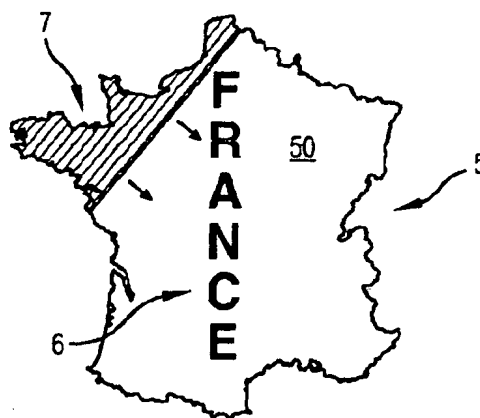


FIG. 4



Publication data including kind & date

WO2009147204	A2	2009-12-10	WO2009147204
CA2726968	A1	2009-12-10	CA2726968
FR2932116	A1	2009-12-11	FR2932116
WO2009147204	A3	2010-06-03	WO2009147204
FR2932116	B1	2010-07-30	FR2932116
EP2318217	A2	2011-05-11	EP2318217



[US8907998](#)

B2 2014-12-09 US8907998

[JP6151648](#)

B2 2017-06-21 JP6151648

**Abstract**

(US8907998)

An **ink**-based digital printing apparatus includes an imaging member having a surface layer with regular texture. The regular texture includes an array of microstructures such as cavities. Methods include forming the imaging member textured surface using photolithography and molding processes.

Inventors

KANUNGO MANDAKINI

METTU SRINIVAS

STOWE TIMOTHY D

PATTEKAR ASHISH

Latest standardized assignees - inventors removed

PALO ALTO RESEARCH CENTER

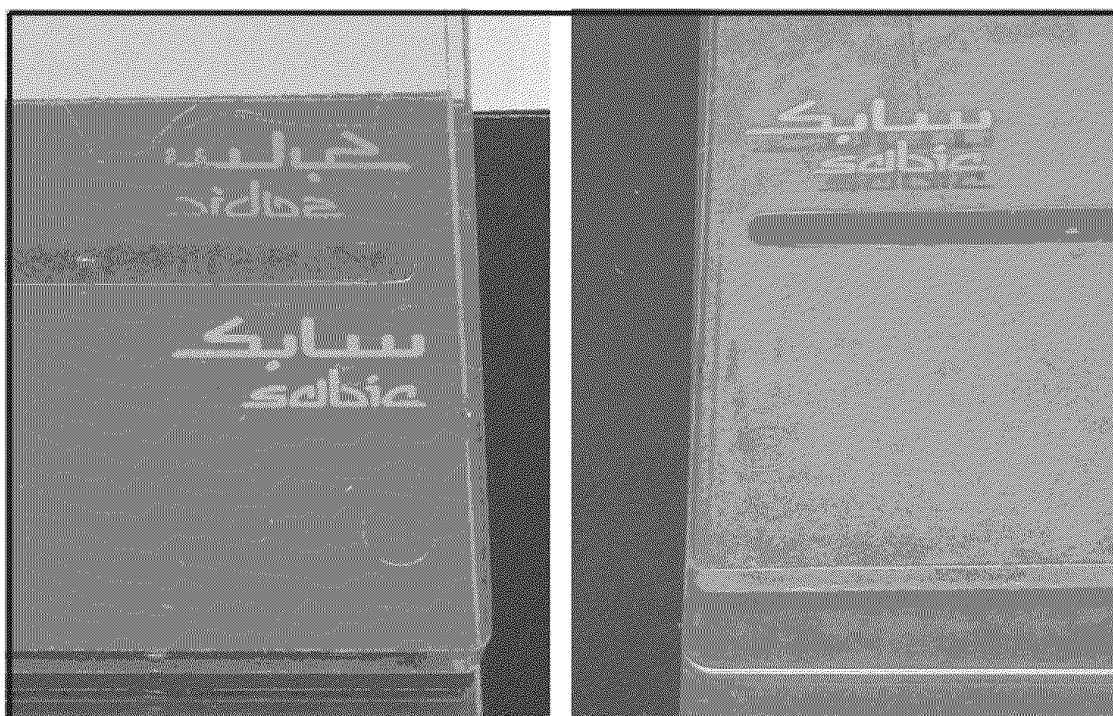
XEROX

Family 85/200 - FAMPAT - ©Questel

Title

(EP2855116)

Marked thermoplastic compositions, methods of making and articles comprising the same, and uses thereof

Images**Publication data including kind & date**[US20130323476](#)

A1 2013-12-05 US20130323476

[US20130320276](#)

A1 2013-12-05 US20130320276

[WO2013183000](#)

A1 2013-12-12 WO2013183000

[TW201412503](#)

A 2014-04-01 TW201412503

[CN104349887](#)

A 2015-02-11 CN104349887

[EP2855116](#)

A1 2015-04-08 EP2855116

[US9168696](#)

B2 2015-10-27 US9168696



[CN104349887](#)

B 2017-05-10 CN104349887B

[US9662833](#)

B2 2017-05-30 US9662833

**Abstract**

(EP2855116)

An article for **laser** marking can comprising: a thermoplastic composition comprising a thermoplastic polymer, an active component comprising at least one of a polymeric unit and an additive, wherein the thermoplastic polymer has a visible transmission of greater than or equal to 80% according to ASTM D1003-00, Procedure A, using D65 illumination, 10 degrees observer, and thickness of 1 mm; and a mark produced by chemical rearrangement of the active component generated by a **laser** of a first wavelength; wherein the mark exhibits at least one of: (i) a change in optical properties in the region 400 nm to 700 nm when exposed to light having a wavelength less than or equal to 500 nm; and (ii) a change in optical properties in the region of 400 nm to 700 nm when exposed to light having a wavelength greater than or equal to the first wavelength.

Inventors

FARRELL TONY

VAN DER SCHEER ROBIN ALPHONSUS ADRIANA

VAN PEER CORNELIA JOHANNES GERARDUS MARIA

Latest standardized assignees - inventors removed

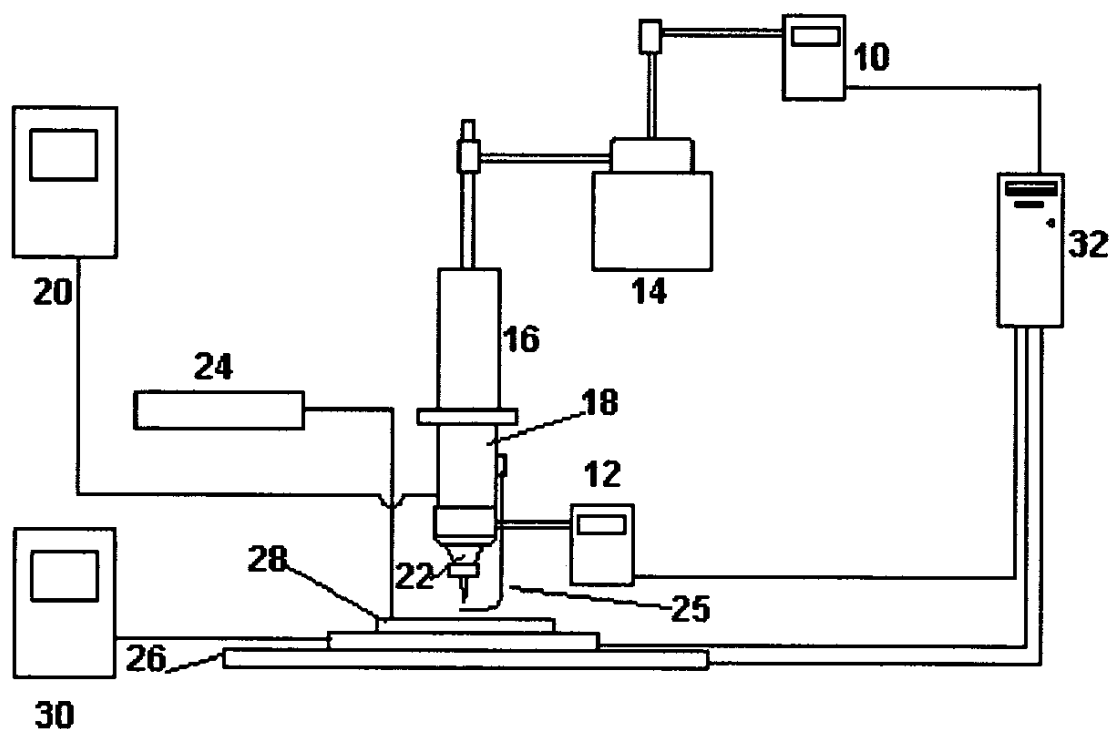
SABIC GLOBAL TECHNOLOGIES

Family 86/200 - FAMPAT - ©Questel

Title

(US8455051)

Apparatuses and methods for maskless mesoscale material deposition

Images**Publication data including kind & date**[US20030228124](#)

A1 2003-12-11 US20030228124

[US20040179808](#)

A1 2004-09-16 US20040179808

[US20050046664](#)

A1 2005-03-03 US20050046664



US20050156991	A1	2005-07-21	US20050156991				
US20050163917	A1	2005-07-28	US20050163917				
US7045015	B2	2006-05-16	US7045015				
US20060233953	A1	2006-10-19	US20060233953				
US20070181060	A1	2007-08-09	US20070181060				
US7270844	B2	2007-09-18	US7270844				
US7485345	B2	2009-02-03	US7485345				
US20090114151	A1	2009-05-07	US20090114151				
US7658163	B2	2010-02-09	US7658163				
US20110129615	A1	2011-06-02	US20110129615				
US7987813	B2	2011-08-02	US7987813				
US8455051	B2	2013-06-04	US8455051				
US20130260056	A1	2013-10-03	US20130260056				

Abstract

(US8455051)

Apparatuses and processes for maskless deposition of electronic and biological materials. The process is capable of direct deposition of features with linewidths varying from the micron range up to a fraction of a millimeter, and may be used to deposit features on substrates with damage thresholds near 100° C. Deposition and subsequent processing may be carried out under ambient conditions, eliminating the need for a vacuum atmosphere. The process may also be performed in an inert gas environment. Deposition of and subsequent **laser** post processing produces linewidths as low as 1 micron, with sub-micron edge definition. The apparatus nozzle has a large working distance-the orifice to substrate distance may be several millimeters-and direct write onto non-planar surfaces is possible.

Inventors

RENN MICHAEL J

KING BRUCE H

ESSIEN MARCELINO

MARQUEZ GREGORY J

GIRIDHARAN MANAMPATHY G

SHEU JYH-CHERNG

Latest standardized assignees - inventors removed

OPTOMECH

OPTOMECH DESIGN

Family 87/200 - FAMPAT - ©Questel

Title

(EP-710184)

Identity card and process for producing it

Images

[RU2127671](#)

C1 1999-03-20 RU2127671

[CN1046461](#)

C 1999-11-17 CN1046461C

**Abstract**

(EP-710184)

An identity card, especially a credit card, with an image section (B) containing a photograph of the holder, in which image spots of different absorption, especially the grey and black sections, are burned into the cover layer (1) and/or an intermediate layer (2) under a transparent cover layer (1) of the identity card by a **laser** beam and a colour section (BF) is also applied in register with the image, especially by the heat transfer process. Security characteristics can also be applied to the image distribution.

Inventors

BLOME RAINER

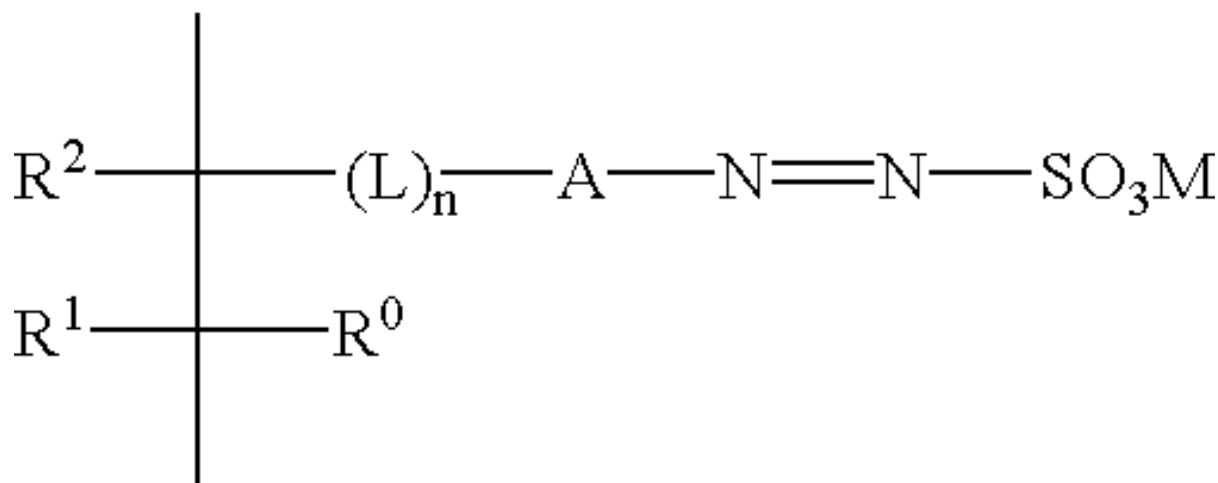
Latest standardized assignees - inventors removed

MORPHO

Family 88/200 - FAMPAT - ©Questel

Title

(EP1232877)

Cleaning method for recycling a printing substrate by **laser** ablation**Images****Publication data including kind & date**[EP1232877](#)

A1 2002-08-21 EP1232877

[US20020148375](#)

A1 2002-10-17 US20020148375

[JP2002331635](#)

A 2002-11-19 JP2002331635

[US6820552](#)

B2 2004-11-23 US6820552

[EP1232877](#)

B1 2006-05-03 EP1232877

[DE60119278](#)

D1 2006-06-08 DE60119278

[DE60119278](#)

T2 2007-03-29 DE60119278

**Abstract**

(EP1232877)

A method is disclosed for removing **ink**-accepting areas from a printing master by **laser** ablation, characterized in that the printing master comprises a substrate which comprises a support and a base layer, wherein the base layer contains a crosslinked hydrophilic binder and a metal oxide. The base layer prevents deterioration of the quality of the substrate due to the **laser** ablation. In a preferred embodiment, the same substrate is used in a number of consecutive printing cycles of on-press coating, on-press exposure, printing and cleaning.

Inventors

VERSCHUEREN ERIC

VAN DAMME MARC

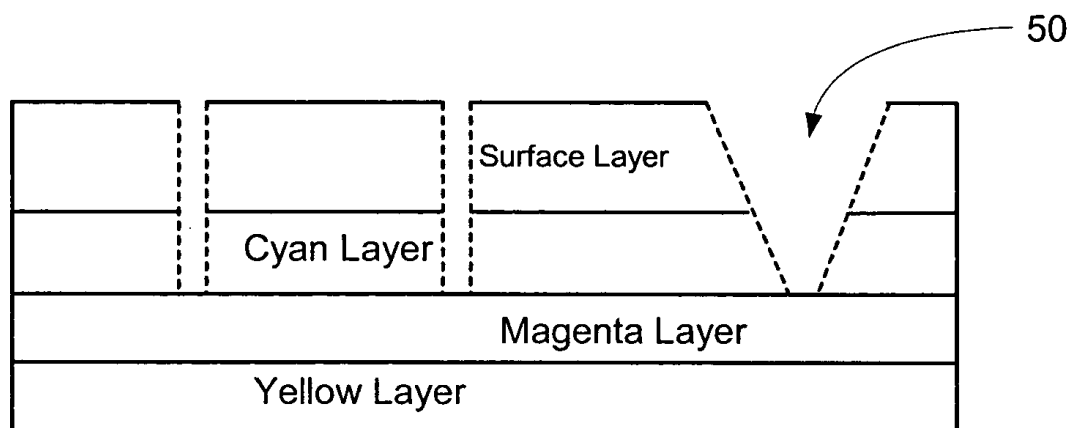
Latest standardized assignees - inventors removed

AGFA

Family 89/200 - FAMPAT - ©Questel

Title

(US7763179)

Color **laser** engraving and digital watermarking**Images****Publication data including kind & date**

US20050001419	A1	2005-01-06	US20050001419
US7763179	B2	2010-07-27	US7763179
US20110181036	A1	2011-07-28	US20110181036

**Abstract**

(US7763179)

A color **laser** engraving method engraves a document including a surface layer and one or more sub-layers. The sub-layer includes different colors and orientations of **ink**. A **laser** provides openings in the surface layer—to expose color **ink** in the sub-layer—to create color images and/or text. The different orientations of the colored inks include, e.g., circular, linear and overlapped groupings of **ink**. A sub-layer preferably includes many repeated instances of the grouping. A digital watermark is embedded in a document via transfer of the digital watermark in an embedded image or text, or by pre-embedding the document via altering intensity of colored inks on the original document card stock. A digital watermark can be carried via modulation with a pseudo-random noise sequence.

Inventors

LEVY KENNETH L

LABREC BRIAN

JONES ROBERT

Latest standardized assignees - inventors removed

DIGIMARC

Family 90/200 - FAMPAT - ©Questel

Title

(EP-664211)

Seamless offset lithographic printing members for use with **laser**-discharge imaging apparatus**Images**

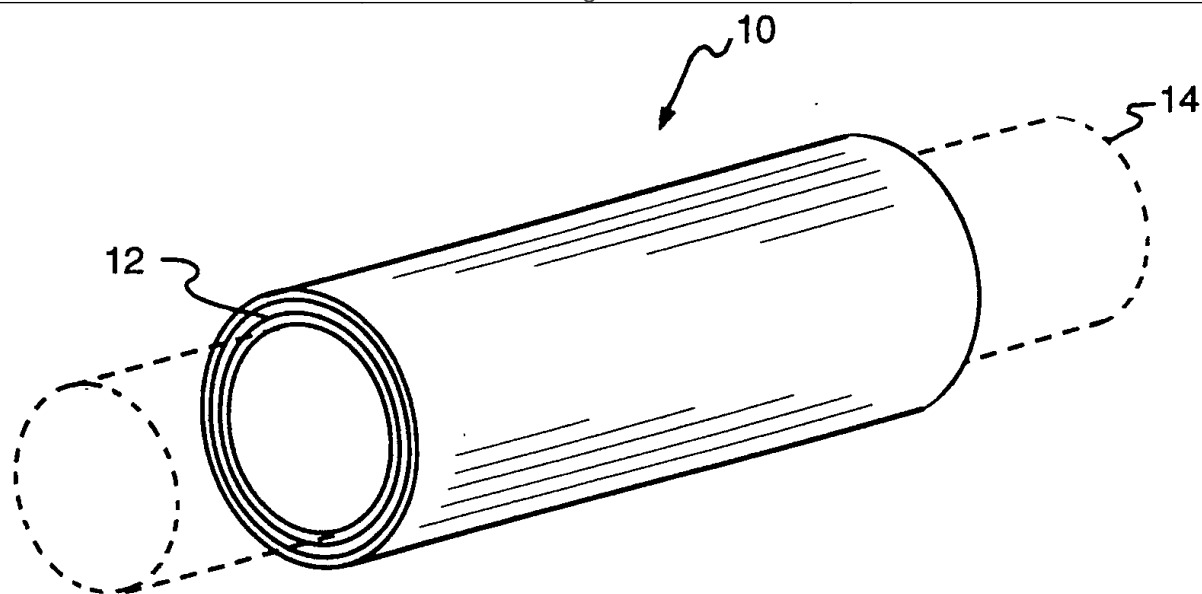


FIG. 1

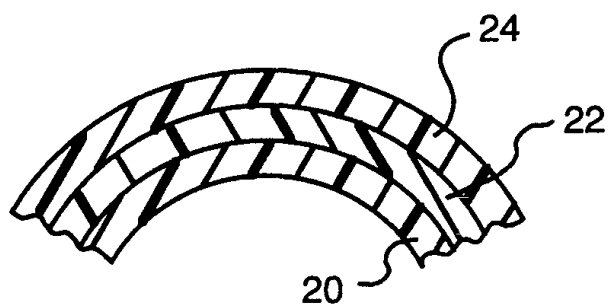


FIG. 2

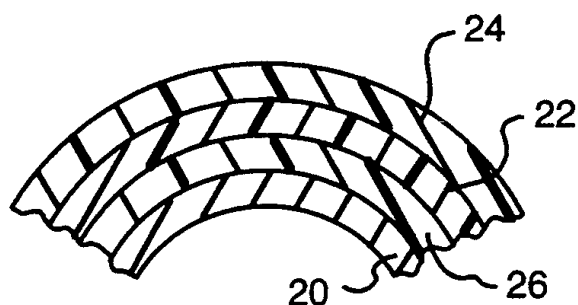


FIG. 3

Publication data including kind & date

[CA2140462](#)

A1 1995-07-22

CA2140462

[EP0664211](#)

A2 1995-07-26

EP-664211



AU1022595	A	1995-08-03	AU9510225
US5440987	A	1995-08-15	US5440987
JP07309001	A	1995-11-28	JP07309001
EP0664211	A3	1996-09-18	EP-664211
US5634403	A	1997-06-03	US5634403
US5636572	A	1997-06-10	US5636572
AU679294	B2	1997-06-26	AU-679294
CA2140462	C	2000-03-28	CA2140462
EP0664211	B1	2000-04-26	EP-664211
AT192076	T	2000-05-15	ATE192076
JP3042972	B2	2000-05-22	JP3042972
DE69516428	D1	2000-05-31	DE69516428
DE69516428	T2	2000-11-30	DE69516428



Abstract

(EP-664211)

Seamless, sleeve-shaped dry and wet lithographic printing members that can be recycled after use, along with methods for their manufacture and use. The members include a strong, durable, hollow cylinder or sleeve 20 that is attached to the plate mandrel or cylinder jacket 14 of an offset printing press or platemaking apparatus. Surrounding the sleeve is a layer of a material 22, preferably polymeric in nature, which is characterised by efficient, ablative absorption of **laser** radiation, as well as other layers 24 that facilitate imaging and subsequent printing. <IMAGE>

Inventors

WILLIAMS RICHARD A

LEWIS THOMAS E

Latest standardized assignees - inventors removed

PRESSTEK

Family 91/200 - FAMPAT - ©Questel

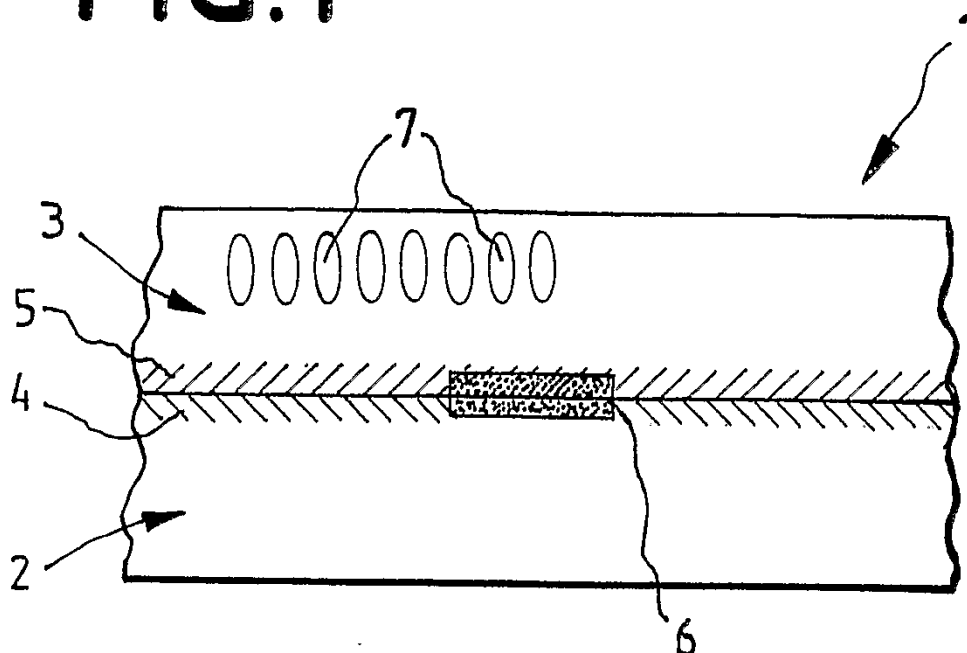
Title

(EP2244883)

Method for the production of a security and/or value document comprising protected personalized data

Images

FIG.1



Publication data including kind & date

WO2009106036	A2	2009-09-03	WO2009106036
DE102008012437	A1	2009-09-03	DE102008012437
WO2009106036	A3	2009-11-05	WO2009106036
EP2244883	A2	2010-11-03	EP2244883
EP2244883	B1	2015-12-16	EP2244883



Abstract

(EP2244883)

The invention relates to a method for producing a security and/or value document (1) containing a polymer laminate (2, 3) formed from a basic polymer laminate (2) and a polymer coating (3). At least the polymer coating has a printable substrate layer (4, 5) that can absorb a diffusible ink (6). Said method encompasses the following steps: A) a first printed image is produced on the printable substrate layer (4) of the basic polymer laminate or on the basic polymer laminate by printing a sublimation ink sublimating at a given diffusion temperature by means of a printing process; B) the printable substrate layer (5) of the polymer coating is placed on the first printed image; C) the stack comprising the basic polymer laminate and the polymer coating is laminated by heating the stack to a given lamination temperature; D) simultaneously with or following step C), at least subareas of the stack relative to a main area of the stack are heated to a temperature exceeding the diffusion temperature of the diffusible ink for a given period of time such that at least some of the diffusible ink of the first printed image is diffused into the printable substrate layer (5) of the polymer coating.

Inventors

LEOPOLD ANDRÉ
KRÜGER PER
EHREKE JENS

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

Family 92/200 - FAMPAT - ©Questel

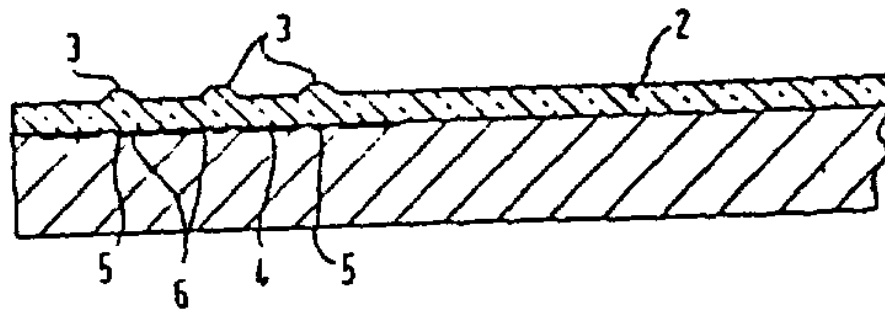
Title

(EP-216947)

Card-shaped data carrier and method of producing it

Images

Fig.1



Publication data including kind & date

EP0216947	A1	1987-04-08	EP-216947
AU6698386	A	1988-06-30	AU8666983
AU600922	B2	1990-08-30	AU-600922
EP0216947	B1	1991-01-02	EP-216947
AT59717	T	1991-01-15	ATE059717
DE3581082	D1	1991-02-07	DE3581082
HK21292	A	1992-03-27	HK9200212
SG16892	G	1992-09-04	SG--16892



Abstract

(EP-216947)

Card-shaped data carrier with a substrate and at least one transparent cover foil, which substrate is provided with information items which are recognisable through the cover foil by using a **laser** beam through the cover foil, the transparent cover foil (2) carrying a relief (3) which has been applied before the recording of the information items and which at least partially overlaps the information area, which relief characteristically changes the information recording due to its optical lens effect, and method for fabricating it.

Inventors

MAURER, THOMAS

Latest standardized assignees - inventors removed

MAURER ELECTRONICS

Family 93/200 - FAMPAT - ©Questel

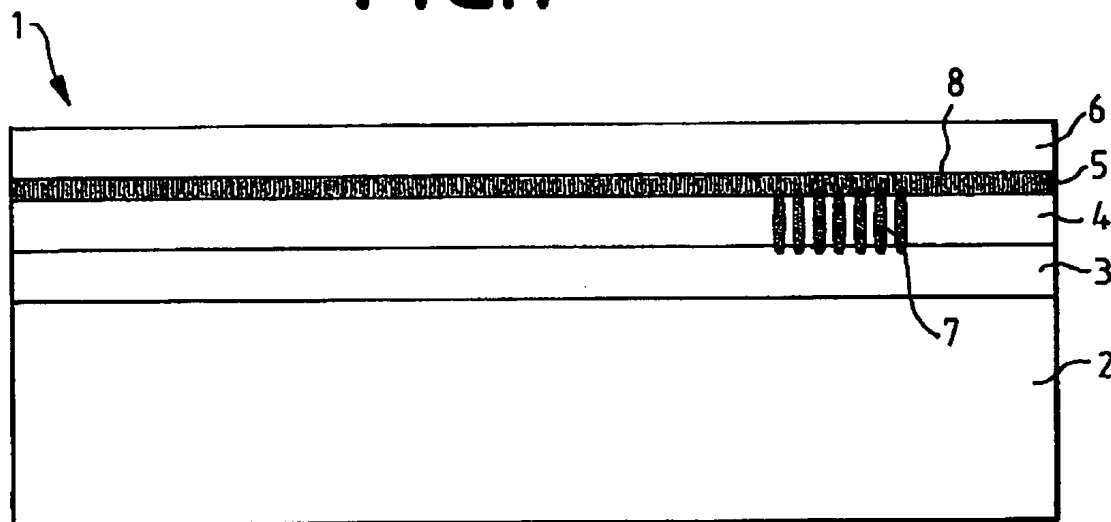
Title

(EP2121340)

Security and/or valuable document having at least two different security features which are positioned precisely to register

Images

FIG.1

**Publication data including kind & date**

WO2008110163	A2	2008-09-18	WO2008110163
DE102007012696	A1	2008-09-18	DE102007012696
WO2008110163	A3	2008-11-27	WO2008110163
EP2121340	A2	2009-11-25	EP2121340
CN101678696	A	2010-03-24	CN101678696
JP2010520826	A	2010-06-17	JP2010520826

**Abstract**

(EP2121340)

The invention relates to a security and/or valuable document (1) with a security element (12) that comprises at least two different security features selected from the group consisting of "holograms, **laser** engravings, printing motifs, fluorescent motif, luminescent motif, diffractive motif, optical variable **ink** (OVI) motif". The invention is characterized in that each security feature has a graphical structure (7, 8, 10, 11), wherein the graphical structures of different security features are graphically adjoining one another, arranged either in different layers or in the same layer of the security and/or valuable document, or are superimposed in different layers of the security and/or valuable document, the graphical structures of the different security features forming a graphical overall representation.

Inventors

LEOPOLD ANDRE
FISCHER JOERG
SPRINGMANN EDWARD

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

Family 94/200 - FAMPAT - ©Questel

Title

(EP1022133)

Lithographic printing plate and method for its' manufacture using **laser** irradiation**Images**

provided for forming the picture element part or the picture element part and the shading part.

Inventors

OKABE MASATO

KOBAYASHI HIRONORI

YAMAMOTO MANABU

Latest standardized assignees - inventors removed

DAI NIPPON PRINTING

Family 96/200 - FAMPAT - ©Questel

Title

(EP2864127)

Sheet element capable of being engraved by a **laser**

Publication data including kind & date

FR2992256	A1	2013-12-27	FR2992256
WO2014002014	A2	2014-01-03	WO201402014
WO2014002014	A3	2014-01-30	WO201402014
EP2864127	A2	2015-04-29	EP2864127



Abstract

(EP2864127)

The present invention relates to a sheet element capable of being engraved by a **laser** at a wavelength of between 800 nm and 1200 nm, said sheet comprising a fibrous substrate that comprises: natural fibres, in particular cellulose fibres; dispersed in the body of the fibrous substrate, at least one **laser**-marking pigment, in particular at least one metal oxide; at least on the surface of the fibrous substrate, and preferably in the body thereof, a printability filler, in particular one selected from among inorganic particles; and, preferably, at least one binder dispersed in the body of the fibrous substrate.

Inventors

LE LOARER THIBAUT

Latest standardized assignees - inventors removed

ARJOWIGGINS SECURITY

Family 97/200 - FAMPAT - ©Questel

Title

(EP2095969)

Laser engravable printing original plate

Publication data including kind & date

WO2008075451	A1	2008-06-26	WO200875451
JP4196362	B2	2008-10-10	JP4196362
EP2095969	A1	2009-09-02	EP2095969
EP2095969	A4	2010-02-03	EP2095969
US20100081083	A1	2010-04-01	US20100081083
JPWO2008075451	A1	2010-04-08	JP2008075451W
US8043790	B2	2011-10-25	US8043790
EP2095969	B1	2015-04-29	EP2095969



Abstract

(EP2095969)

The present invention provides a printing original plate for **laser** engraving which generates no printing deficiencies and from which a printing plate with a satisfactory resolution can be produced. A printing original plate for **laser** engraving which is obtained by molding a resin composition containing (A) at least one latex having a weight average degree of gelation of 75% or more, (B) a photopolymerizable compound and (C) a photopolymerization initiator into a sheet-like or tubular form, and then irradiating the molded article with light to crosslink and cure, characterized in that the depth of 10% screen dot at

150lpi is 80 µm or more.

Inventors

WADA TORU

YOSHIMOTO KAZUYA

Latest standardized assignees - inventors removed

TOYOBO

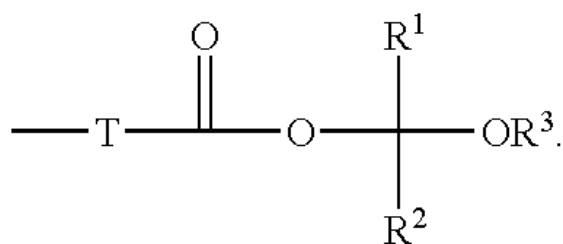
Family 98/200 - FAMPAT - ©Questel

Title

(EP1057623)

A method for preparing a lithographic printing plate by **laser** ablation of a heat-sensitive imaging element

Images



(I)

Publication data including kind & date

EP1057623	A1	2000-12-06	EP1057623
JP2001047593	A	2001-02-20	JP2001047593
US6455230	B1	2002-09-24	US6455230
EP1057623	B1	2004-05-06	EP1057623
DE69917004	D1	2004-06-09	DE69917004
DE69917004	T2	2004-10-28	DE69917004



Abstract

(EP1057623)

According to the present invention there is provided a method for preparing a lithographic printing plate, said method comprising the steps of (1) providing an imaging element comprising on a lithographic hydrophilic support as contiguous top layer a heat-sensitive coating comprising a compound capable of converting light to heat and a compound, which becomes more hydrophilic under the action of heat; (2) imagewise exposing said imaging heat-sensitive composition with a high intensity **laser** emitting a **laser** beam with an intensity at the surface of said heat-sensitive composition of at least 0.2 mW/ µm² thereby at least partially removing said heat-sensitive composition to expose at least partially the lithographic support.

Inventors

VAN DAMME MARC

HENDRICKX PETER

Latest standardized assignees - inventors removed

AGFA

Family 99/200 - FAMPAT - ©Questel

Title

(EP2246170)

Manufacturing method for seamless mold

Images

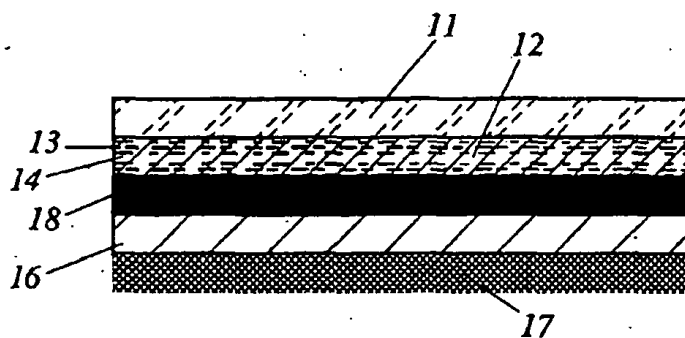
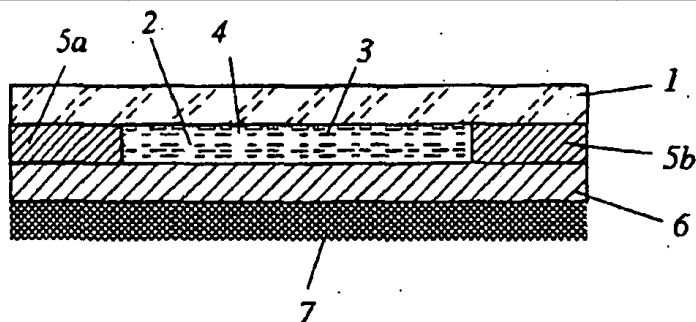
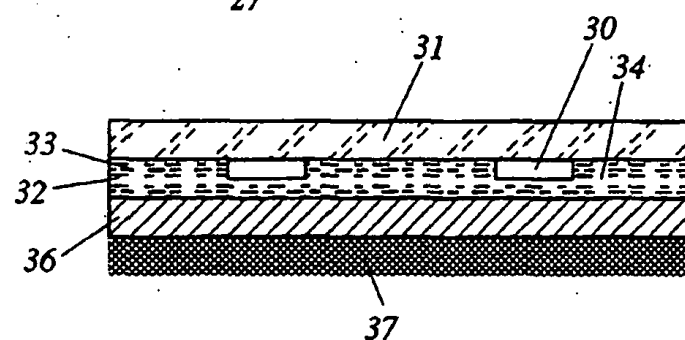
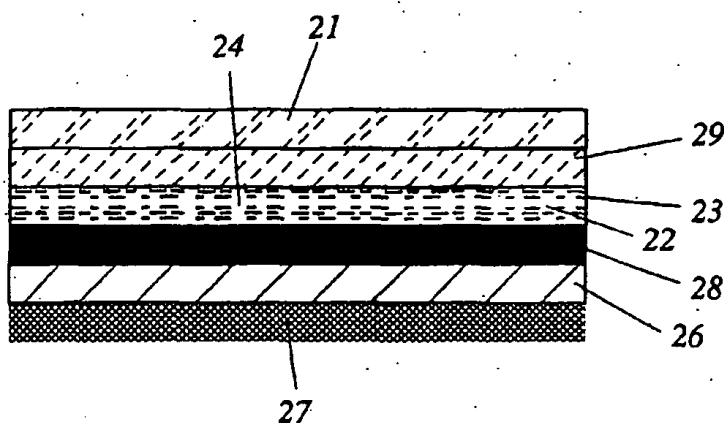
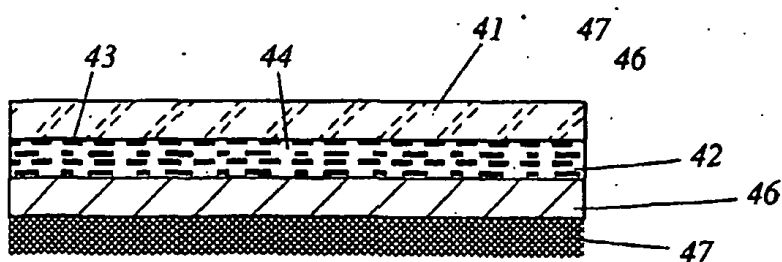
Family 100/200 - FAMPAT - ©Questel

Title

(EP1567363)

Laser-writable film

Images

Fig. 1*Fig. 2**Fig. 3**Fig. 4**Fig. 5*

Publication data including kind & date

WO2004050380

A1 2004-06-17

WO200450380

AU2003298321

A1 2004-06-23

AU2003298321

DE10256470

A1 2004-06-24

DE10256470



EP1567363	A1	2005-08-31	EP1567363
EP1567363	B1	2007-03-28	EP1567363
AT358026	T	2007-04-15	ATE358026
DE50306929	D1	2007-05-10	DE50306929
ES2285247	T3	2007-11-16	ES2285247

**Abstract**

(EP1567363)

The opaque inscription layer (2) is applied to a portion of the underside of the transparent top film (1) and is comprised of thin lamellar metal particles (3) incorporated into a matrix material (4) like a printing **ink**. The inscription layer (2) can be applied to the underside of the top film (1) using printing techniques. Aluminum flakes are particularly well-suited for use as the metal particles (3) and can be commercially obtained in particle sizes of around 15 nm with submicron thicknesses. When viewed through the top film, the inscription layer has a silvery white color of a high brilliance. Due to the incorporated metal particles (3), the inscription layer (2) depicts a medium that can be locally modified by irradiating it with a **laser** beam. The particle structure is effectively destroyed at the location of **laser** irradiation whereby rendering the inscription layer (2) locally transparent. When the **laser** beam is displaced over the inscription layer (2) along a path, which corresponds to the desired inscription, it leaves behind the inscription in the form of a transparent track.

Inventors

KOESSLINGER ROBERT

Latest standardized assignees - inventors removed

SCHREINER

Family 101/200 - FAMPAT - ©Questel

Title

(EP-844080)

Self-cleaning, abrasion-resistant, **laser**-imageable lithographic printing contructions**Images**

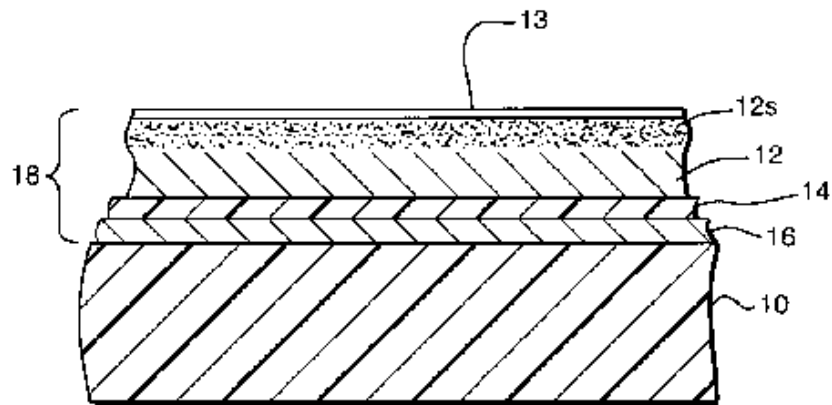


FIG. 1

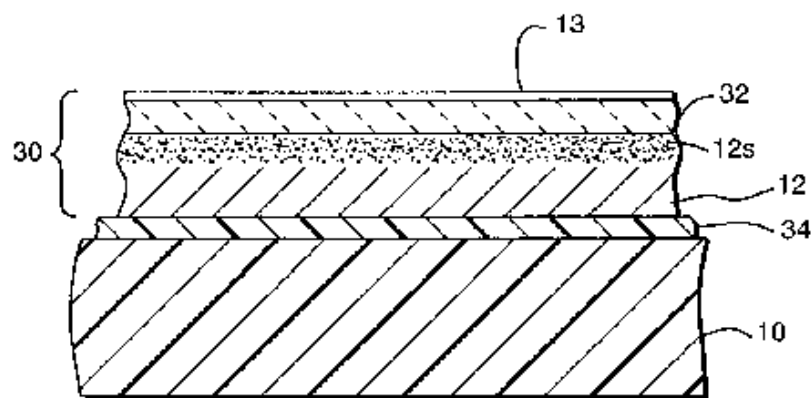


FIG. 2

Publication data including kind & date

CA2221922	A1	1998-02-20	CA2221922
EP0844080	A2	1998-05-27	EP-844080
AU4537297	A	1998-05-28	AU9745372
JP10193823	A	1998-07-28	JP10193823
US5807658	A	1998-09-15	US5807658
EP0844080	A3	1998-12-30	EP-844080
US6030751	A	2000-02-29	US6030751
AU716693	B2	2000-03-02	AU-716693
CA2221922	C	2004-01-27	CA2221922
JP3584152	B2	2004-08-06	JP3584152



Abstract

(EP2953798)

The invention relates to an optically variable surface pattern (10), which comprises at least two sub-regions (17, 18) having reflection elements (14, 15, 22, 27, 28), wherein the reflection elements (14, 22, 27) of the first sub-region (17) and the reflection elements (15, 22, 28) of the second sub-region reflect incident light in different reflection directions, wherein the first sub-region (17) is covered with a first transparent colour layer (20, 23, 29) in such a way that an observer, when the angle of observation at which the observer observes the optically variable surface pattern (10) is changed, sees the first sub-region (17) glow in a first colour when a first angle of observation (a1) is reached and sees the second sub-region (18) glow in a second colour different from the first colour when a second angle of observation (a2) is reached.

Inventors

FUHSE CHRISTIAN

RAUCH ANDREAS

HOFFMÜLLER WINFRIED

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

Family 103/200 - FAMPAT - ©Questel

Title

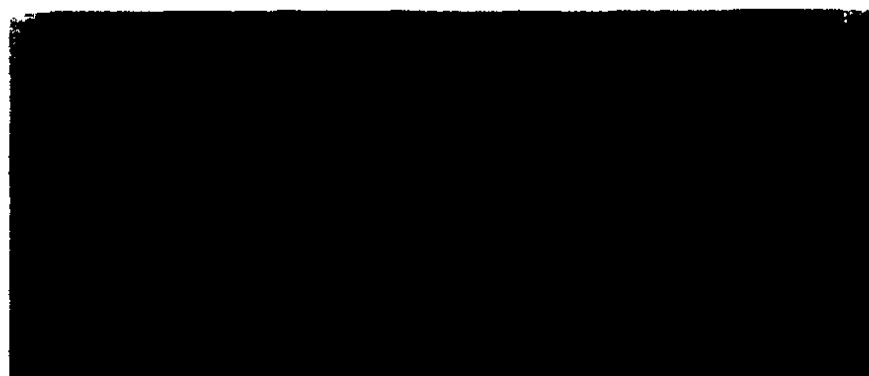
(EP1710093)

Photosensitive resin composition for **laser** engravable printing substrate**Images**

FIG.1



FIG.2



Publication data including kind & date

WO2005070691	A1	2005-08-04	WO200570691
EP1710093	A1	2006-10-11	EP1710093
KR20060125863	A	2006-12-06	KR20060125863
CN1922545	A	2007-02-28	CN1922545
IN2039/KOLNP/2006	A	2007-05-18	IN2006KN02039
US20070160928	A1	2007-07-12	US20070160928
JPWO2005070691	A1	2007-09-06	JP2005070691W
EP1710093	A4	2007-10-31	EP1710093



KR100796869	B1	2008-01-22	KR100796869
RU2006130804	A	2008-03-20	RU2006130804
RU2327195	C1	2008-06-20	RU2327195
JP2010208326	A	2010-09-24	JP2010208326
US7901863	B2	2011-03-08	US7901863
JP4789275	B2	2011-07-29	JP4789275
EP1710093	B1	2013-11-20	EP1710093

**Abstract**

(EP1710093)

A photosensitive resin composition for a **laser** engravable printing substrate, comprising resin (a) having a polymerizable unsaturated group whose number average molecular weight is in the range of 1000 to 20×10^4 , organic compound (b) having a polymerizable unsaturated group whose number average molecular weight is ≤ 1000 and organosilicon compound (c) having at least one Si-O bond in each molecule and having no polymerizable unsaturated group in molecules, wherein the content of organosilicon compound (c) is in the range of 0.1 to 10 wt.% based on the whole of photosensitive resin composition.

Inventors

YAMADA HIROSHI

TOMEBA KEI

Latest standardized assignees - inventors removed

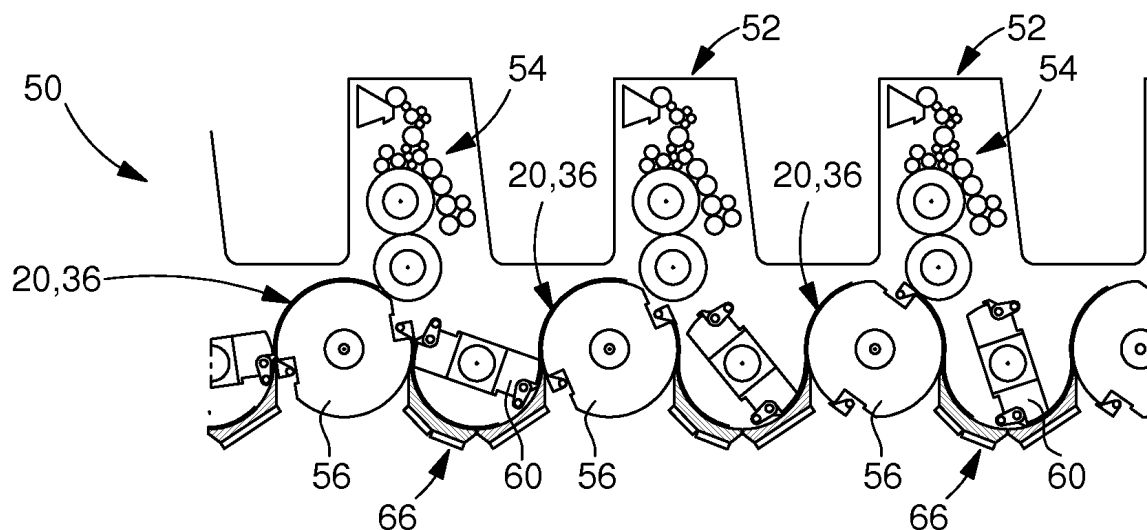
ASAHI KASEI CHEMICALS

Family 104/200 - FAMPAT - ©Questel

Title

(EP2132684)

Method for producing electronic cards including at least one printed pattern

Images**Publication data including kind & date**

WO2008101807	A1	2008-08-28	WO2008101807
CA2678157	A1	2008-08-28	CA2678157
AU2008217056	A1	2008-08-28	AU2008217056
MX2009007905	A	2009-07-31	MX2009007905
KR20090108650	A	2009-10-15	KR20090108650
EP2132684	A1	2009-12-16	EP2132684
IN4622/CHENP/2009	A	2009-12-18	IN2009CN04622
US20100008055	A1	2010-01-14	US20100008055



CN101652786	A	2010-02-17	CN101652786				
JP2010532504	A	2010-10-07	JP2010532504				
EP2132684	B1	2012-08-22	EP2132684				
US20120224344	A1	2012-09-06	US20120224344				
KR101188091	B1	2012-10-05	KR101188091				
AU2008217056	B2	2012-12-20	AU2008217056				
ES2393884	T3	2012-12-28	ES2393884				
JP5281585	B2	2013-05-31	JP5281585				
CN101652786	B	2013-06-05	CN101652786B				
JP2013211014	A	2013-10-10	JP2013211014				
JP5450862	B2	2014-01-10	JP5450862				
HK1141606	A1	2014-02-14	HK1141606				
CA2678157	C	2014-04-01	CA2678157				
US20140283978	A1	2014-09-25	US20140283978				
US9107336	B2	2015-08-11	US9107336				
US20150379386	A1	2015-12-31	US20150379386				
US9320186	B2	2016-04-19	US9320186				
IN290059	B	2017-12-01	IN-290059				

Abstract

(EP2132684)

The invention relates to a method for producing electronic cards, that comprises the following steps: A) forming a plurality of card bodies in the form of a thick sheet (36) in which is respectively imbedded a plurality of electronic units or modules (28); B) printing a plurality of first patterns (14) on a first face (21) of said thick sheet in a printing station in which **ink** is applied on the first face for making said first patterns; C) applying a first at least partially transparent coating (38) on each printed first pattern, that adheres to said card body. In an advanced embodiment, the method also comprises printing a plurality of second patterns (40) on the inner surface of a film (38) forming said first coating. Preferably, the printing of the first patterns is carried out in an offset type station for printing high definition patterns, essentially of the security type. The second patterns essentially define personal data. The printed thick sheet (36) defines an intermediate product according to the invention.

Inventors

DROZ FRANCOIS

Latest standardized assignees - inventors removed

KUDELSKI

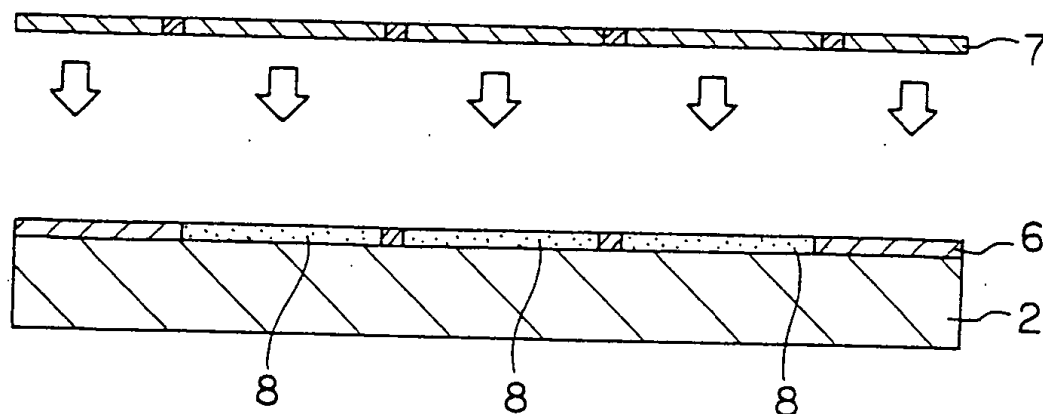
Family 105/200 - FAMPAT - ©Questel

Title

(US20050042385)

Color filter and process for producing the same

Images

**Publication data including kind & date**

JP2001074929	A	2001-03-23	JP2001074929
TW495622	B	2002-07-21	TW-495622
JP3395841	B2	2003-04-14	JP3395841
US20050042385	A1	2005-02-24	US20050042385

**Abstract**

(US20050042385)

There is provided a color filter without a shading part, which comprises a transparent substrate, a picture element part provided on the transparent substrate by the predetermined pattern of a plurality of colors with an **ink** jet system, and a wettability-variable layer, in which the wettability can be changed, provided for forming the picture element part.

Inventors

OKABE MASATO

KOBAYASHI HIRONORI

YAMAMOTO MANABU

Latest standardized assignees - inventors removed

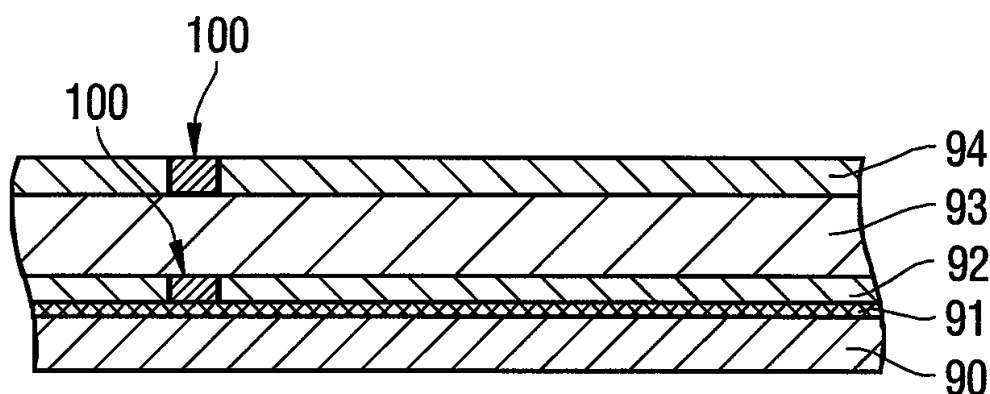
DAI NIPPON PRINTING

Family 106/200 - FAMPAT - ©Questel

Title

(EP1983473)

Data carrier with codes

Images**Publication data including kind & date**

WO2005048182	A1	2005-05-26	WO200548182
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DE10353092	A1	2005-06-16	DE10353092				
EP1687763	A1	2006-08-09	EP1687763				
US20070087173	A1	2007-04-19	US20070087173				
EP1983473	A1	2008-10-22	EP1983473				
EP1983473	B1	2010-03-17	EP1983473				
AT461499	T	2010-04-15	ATE461499				
DE502004010924	D1	2010-04-29	DE502004010924				
ES2341391	T3	2010-06-18	ES2341391				
US20100290039	A1	2010-11-18	US20100290039				
US8409693	B2	2013-04-02	US8409693				

Abstract

(EP1983473)

Data carrier into which markings are introduced using a **laser** beam, said markings being visible as **laser**-generated irreversible changes of the optical characteristics of the data carrier. The data carrier comprises a **laser**-sensitive layer (20) that is opaque in the visible spectrum and is combined with a securing layer (22) that is metalized in at least a partial area. The markings (30, 32) are introduced simultaneously and with exactly matching registers in the **laser** sensitive layer and the metalized area (24) of the securing layer. An independent claim is made for a method for manufacturing an inventive data carrier.

Inventors

ENDRES GUENTER

KRUSE GEORG

RIEDL JOSEF

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT MOBILE SECURITY

Family 107/200 - FAMPAT - ©Questel

Title

(DE3614661)

Process for producing a customer, credit or identity card

Publication data including kind & date[DE3614661](#) C1 1987-07-23 DE3614661**Abstract**

(DE3614661)

Process for producing a customer, credit or identity card which can be printed on by a cold-**laser** printer from a piece of PVC sheet in card form. The PVC sheet has a surface roughness of 5-15 μm and is coated at least on one side, at least partially, with a UV varnish, which is left to cure in the UV light.

Inventors

BILLER MANFRED

Latest standardized assignees - inventors removed

WINTER WERTDRUCK

Family 108/200 - FAMPAT - ©Questel

Title

(EP2542421)

Security element having aligned magnetic pigments

Images

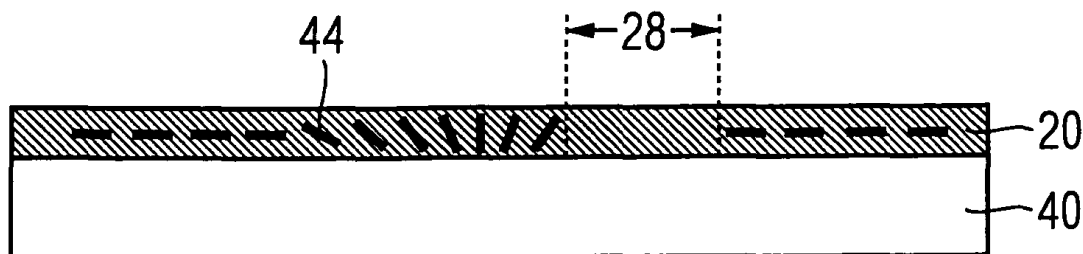


Fig. 5

Publication data including kind & date

DE102010009977	A1	2011-09-08	DE102010009977
WO2011107271	A1	2011-09-09	WO2011107271
CA2791199	A1	2011-09-09	CA2791199
AU2011223202	A1	2012-10-25	AU2011223202
EP2542421	A1	2013-01-09	EP2542421
BR112012021113	A1	2013-04-16	BR112012021113

**Abstract**

(EP2542421)

The invention relates to a security element (12) for security papers, value documents and other data carriers, comprising at least one colour layer (20) containing magnetically aligned magnetic pigments (44), which form a first motif (22) in the form of patterns, signs or an encoding that exhibits a dynamic movement effect when the security element is tilted. According to the invention, the first, dynamic motif (22) is combined with a second, static motif (28) in the form of patterns, signs or an encoding that is generated by the action of **laser** radiation and the stationary outline of which, under observation, forms a fixed reference point for the dynamic motif.

Inventors

DEPTA GEORG

MENGEL CHRISTOPH

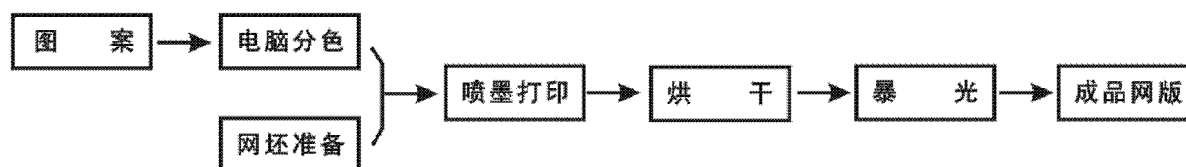
Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

Family 109/200 - FAMPAT - ©Questel

Title

(CN103048877B)

ink-jet printing silk screen plate making method and photo-sensitive resist **ink** thereof**Images****Publication data including kind & date**

CN103048877	A	2013-04-17	CN103048877
CN103048877	B	2014-06-18	CN103048877B

**Abstract**

(CN103048877B)

The invention provides an **ink**-jet printing silk screen plate making method and **ink**-jet **ink** thereof. The method comprises

US6383618	B1	2002-05-07	US6383618				
RU2191119	C2	2002-10-20	RU2191119				
CN1142866	C	2004-03-24	CN1142866C				
HK1027323	A1	2004-09-03	HK1027323				
EP0977670	B1	2004-11-10	EP-977670				
AT281940	T	2004-11-15	ATE281940				
DE59911029	D1	2004-12-16	DE59911029				
IN0044/KOLNP/1999	A	2005-11-04	IN1999KN00044				
BR9904819	B1	2008-11-18	BR9904819				
BRPI9904819	B1	2008-12-16	BRPI9904819				
IN233922	B	2009-04-24	IN-233922				
DE19803997	B4	2018-01-25	DE19803997				

Abstract

(EP-977670)

The invention relates to a printed document having a value and comprising at least one authenticity feature in the form of a luminescent substance on the basis of a host lattice doped with at least one rare-earth metal. The host lattice absorbs essentially in the entire visible spectrum, can be excited in significant parts of the visible spectrum and is at least partly transparent at least in the wavelength range ranging from 0.8 μm to 1.1 μm . The host lattice also has a garnet or perovskite structure. The rare-earth metal emits in the wavelength range ranging from 0.8 μm to 1.1 μm .

Inventors

KAULE WITTICH DR

SCHWENK GERHARD DR

STENZEL GERHARD DR

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

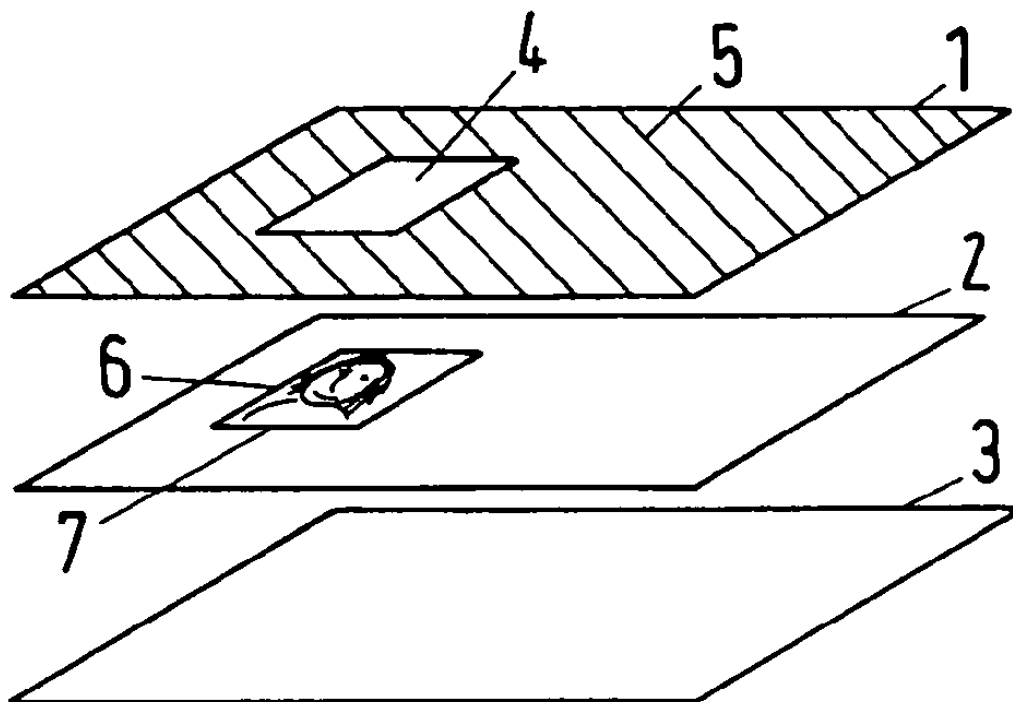
Family 111/200 - FAMPAT - ©Questel

Title

(EP2209653)

Polymer layer composite for a secure and/or valuable document, and method for the production thereof

Images



Publication data including kind & date

WO2009056352	A1	2009-05-07	WO200956352				
CA2703749	A1	2009-05-07	CA2703749				
AU2008317837	A1	2009-05-07	AU2008317837				
EP2209653	A1	2010-07-28	EP2209653				
KR20100099101	A	2010-09-10	KR20100099101				
US20100295290	A1	2010-11-25	US20100295290				
CN101980875	A	2011-02-23	CN101980875				
RU2010121972	A	2011-12-10	RU2010121972				
AU2008317837	B2	2012-07-05	AU2008317837				
RU2474498	C2	2013-02-10	RU2474498				
EP2209653	B1	2014-04-30	EP2209653				
ES2464531	T3	2014-06-03	ES2464531				
CN101980875	B	2015-06-10	CN101980875B				
KR101565180	B1	2015-11-02	KR101565180				
CA2703749	C	2016-01-12	CA2703749				

Abstract

(EP2209653)

In order to create novel security features in secure and/or valuable documents, the invention proposes a polymer layer composite (1, 2, 3), which has at least two polymer layers that are bonded to each other in a material fit, wherein at least one surface printed with an absorbing printed layer (5) within the visible region in and/or on the composite is located on a polymer layer of the composite, the absorbing printed layer forms at least one printed region, and all printed regions of the printed surface of the polymer layer have a total surface area of at least 50% and not more than 95%.

Inventors

MUTH OLIVER

PAESCHKE MANFRED

MATHEA ARTHUR

LEOPOLD ANDRE

FISCHER JOERG

PFLUGHOEFFFT MALTE

PUDLEINER HEINZ

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

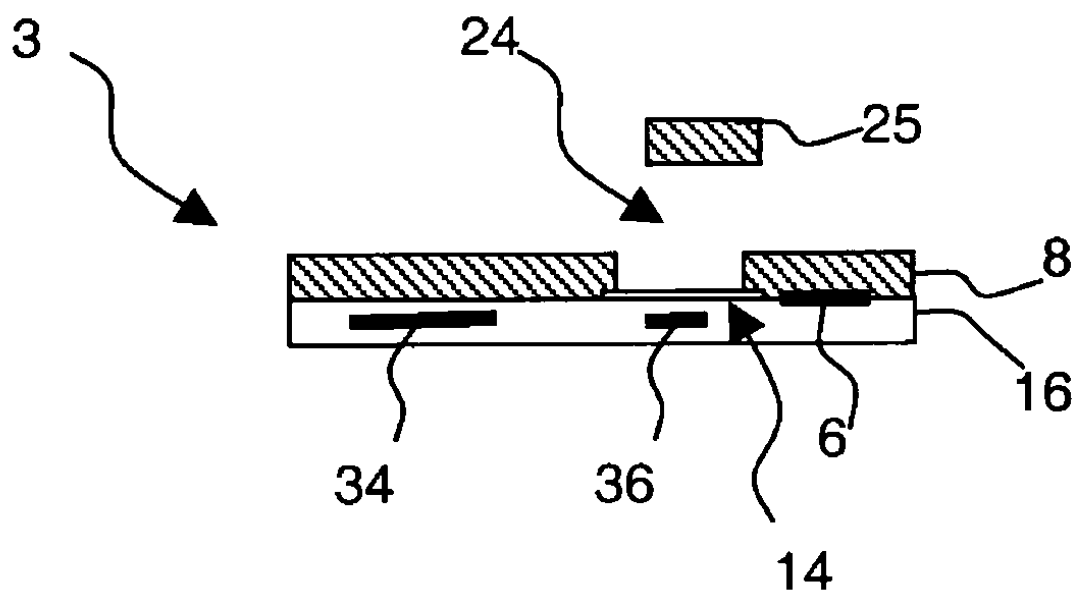
COVESTRO DEUTSCHLAND

Family 112/200 - FAMPAT - ©Questel

Title

(EP2114690)

Data carrier with see-through window and method for producing it

Images**Publication data including kind & date**

EP1935663	A1	2008-06-25	EP1935663
WO2008075164	A2	2008-06-26	WO2008075164
CA2672847	A1	2008-06-26	CA2672847
WO2008075164	A3	2008-09-12	WO2008075164
MX2009006534	A	2009-07-29	MX2009006534
EP2114690	A2	2009-11-11	EP2114690
KR20090125238	A	2009-12-04	KR20090125238
US20100047488	A1	2010-02-25	US20100047488
JP2010514084	A	2010-04-30	JP2010514084
JP5260548	B2	2013-05-02	JP5260548
US8568864	B2	2013-10-29	US8568864
BRPI0720467	A2	2014-01-14	BR200720467
US20140037868	A1	2014-02-06	US20140037868
KR101447303	B1	2014-10-07	KR101447303
CA2672847	C	2015-02-10	CA2672847
US9566813	B2	2017-02-14	US9566813
EP2114690	B1	2018-11-21	EP2114690

**Abstract**

(EP2114690)

The invention relates to a data carrier having a see-through portion (24) that allows revealing security features (36) with a different appearance on each of its sides (S1, S2) under special lighting conditions, and a method for making such a data carrier. The see-through portion has an improved security, which is more difficult to reproduce by infringers.

Inventors

SYRJANEN TARU

POHJOLA TEEMU

Latest standardized assignees - inventors removed

GEMALTO

Family 113/200 - FAMPAT - ©Questel

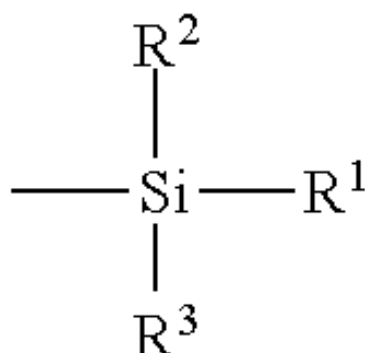
Title

(EP2393666)

Relief printing plate

Images

(1)



Publication data including kind & date

WO2010090345	A1	2010-08-12	WO201090345
JP2011102027	A	2011-05-26	JP2011102027
EP2393666	A1	2011-12-14	EP2393666
US20110311776	A1	2011-12-22	US20110311776
CN102300719	A	2011-12-28	CN102300719
EP2393666	A4	2012-06-20	EP2393666
IN6243/CHENP/2011	A	2012-10-12	IN2011CN06243
CN102300719	B	2013-09-04	CN102300719B
US8541534	B2	2013-09-24	US8541534
EP2393666	B1	2014-01-15	EP2393666
JP5566713	B2	2014-06-27	JP5566713



Abstract

(EP2393666)

A resin composition for **laser** engraving, including: a compound (A) having at least one of a hydrolyzable silyl group or a silanol group; and a binder polymer (B) having a functional group capable of forming a crosslinked structure by reacting with at least one of a hydrolyzable silyl group or a silanol group.

Inventors

SUGASAKI ATSUSHI

KAWASHIMA TAKASHI

Latest standardized assignees - inventors removed

FUJIFILM

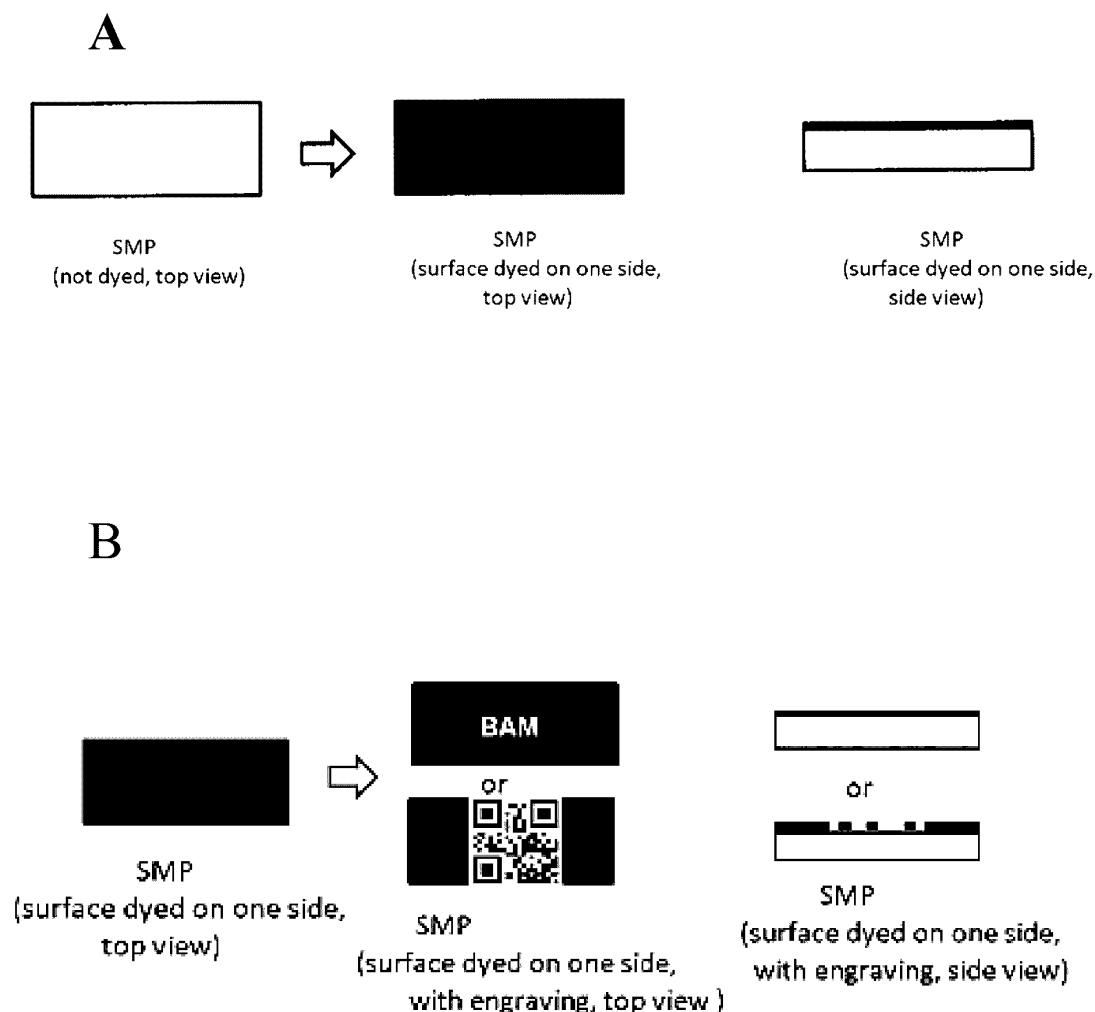
Family 114/200 - FAMPAT - ©Questel

Title

(EP2771392)

Method and dye mixtures for marking shape memory polymers, and shape memory polymer articles with switchable readability

Images



Publication data including kind & date

WO2013/060831	A2	2013-05-02	WO201360831
WO2013/060831	A3	2014-02-20	WO201360831
EP2771392	A2	2014-09-03	EP2771392
US20150119238	A1	2015-04-30	US20150119238
US9670330	B2	2017-06-06	US9670330



Abstract

(EP2771392)

A method is proposed for marking an article comprising a shape memory polymer (SMP) with a visually readable and/or machine-readable graphic element on the surface of the article, comprising the following steps: - pretreating the surface of the article; - colouring the surface of the article with a dye solution comprising an organic dye and an organic solvent; - cleaning and drying the surface of the article; - engraving by at least partially ablating the surface of the article. The colouring method is suitable advantageously for colouring the surface of a shape memory polymer (SMP), with information in the form of a code or other marking being engraved into the coloured surface. The coloration heightens the contrast and thus the facilitated machine-readability of the marking or coding, without adversely affecting the other properties of the SMP.

Inventors

PRETSCH THORSTEN

ECKER MELANIE

SCHILDHAUER MARKUS

Latest standardized assignees - inventors removed

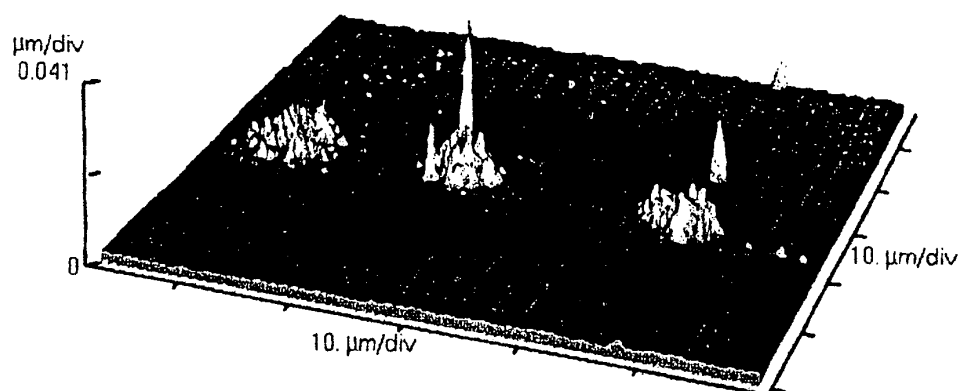
BAM BUNDESANSTALT FUER MATERIALFORSCHUNG & PRUEFUNG

Family 115/200 - FAMPAT - ©Questel

Title

(EP1665360)

Processes for fabricating conductive patterns using nanolithography as a patterning tool

Images

Platinum nanostructures deposited via the DPN process onto Silicon oxide surface.

Publication data including kind & date

US20040127025	A1	2004-07-01	US20040127025
WO2005037418	A2	2005-04-28	WO200537418
CA2537023	A1	2005-04-28	CA2537023
US20050235869	A1	2005-10-27	US20050235869
US20050255237	A1	2005-11-17	US20050255237
US7005378	B2	2006-02-28	US7005378
WO2005037418	A3	2006-03-23	WO200537418
EP1665360	A2	2006-06-07	EP1665360
CN1875469	A	2006-12-06	CN1875469
JP2007503725	A	2007-02-22	JP2007503725
KR20070026297	A	2007-03-08	KR20070026297
US7491422	B2	2009-02-17	US7491422
CN100583401	C	2010-01-20	CN100583401C
HK1097954	A1	2010-06-11	HK1097954
EP1665360	A4	2011-03-30	EP1665360
JP4740850	B2	2011-05-13	JP4740850
KR101084395	B1	2011-11-18	KR101084395
US8071168	B2	2011-12-06	US8071168
CA2537023	C	2012-02-07	CA2537023

**Abstract**

(EP1665360)

ZA200102252	B	2002-06-04	ZA200102252				
JP2002526289	A	2002-08-20	JP2002526289				
AU756205	B2	2003-01-09	AU-756205				
EP1117537	B1	2003-05-07	EP1117537				
AT239614	T	2003-05-15	ATE239614				
DE59905490	D1	2003-06-12	DE59905490				
DK1117537	T3	2003-08-25	DK1117537T				
PT1117537	E	2003-09-30	PT1117537				
ES2194512	T3	2003-11-16	ES2194512				
CN1155471	C	2004-06-30	CN1155471C				
RU2236949	C2	2004-09-27	RU2236949				
IN0304/KOLNP/2001	A	2005-07-22	IN2001KN00304				
US6928925	B1	2005-08-16	US6928925				
US20050193909	A1	2005-09-08	US20050193909				
CA2345748	C	2005-12-27	CA2345748				
PL190828	B1	2006-02-28	PL-190828				
US7028615	B2	2006-04-18	US7028615				
DE19845436	B4	2009-06-10	DE19845436				
JP4550282	B2	2010-07-16	JP4550282				
DE19845436	C5	2015-02-26	DE19845436				
EP1117537	B2	2017-12-13	EP1117537				

Abstract

(EP1117537)

The invention relates to a data carrier with a printed image that is produced by means of a gravure process. The printed image comprises at least one first colour surface with a first colour coating thickness and a second colour surface adjacent to the first colour surface and provided with a second colour coating thickness, whereby the thicknesses of the two colour coatings are different. The first and second colour surfaces are divided by a sharp borderline that is invisible to the naked eye and the colour coating thickness of both colour surfaces corresponds to a minimum thickness in the region of the borderline.

Inventors

MAYER KARLHEINZ

ADAMCZYK ROGER

WISJAK EDUARD

FRANZ PETER

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

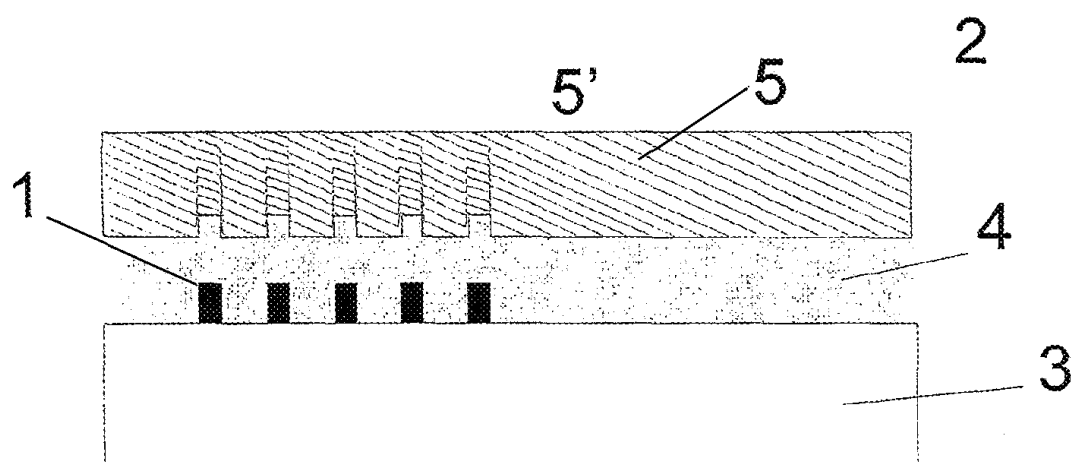
Family 117/200 - FAMPAT - ©Questel

Title

(EP2238516)

Method for producing security elements by individualization of volume holograms and security elements produced therewith

Images



Publication data including kind & date

WO2009097838	A1	2009-08-13	WO200997838
DE102008007620	A1	2009-08-27	DE102008007620
EP2238516	A1	2010-10-13	EP2238516
US20110049864	A1	2011-03-03	US20110049864
EP2238516	B1	2012-04-25	EP2238516
AT555424	T	2012-05-15	ATE555424
US10031480	B2	2018-07-24	US10031480



Abstract

(EP2238516)

When coating a document surface (3) having relief-like information (1) carrying personal data, for example, with a monomer-containing liquid UV adhesive (4) across the entire surface and then laminating thereon a volume hologram (2), the varying adhesive thicknesses between the volume hologram and the document surface resulting from the relief cause differentiated swelling and thereby a differentiated color shift of the hologram. After the desired color shift is achieved, the UV adhesive (4) is completely cured. In this way, individual holographic information is obtained, which is located exactly above the relief-like information of the document. With this method, holographic overlays comprising personal data and a passport picture can be produced, and it is possible to link defined optical document information to the hologram in an accurately positioned manner, so that information is visible both non-diffractively and, from a different viewing angle, holographically in a different color.

Inventors

MENZ IRINA

HUET PHILIPPE

Latest standardized assignees - inventors removed

HOLOGRAM INDUSTRIES

Family 118/200 - FAMPAT - ©Questel

Title

(EP2403719)

Security element for valuable document

Images

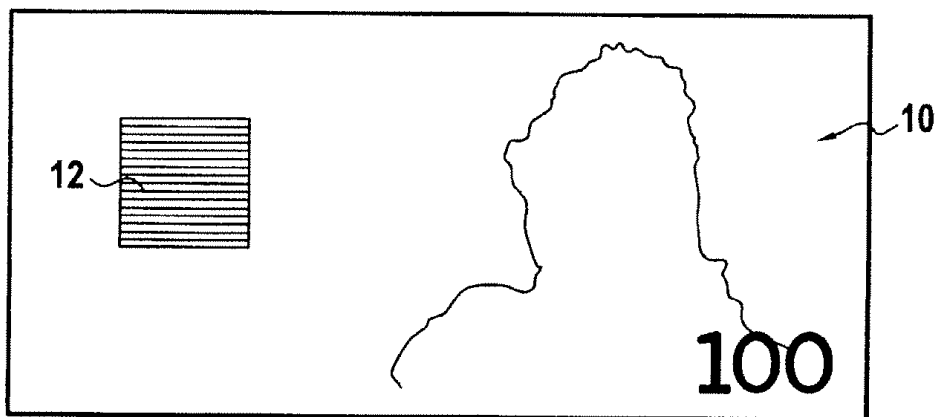


FIG. 1

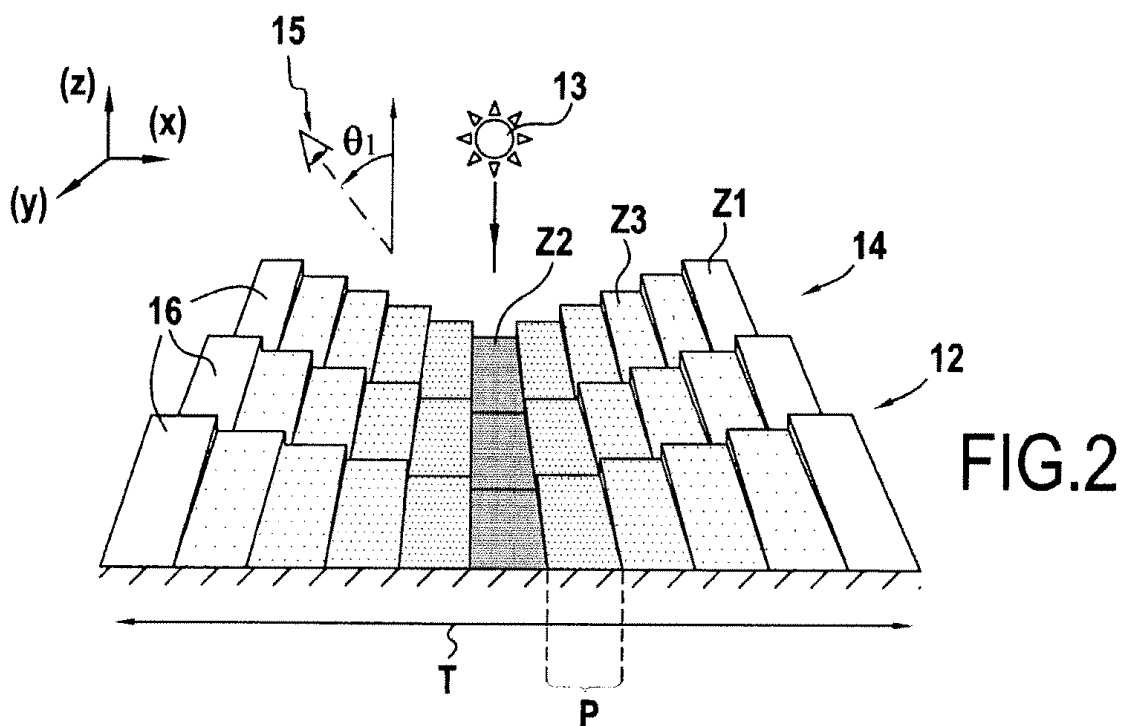


FIG. 2

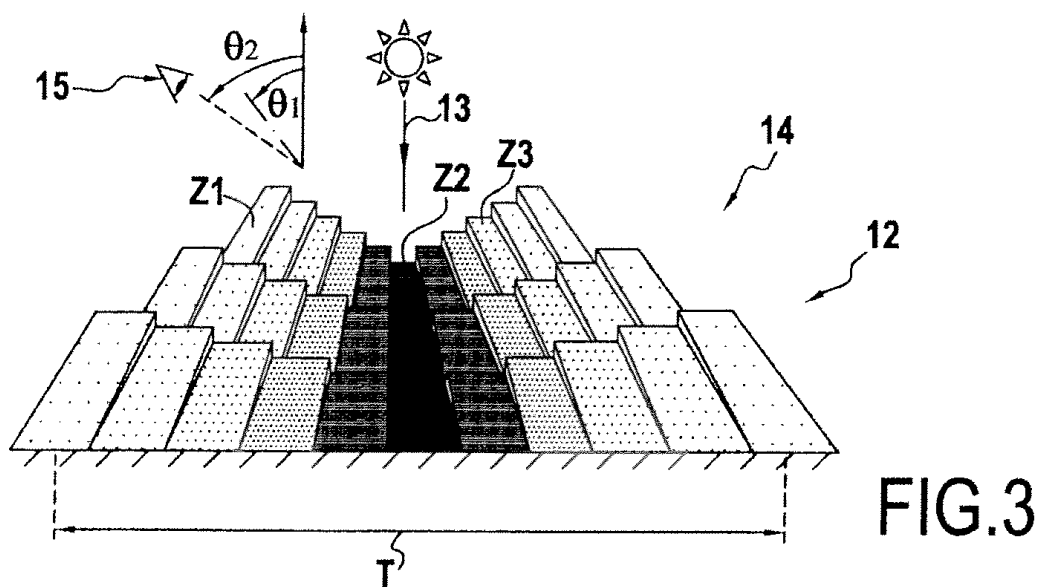


FIG. 3

Publication data including kind & date

WO2010100360	A1	2010-09-10	WO2010100360				
CA2761779	A1	2010-09-10	CA2761779				
FR2942811	A1	2010-09-10	FR2942811				
FR2942811	B1	2011-05-06	FR2942811				
CN102292219	A	2011-12-21	CN102292219				
AP201106017	A0	2011-12-31	AP201106017				
EP2403719	A1	2012-01-11	EP2403719				
AU2010219575	A1	2012-02-16	AU2010219575				
BRPI1011735	A1	2012-11-27	BR201011735				
AU2010219575	B2	2013-03-28	AU2010219575				
ZA201108331	B	2013-04-24	ZA201108331				
RU2011145891	A	2013-05-20	RU2011145891				
CN102292219	B	2013-10-23	CN102292219B				
RU2537831	C2	2015-01-10	RU2537831				
EP2403719	B1	2016-04-27	EP2403719				
CA2761779	C	2016-12-20	CA2761779				
PL2403719	T3	2016-12-30	PL2403719				

Abstract

(EP2403719)

The invention relates to an element (12) that includes an array (14) of raised lines (16), each line (16) including at least one flank (18A, 18B), each of which define an inclination angle (α_1) relative to a direction normal (Z) to the array (14). More precisely, the inclination angle (α_1) of the flank (18A, 18B) of at least one line (16) of the array (14) gradually changes along said line (16) so as to form, in terms of light reflection, a degraded optical effect that changes based on the observation angle of the security element.

Inventors

BORDE XAVIER

CESBRON THIERRY

GILLOT JULIEN

Latest standardized assignees - inventors removed

OBERTHUR FIDUCIAIRE

Family 119/200 - FAMPAT - ©Questel

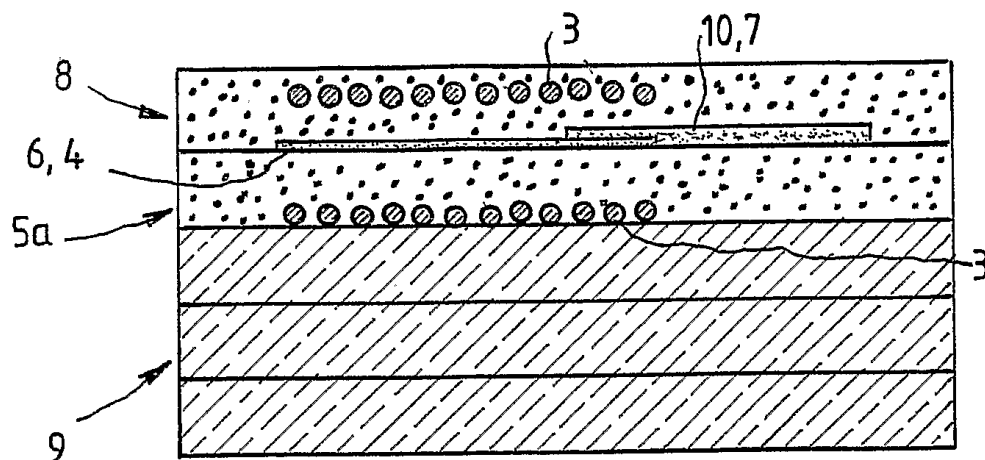
Title

(EP2244887)

Security and/or value document

Images

FIG. 2

**Publication data including kind & date**

WO2009106066	A1	2009-09-03	WO2009106066
DE102008012436	A1	2009-09-03	DE102008012436
EP2244887	A1	2010-11-03	EP2244887
CN101970245	A	2011-02-09	CN101970245
EP2244887	B1	2013-11-20	EP2244887
PT2244887	E	2013-12-23	PT2244887
ES2440547	T3	2014-01-29	ES2440547
CN101970245	B	2015-05-20	CN101970245B

**Abstract**

(EP2244887)

The invention relates to a security and/or value document (1) comprising personalized comprehensive graphic data (2) composed of at least two pieces of partial graphic data (3, 4) that overlap in a direction (R) perpendicular to a main area (H) of the security and/or value document and complement each other to form the comprehensive graphic data, the partial data being represented using identical or different imaging technologies and being copied onto the same or different layers (5, 6) of the security and/or value document. One or more security elements (7) are arranged at least in one subarea of the comprehensive graphic data, above, below, and/or between the layers in a direction (R) perpendicular to a main area of the security and/or value document. The surface of the security and/or value document is formed by a protective layer (8) without a security element.

Inventors

KRUEGER PER
BOSIEN ANDREAS
EHREKE JENS

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

Family 120/200 - FAMPAT - ©Questel

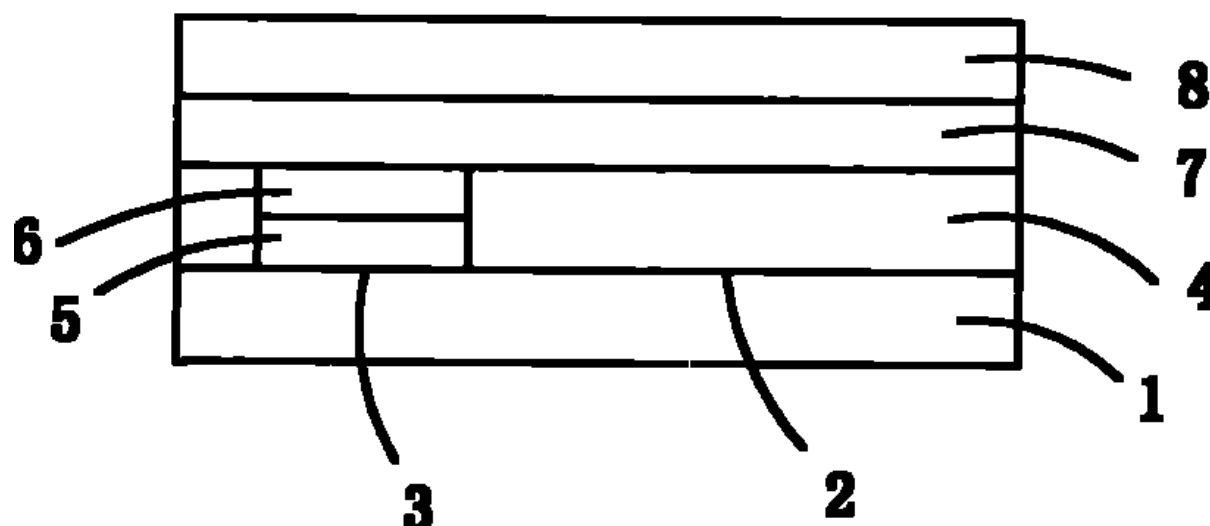
Title

(CN101407264B)

Manufacturing method of locating **laser** anti-counterfeiting compound film

Images

A-A



Publication data including kind & date

CN101407264	A	2009-04-15	CN101407264
CN101407264	B	2011-05-25	CN101407264B



Abstract

(CN101407264B)

The invention discloses a positioning **laser** anti-fake complex film and a production method thereof. The complex film is provided with a printing bearing layer which consists of a printing area and a gluing area, a printing **ink** layer is printed on the printing area, a first gluing layer is coated on the gluing area and adhered with a **laser** anti-fake layer, and a second gluing layer and a protective layer are arranged on the printing **ink** layer and the **laser** anti-fake layer. The production method of the positioning **laser** anti-fake complex film includes the steps of: 1) preparing a **laser** transferfilm and the printing bearing layer; 2) printing the printing **ink** layer on the printing bearing layer; 3) forming the first gluing layer on the gluing area; 4) compounding the printing bearing layer and the **laser** transfer film by hot pressing; 5) carrying out heat-preservation-type curing treatment; 6) peeling off operation, i.e., peeling off the base material in the **laser** transfer film; 7) coating a layer of gulewater on the blank of the complex film to form the second gluing layer; and 8) obtaining the finished product by compounding the blank of the complex film and the protective film by hot pressing. The product can effectively protect the **laser** anti-fake layer and prevent the falling off of the **laser** anti-fake layer, and the method has higher yield.

Inventors

CENG WENMING
SUN GUOJIN

Latest standardized assignees - inventors removed

ZHEJIANG GOLDSTONE PACKING

Family 121/200 - FAMPAT - ©Questel

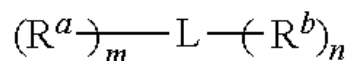
Title

(US20150059605)

Resin composition for **laser** engraving, flexographic printing plate precursor for **laser** engraving and process for producing same, and flexographic printing plate and process for making same

Images

(1)

**Publication data including kind & date**

US20150059605	A1	2015-03-05	US20150059605
JP2015047745	A	2015-03-16	JP2015047745
CN104418982	A	2015-03-18	CN104418982
JP5918731	B2	2016-04-15	JP5918731

**Abstract**

(US20150059605)

Disclosed is a resin composition for **laser** engraving comprising (Component A) a polymer having a monomer unit derived from a conjugated diene-based hydrocarbon, (Component B) a compound having an acid group and an ethylenically unsaturated bond; and (Component C) a polymerization initiator.

Inventors

HAMADA KAZUHIRO

Latest standardized assignees - inventors removed

FUJIFILM

Family 122/200 - FAMPAT - ©Questel

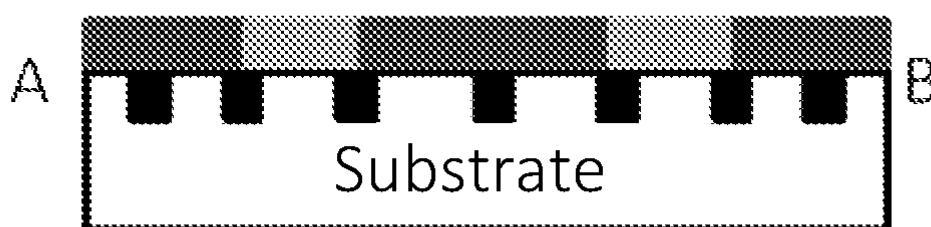
Title

(EP3036110)

Printed image

Images

Dark coloration of the substrate

**Publication data including kind & date**

WO2015024619	A1	2015-02-26	WO201524619
CN105492213	A	2016-04-13	CN105492213
EP3036110	A1	2016-06-29	EP3036110
US20160207344	A1	2016-07-21	US20160207344
JP2016534901	A	2016-11-10	JP2016534901
EP3036110	B1	2017-05-31	EP3036110
ES2638817	T3	2017-10-24	ES2638817
CN105492213	B	2018-09-04	CN105492213B
JP6392349	B2	2018-09-19	JP6392349

**Abstract**

(EP3036110)

The present invention relates to a printed image containing platelet-shaped effect pigments, which has striking low gloss effects, to a method for producing such a printed image and to the use thereof, in particular in security printing.

Inventors

KLEIN SYLKE

MONTAG HEIDEMARIE

Latest standardized assignees - inventors removed

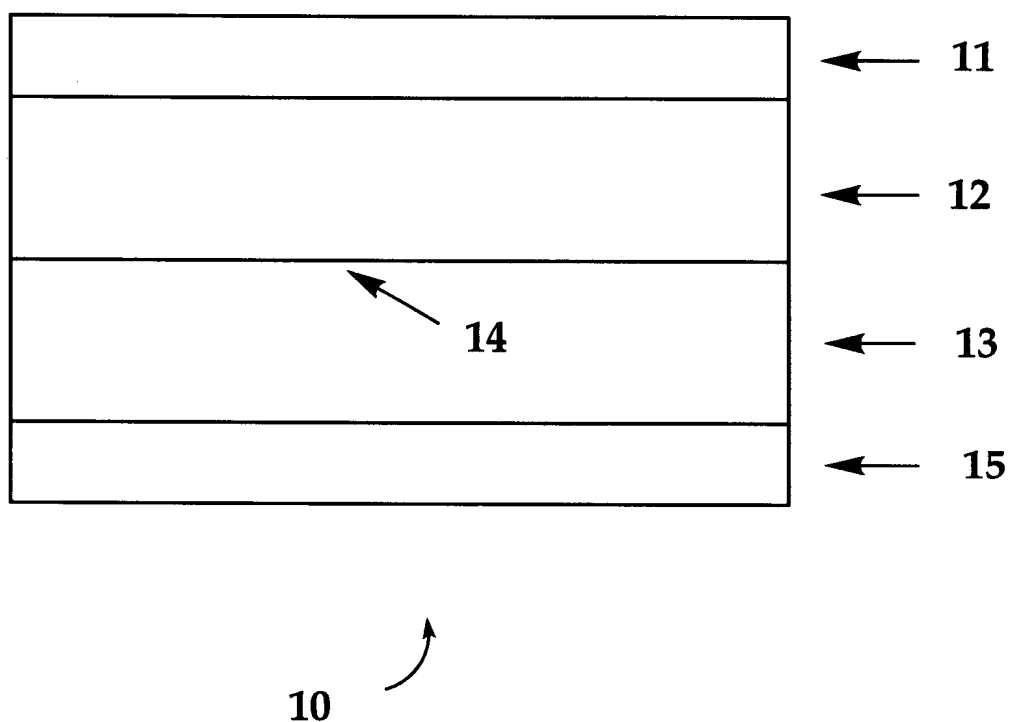
MERCK

Family 123/200 - FAMPAT - ©Questel

Title

(EP-911787)

Laserlabels and their use

Images**FIGURE 1****Publication data including kind & date**[DE19747000](#)

C1 1998-12-24

DE19747000

[EP0911787](#)

A2 1999-04-28

EP-911787



EP0911787	A3	1999-12-29	EP-911787
US6241289	B1	2001-06-05	US6241289
EP0911787	B1	2003-01-22	EP-911787
DE59806989	D1	2003-02-27	DE59806989
ES2189066	T3	2003-07-01	ES2189066
DE19747000	C2	2003-10-30	DE19747000

**Abstract**

(EP-911787)

Laser ticket using fluorescent **ink** pigment

The ticket has at least one plastics layer, coated on one side with a self-adhesive mass, protected by a removable paper or foil layer. A printing **ink** between the plastics layer and the self-adhesive mass incorporates a fluorescent **ink** pigment which can be stimulated by IR or UV radiation, to provide a marking which can be detected from one side of the ticket, e.g. the ticket side edge. The printed markings may be provided as bar code lines which are detected as points of light at the edge of the ticket

Inventors

KUELPER KLAUS DR

KOOPS ARNE

Latest standardized assignees - inventors removed

TESA

Family 124/200 - FAMPAT - ©Questel

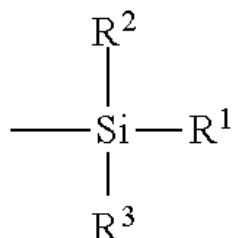
Title

(US8426505)

Resin composition for **laser** engraving, relief printing starting plate for **laser** engraving, process for making relief printing plate, and relief printing plate

Images

(1)

**Publication data including kind & date**

US20110156317	A1	2011-06-30	US20110156317
JP2011148299	A	2011-08-04	JP2011148299
US8426505	B2	2013-04-23	US8426505
JP5628650	B2	2014-10-10	JP5628650

**Abstract**

(US8426505)

A process for making a relief printing plate is provided that includes (1) a step of crosslinking by means of heat and/or light a relief-forming layer formed from a resin composition containing (Component A) a compound having a hydrolyzable silyl group and/or a silanol group, (Component B) a thermoplastic elastomer, and (Component C) a polymerizable compound, and (2) a step of forming a relief layer by **laser**-engraving the crosslinked relief-forming layer.

Inventors

YOSHIDA KENTA

Latest standardized assignees - inventors removed

FUJIFILM

	A1	2000-12-04	PL98339308				
CZ2000520	A3	2000-12-13	CZ200000520				
HU0003606	A2	2001-02-28	HU200003606				
KR20010022914	A	2001-03-26	KR20010022914				
IL134414	A	2001-04-30	IL-134414				
JP2001514986	A	2001-09-18	JP2001514986				
EP1236584	A2	2002-09-04	EP1236584				
HU0003606	A3	2002-12-28	HU200003606				
CN1105654	C	2003-04-16	CN1105654C				
DE19735293	C2	2003-06-12	DE19735293				
EP1003646	B1	2003-10-15	EP1003646				
AT251998	T	2003-11-15	ATE251998				
DE59809934	D1	2003-11-20	DE59809934				
EP1236584	A3	2004-01-07	EP1236584				
DK1003646	T3	2004-02-16	DK1003646T				
PT1003646	E	2004-03-31	PT1003646				
ES2209202	T3	2004-06-16	ES2209202				
CZ295125	B6	2005-05-18	CZ-295125				
IN2359/DEL/1998	A	2005-05-20	IN1998DE02359				
PL193977	B1	2007-04-30	PL-193977				
EP1236584	B1	2008-07-09	EP1236584				
AT400446	T	2008-07-15	ATE400446				
DE59814253	D1	2008-08-21	DE59814253				
PT1236584	E	2008-09-03	PT1236584				
IN197204	B	2008-09-19	IN-197204				
DK1236584	T3	2008-11-03	DK1236584T				
ES2309121	T3	2008-12-16	ES2309121				
JP4554070	B2	2010-07-23	JP4554070				

Abstract

(EP1236584)

The banknote or other security document has a paper substrate (1) into which an electrode arrangement (2) is formed. The electrode arrangement reacts to an electro magnetic field. The electrodes extend (6,7) and are located in a checking unit (8). A section of the surface has an electro luminescent layer (13) that is illuminated by an externally applied background lighting.

Inventors

AHLERS BENEDIKT
GUTMANN ROLAND
FRANZ-BURGHOLZ ARNIM
KAPPE FRANK

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

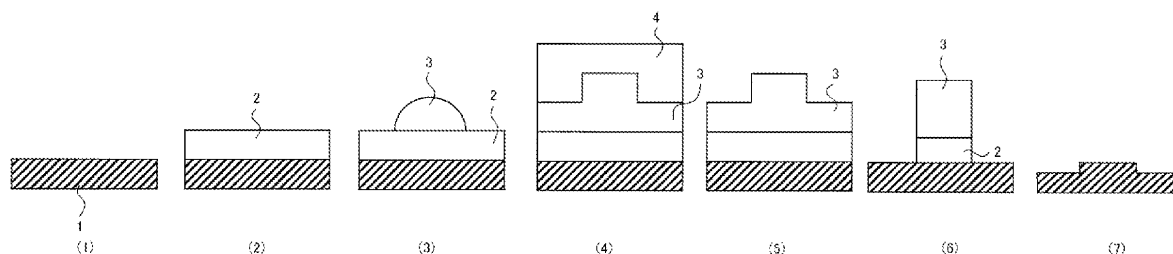
Family 126/200 - FAMPAT - ©Questel

Title

(WO2013191118)

Composition for bonding curable imprinting composition and substrate and semiconductor device using same

Images

**Publication data including kind & date**

WO2013191118	A1	2013-12-27	WO2013191118				
TW201400988	A	2014-01-01	TW201400988				
JP2014003123	A	2014-01-09	JP2014003123				
KR20150013313	A	2015-02-04	KR20150013313				
US20150079793	A1	2015-03-19	US20150079793				
JP5827180	B2	2015-10-23	JP5827180				
US9263289	B2	2016-02-16	US9263289				
KR101674039	B1	2016-11-08	KR101674039				

Abstract

(WO2013191118)

The present invention provides a composition for bonding a curable imprinting composition and a substrate, the bonding composition minimizing pattern defects while exhibiting exceptional substrate-bonding performance. A composition for bonding a curable imprinting composition and a substrate, the bonding composition having a reactive-group-containing compound having a molecular weight of at least 500, and containing no more than 10 percent by mass of a compound having a molecular weight of no more than 200.

Inventors

HATTORI AKIKO

KITAGAWA HIROTAKE

ENOMOTO YUICHIRO

Latest standardized assignees - inventors removed

FUJIFILM

Family 127/200 - FAMPAT - ©Questel

Title

(EP2969586)

Dna marking of previously undistinguished items for traceability

Publication data including kind & date

US20140272097	A1	2014-09-18	US20140272097			
CA2904614	A1	2014-10-09	CA2904614			
WO2014164958	A1	2014-10-09	WO2014164958			
EP2969586	A1	2016-01-20	EP2969586			
MX2015012210	A	2016-05-26	MX2015012210			
EP2969586	A4	2016-12-07	EP2969586			
MX352062	B	2017-11-08	MX-352062			

Abstract

(EP2969586)

The invention provides a method of marking an item with a DNA marker for authenticating or tracking, wherein the method includes providing an item for marking; and affixing to the item, or embedding into the item a medium comprising a DNA marker; wherein the DNA marker encodes information unique to said item. The affixing can be by printing, molding, varnishing, stamping, painting, writing, coating or by labeling.

Inventors

JUNG LAWRENCE

HAYWARD JAMES A

LIANG BENJAMIN MINGHWA

Latest standardized assignees - inventors removed

APPLIED DNA SCIENCES

Family 128/200 - FAMPAT - ©Questel

Title

(EP2913197)

Counterfeit-protected data carrier

Images



Fig. 1

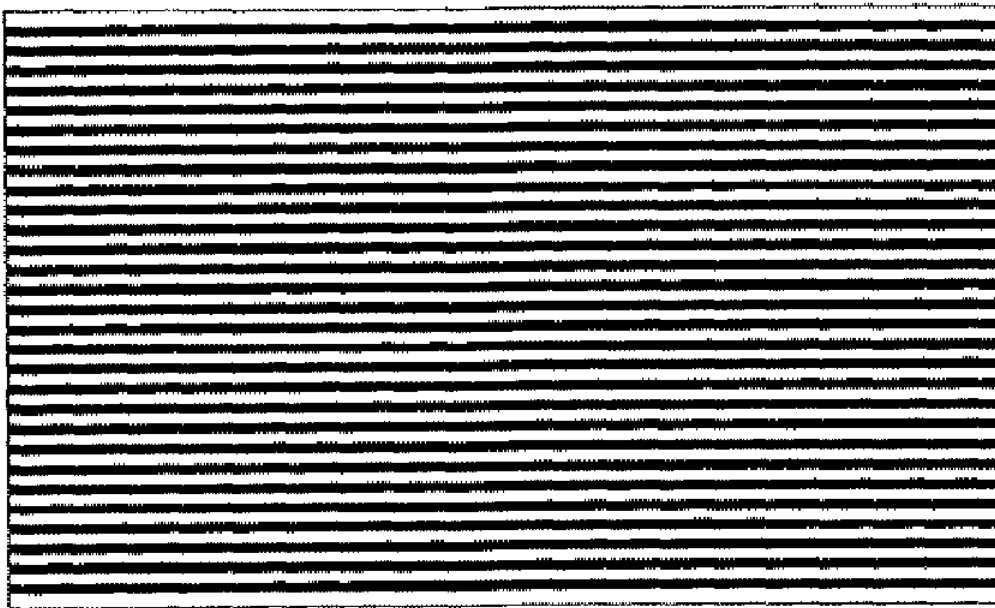


Fig. 2

Publication data including kind & date

RU2503767	C1	2014-01-10	RU2503767
WO2014/065704	A1	2014-05-01	WO201465704
EP2913197	A1	2015-09-02	EP2913197
EP2913197	A4	2016-09-14	EP2913197
EP2913197	B1	2018-05-30	EP2913197

**Abstract**

(EP2913197)

The invention relates to counterfeit-protected data carriers and methods for protecting printed products against counterfeit. Data carrier has a transparent portion with graphic elements disposed on both sides thereof in the form of a high resolution line screen, said graphic elements forming a periodic structure, wherein the elements are mutually arranged such that they form an image which is hidden when viewed in reflected light and visible when viewed in transmitted light; furthermore, when viewed from a different direction in transmitted light the image changes from positive to negative and vice versa, and/or the color of the image changes completely or partially, and/or the effect of motion of monochrome or multi-colored moire fringes appears. Method for manufacturing the data carrier comprises applying graphic elements to both sides of a transparent portion of the carrier by printing. The data carrier retains its flatness after printing. The invention enhances the security of products, provides a novel optically variable effect and/or a motion effect, as well as improves the production effectiveness and reduces the cost of the security element.

Inventors

TRACHUK ARKADIY VLADIMIROVICH
 KURYATNIKOV ANDREY BORISOVICH
 GONCHAROV ALEXEY MIKHAILOVICH
 PISAREV ALEXANDR GEORGIEVICH
 KORNILOV GEORGIY VALENTINOVICH
 FEDOROVA ELENA MIKHAILOVNA
 MOCHALOV ALEXANDR IGOREVICH
 PAVLOV IGOR VASILIEVICH
 BARANOVA GALINA SERGEEVNA
 RYTIKOVA ANNA MENASHEVNA
 TORGASHOVA ALEXANDRA ALEXANDROVNA
 SOROKIN ALEXEY BORISOVICH
 SNEGIRYOVA MARINA EDUARDOVNA

Latest standardized assignees - inventors removed

GOZNAK

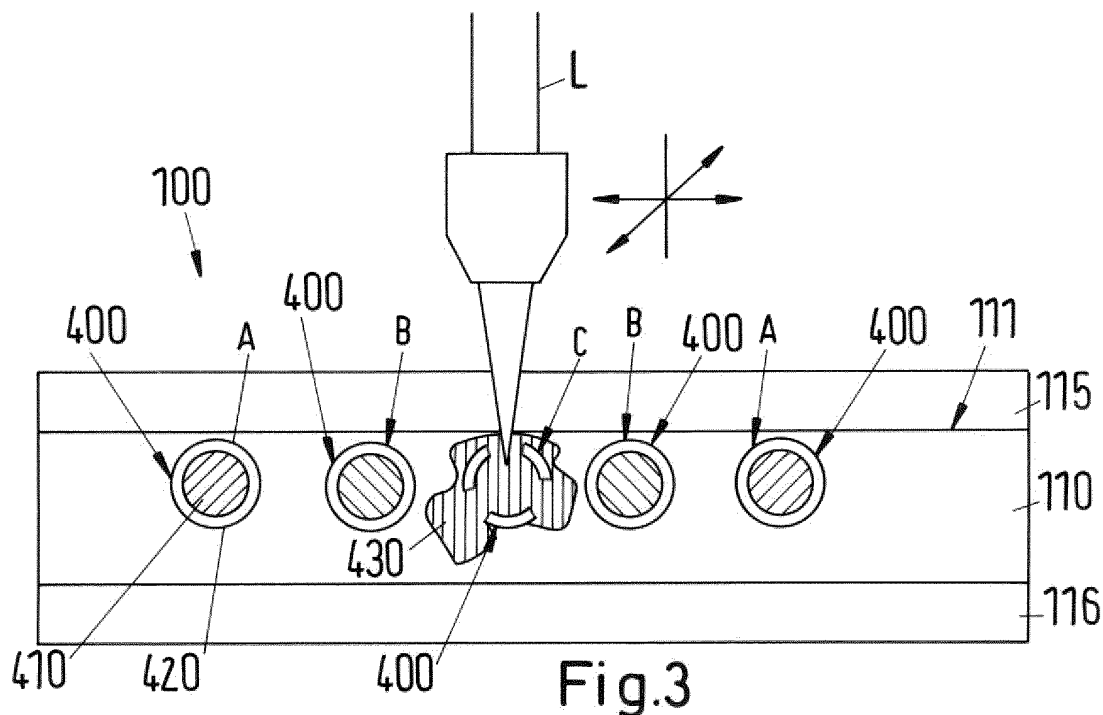
Family 129/200 - FAMPAT - ©Questel

Title

(EP3046774)

Activatable value or security product, method of activation and method for producing a value or security product

Images



Publication data including kind & date

DE102013218752	A1	2015-03-19	DE102013218752
WO2015040053	A1	2015-03-26	WO2015040053
EP3046774	A1	2016-07-27	EP3046774



Abstract

(EP3046774)

The aim of the invention is to produce patterns (300) that are inherent in a value or security product. For this purpose, an activatable value or security product (100) is provided which contains a product material having color particles (400). The value or security product (100) can be permanently activated by electromagnetic radiation L so that a security feature (200) formed by the color particles (400) becomes visually perceptible.

Inventors

PAESCHKE MANFRED
KULIKOVSKA OLGA
PEINZE FRANZISKA
MUTH OLIVER

Latest standardized assignees - inventors removed

BUNDESDRUCKEREI

Family 130/200 - FAMPAT - ©Questel

Title

(JP08282143)

Laser responsive lithographic printing plate original plate

Publication data including kind & date

JP08282143	A	1996-10-29	JP08282143
JP3463404	B2	2003-11-05	JP3463404



Abstract

(JP3463404)

PURPOSE: To obtain a **laser** responsive lithographic printing plate original plate in which **ink** can be efficiently repelled without impairing **laser** response by forming an **ink** repellent layer as a hydrophilic swelled layer in a lithographic printing plate obtained by laminating at least a **laser** responsive layer and the **ink** repellent layer in this order on a board.

CONSTITUTION: In a lithographic printing plate obtained by laminating at least a **laser** responsive layer and an **ink** repellent layer in this order on a board, a hydrophilic swelled layer is used as the repellent layer. The swelled layer is formed to have a phase isolation structure formed of at least two layers of the phase containing at least hydrophilic polymer as a main ingredient and the phase containing hydrophobic polymer as a main ingredient. The **laser** responsive layer and the swelled layer causes a destructive absorption to response to an active light ray due to the emission of a **laser**. Thus, the responsive layer is formed of at least binder resin and thermal absorbent having absorption in a **laser** emitting wavelength band.

Inventors

Ikeda Norimasa

IKEDA NORIMASA

Latest standardized assignees - inventors removed

TORAY INDUSTRIES

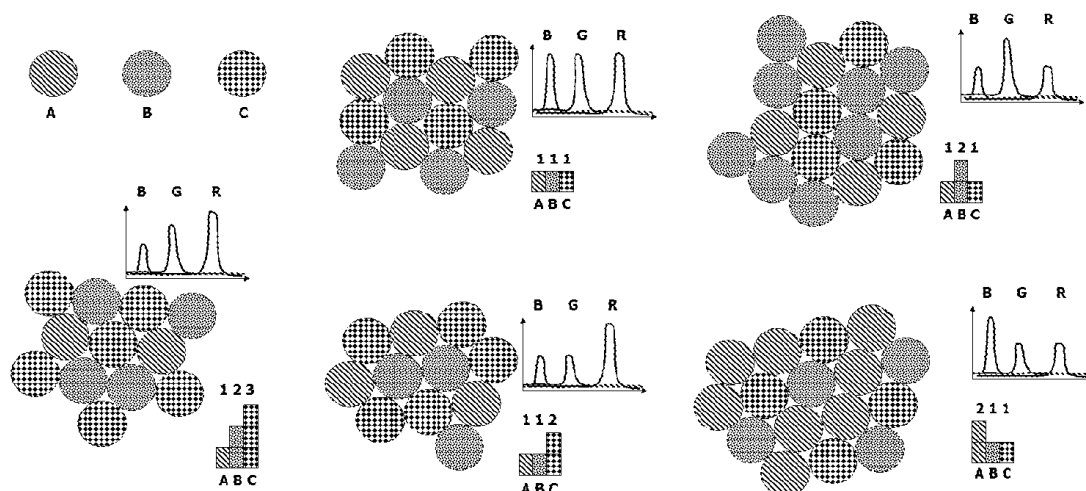
Family 131/200 - FAMPAT - ©Questel

Title

(EP2464710)

Markers for protection valuable liquid and solid materials

Images



Publication data including kind & date

PL388780	A1	2011-02-14	PL2009388780
WO2011019293	A1	2011-02-17	WO201119293
EP2464710	A1	2012-06-20	EP2464710
US20120187341	A1	2012-07-26	US20120187341
PL220030	B1	2015-08-31	PL-220030
EP2464710	B1	2019-01-23	EP2464710



Abstract

(EP2464710)

A marker for protection valuable liquid and solid materials comprising organic or nonorganic liquid solvents as dispersed medium, surface active substances on nanomarker, characterized in that nanomarker is a homogeneous mixture of two or more different nanoluminophors, favourable chosen from metals, nanocrystalline metal oxides -A₂O₃, -granates-A₃B₅O₁₂, perovskites-ABO₃, spinels-AB₂O₄ or stoichiometric compounds with large concentrations of optically active ions like fluorides, oxychlorides and others.

Inventors

STREK WIESLAW

[US7833389](#)

B1 2010-11-16 US7833389

[US20110064838](#)

A1 2011-03-17 US20110064838

[US9307648](#)

B2 2016-04-05 US9307648

**Abstract**

(WO200824947)

Durable replication tools are disclosed for replication of relief patterns in desired media, for example in optical recording or data storage media. Methods of making such durable replication tools are disclosed, including recording and developing a relief pattern on a selected surface of a support cylinder, creating a durable layer with a complementary relief replica of the pattern, separating the durable layer from the support cylinder. Apparatus are disclosed for fabricating such replication tools, including systems and apparatus for recording a desired relief pattern on a surface of a support cylinder. Also disclosed are electro deposition cells for forming a durable tool sleeve having a desired relief pattern. The replication tool relief features may have critical dimensions down to the micron and nanometer regime.

Inventors

SLAFER W DENNIS

Latest standardized assignees - inventors removed

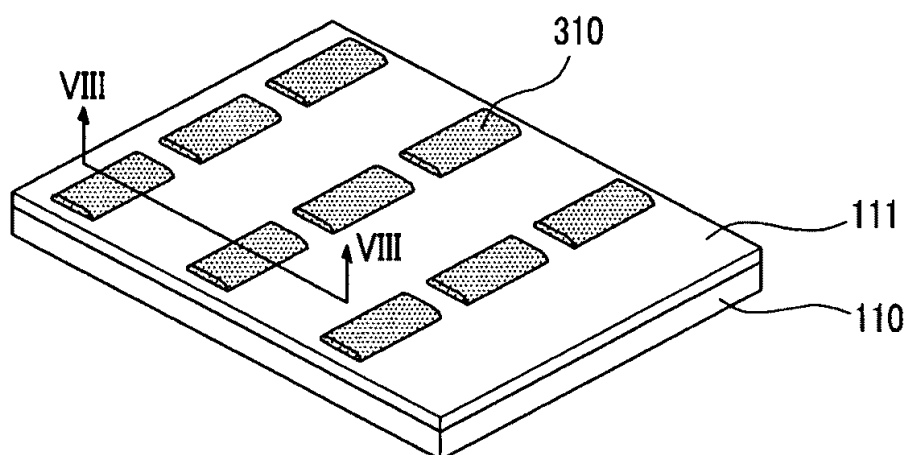
MICROCONTINUUM

Family 133/200 - FAMPAT - ©Questel

Title

(US9496497)

Method for forming pattern arrays and organic devices including the pattern arrays

Images**Publication data including kind & date**[US20090057657](#)

A1 2009-03-05 US20090057657

[KR20090024962](#)

A 2009-03-10 KR20090024962

[KR101326127](#)

B1 2013-11-06 KR101326127

[US9496497](#)

B2 2016-11-15 US9496497

**Abstract**

(US9496497)

The present invention includes forming a hydrophobic thin film on a substrate, removing a portion of the first hydrophobic thin film to form a first hydrophilic region, coating a first organic solution on the substrate and selectively wetting the first hydrophilic region, drying the first organic solution to form a first organic thin film pattern in the first hydrophilic region, forming a second hydrophobic thin film on the first organic thin film pattern, coating a second organic solution and

selectively wetting the second organic solution, and drying the second organic solution to form a second organic thin film pattern.

Inventors

LEE SIN-DOO

NA YU-JIN

Latest standardized assignees - inventors removed

SAMSUNG DISPLAY

Family 134/200 - FAMPAT - ©Questel

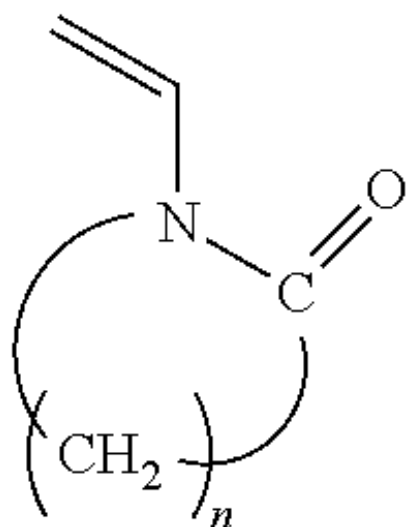
Title

(US20150035205)

Process for producing flexographic printing plate precursor for **laser** engraving, flexographic printing plate precursor for **laser** engraving, process for making flexographic printing plate, and flexographic printing plate

Images

(A-1)



Publication data including kind & date

US20150035205	A1	2015-02-05	US20150035205
CN104339821	A	2015-02-11	CN104339821
JP2015030121	A	2015-02-16	JP2015030121
JP5752752	B2	2015-05-29	JP5752752
IN3714/CHE/2014	A	2016-07-01	IN2014CH03714



Abstract

(US20150035205)

Objects of the present invention are to provide a process for producing a flexographic printing plate precursor for **laser** engraving that has excellent rinsing properties for engraving residue and can give a plate having excellent printing durability, to provide a flexographic printing plate precursor obtained by the process, and to provide a flexographic printing plate and a process for making the flexographic printing plate. Disclosed is a process for producing a flexographic printing plate precursor for **laser** engraving, comprising steps of: forming a relief-forming layer formed of a resin composition for **laser** engraving; and crosslinking the relief-forming layer by means of heat and/or light to thus obtain a flexographic printing plate precursor having a crosslinked relief-forming layer, wherein the resin composition for **laser** engraving comprises (Component A) an N-vinyl compound, (Component B) a polymerizable compound, (Component C) an ethylenically unsaturated bond-containing binder polymer, and (Component D) a polymerization initiator.

Inventors

KURAMOTO MAMORU

Latest standardized assignees - inventors removed

FUJIFILM

Family 135/200 - FAMPAT - ©Questel

Title

(EP1945466)

Security element and method for the production thereof

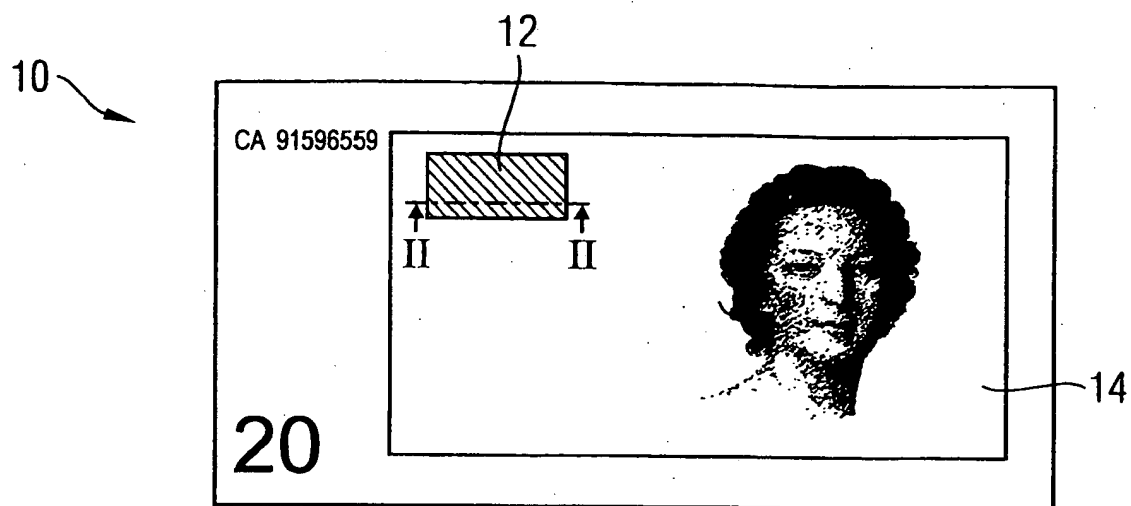
Images

Fig. 1

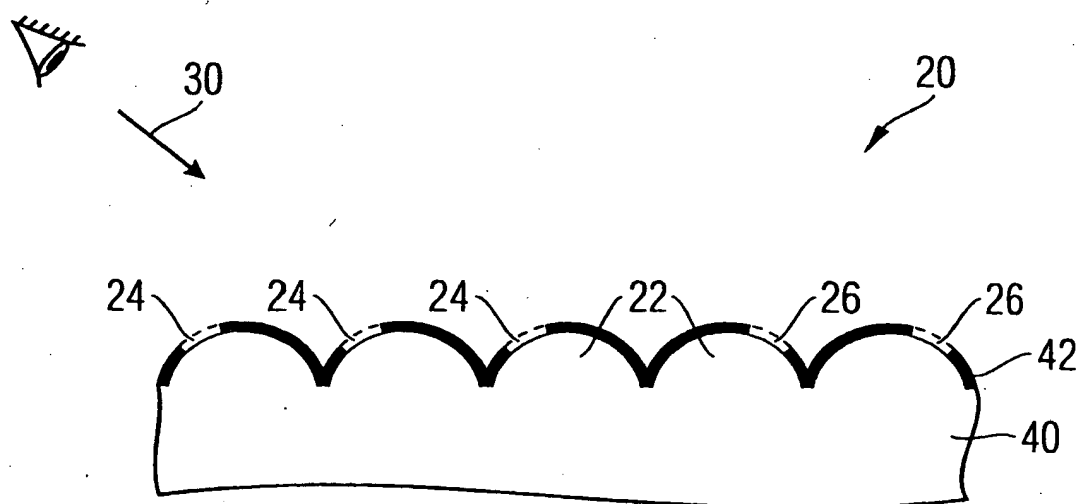


Fig. 2

DE102005052562	A1	2007-05-03	DE102005052562				
WO2007051530	A2	2007-05-10	WO200751530				
CA2627902	A1	2007-05-10	CA2627902				
WO2007051530	A3	2007-07-19	WO200751530				
EP1945466	A2	2008-07-23	EP1945466				
RU2008120809	A	2009-12-10	RU2008120809				
EP1945466	B1	2010-07-21	EP1945466				
AT474724	T	2010-08-15	ATE474724				
DE502006007502	D1	2010-09-02	DE502006007502				
RU2412824	C2	2011-02-27	RU2412824				

Abstract

(EP1945466)

The invention relates to a method for producing a security element (12) with an optically variable structure, which contains an individualization feature, with the following method steps: a) providing a substrate with a marking structure with a number of flat markings (24, 26), and; b) providing the substrate with a relief structure having a number of raised relief elements (22). The marking structure and the relief structure are combined to enable different information to be viewed from different viewing directions, and the individualization feature is generated in at least one of the working steps a) or b) with a contactless method or with a printing method without a fixed printing form.

Inventors

DEPTA GEORG

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

Family 136/200 - FAMPAT - ©Questel

Title

(EP1023165)

Laser printing method and substrate**Images**

(31) having a colorformer leucodye and at least one color activator. The colorformer leucodye and at least one activator react when heated to exhibit a chromic change of at least one of a color change visible in normal light and a fluorescence visible only in ultraviolet light. The at least one coating (31) is heated with at least one **laser** beam (10) to effect the chromic change at selected points to thereby print information.

Inventors

GUNDJIAN ARSHAVIR

Latest standardized assignees - inventors removed

NOCOPI INT

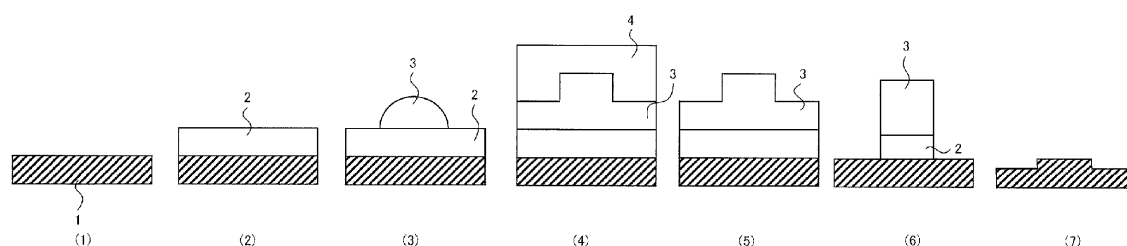
Family 137/200 - FAMPAT - ©Questel

Title

(WO2014157228)

Composition, cured product, stacked body, production method for underlayer film, pattern formation method, pattern, and production method for semiconductor resist

Images



Publication data including kind & date

WO2014157228	A1	2014-10-02	WO2014157228
JP2014189616	A	2014-10-06	JP2014189616
TW201439181	A	2014-10-16	TW201439181
KR20150126630	A	2015-11-12	KR20150126630
US20160009945	A1	2016-01-14	US20160009945
JP6047049	B2	2016-11-25	JP6047049
KR101739397	B1	2017-05-24	KR101739397



Abstract

(WO2014157228)

Provided is a composition with which an underlayer film can be provided, said underlayer film exhibiting excellent adhesive properties between an imprint layer and a substrate, excellent in-plane uniformity with respect to film thickness, and a low defect density. This composition includes a polymerizable compound, a first solvent, and a second solvent. The boiling point of the first solvent at 1 atmosphere is at least 160°C. The boiling point of the second solvent at 1 atmosphere is less than 160°C. The content of the polymerizable compound in the composition is less than 1 mass%.

Inventors

ENOMOTO YUICHIRO

KITAGAWA HIROTAKA

OOMATSU TADASHI

GOTO YUICHIRO

Latest standardized assignees - inventors removed

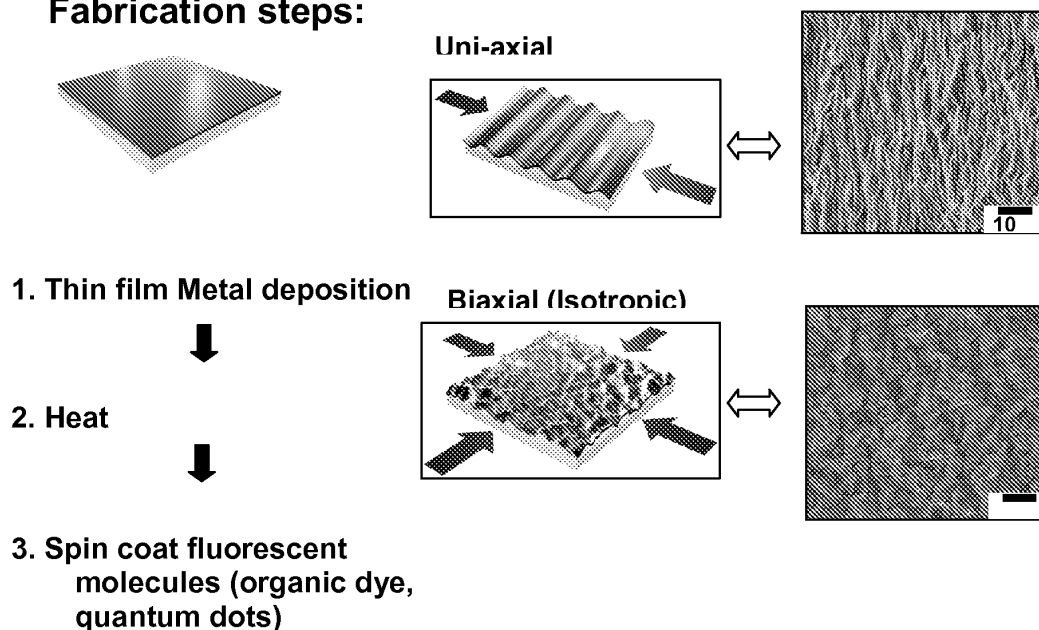
FUJIFILM

Family 138/200 - FAMPAT - ©Questel

Title

(EP2217694)

Processes for rapid microfabrication using thermoplastics and devices thereof

Images**Fabrication steps:****Publication data including kind & date**

WO2009064816	A1	2009-05-22	WO200964816
CA2705553	A1	2009-05-22	CA2705553
AU2008321027	A1	2009-05-22	AU2008321027
EP2217694	A1	2010-08-18	EP2217694
JP2011504426	A	2011-02-10	JP2011504426
US20110122406	A1	2011-05-26	US20110122406
EP2217694	A4	2011-08-31	EP2217694
US9522820	B2	2016-12-20	US9522820
US20170144152	A1	2017-05-25	US20170144152

**Abstract**

(EP2217694)

A method is provided to prepare one or more microfluidic channels on a receptive material by applying an image-forming material to a heat sensitive thermoplastic receptive material in a designed pattern and heating the material under conditions that reduce the size of the thermoplastic receptive material by at least about 60%. In an alternative aspect, the microfluidic channels on receptive material are prepared by etching a designed pattern into a heat sensitive thermoplastic material support and then heating the material under conditions that reduce the size of the thermoplastic receptive material by at least about 60%.

Inventors

KHINE MICHELLE
 CHEN CHI-SHUO
 GRIMES ANTHONY
 BRESLAUER DAVID NATE
 LEE LUKE
 DUNLAP MICHAEL
 GOPINATHAN AJAY

GHOSH SAYANTANI

Latest standardized assignees - inventors removed

UNIVERSITY OF CALIFORNIA

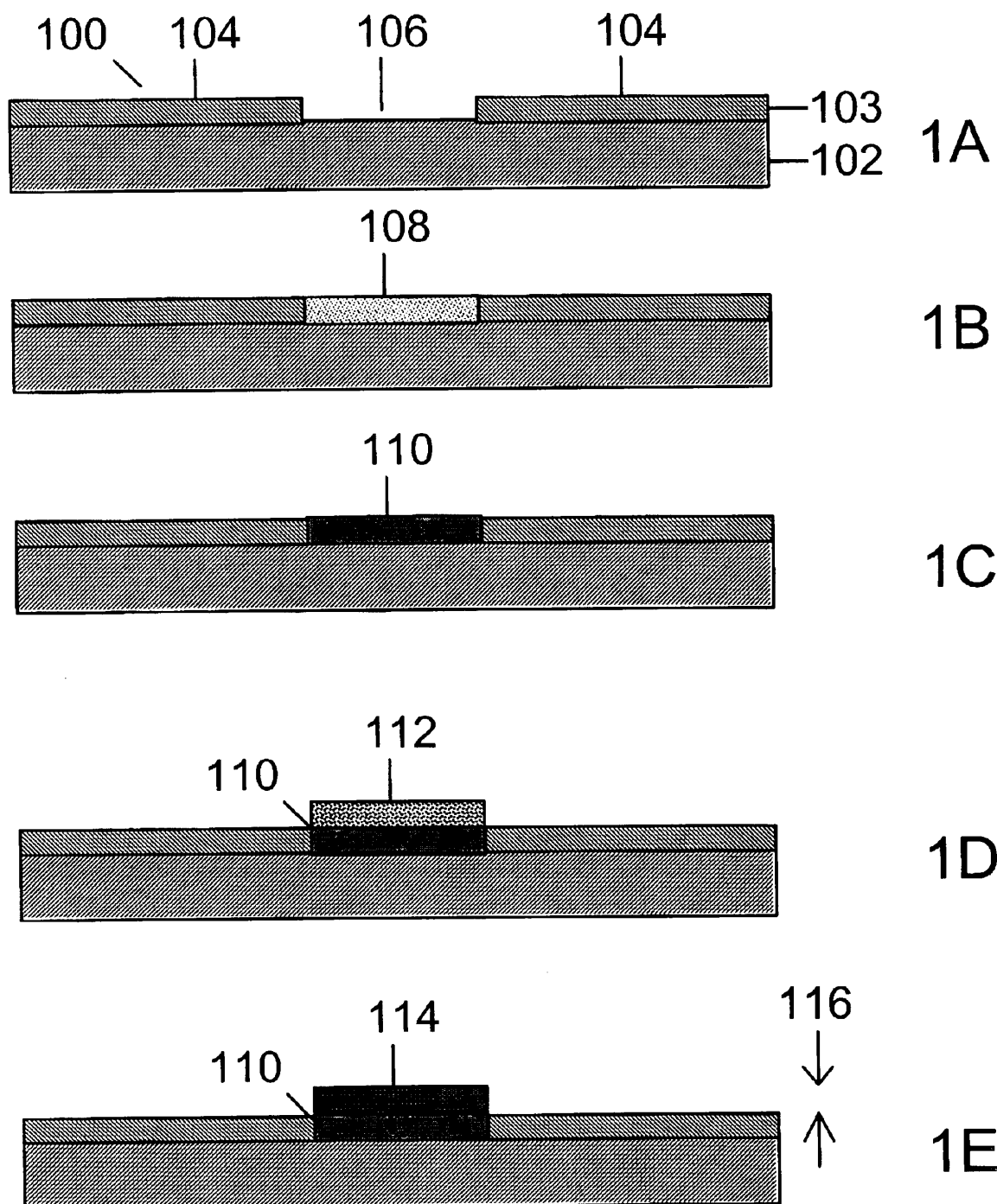
Family 139/200 - FAMPAT - ©Questel

Title

(US6881533)

Flexographic printing plate with ink-repellent non-image areas

Images



Publication data including kind & date

[US20040161705](#)

A1 2004-08-19

US20040161705

[US6881533](#)

B2 2005-04-19

US6881533



Abstract

(US6881533)

A method for making a relief printing plate from an imageable lithographic printing plate precursor. The relief printing plate has **ink**-receptive cured areas, and **ink**-repellent non-image areas. The method comprises the steps of: a) imaging the lithographic printing plate precursor to produce **ink**-receptive image areas and **ink**-repellent non-image areas; b) applying a curable composition to form a coating on **ink**-receptive image areas; and c) curing the coating to produce **ink**-receptive cured areas. The method of another embodiment further comprises the steps of: d) applying a curable composition to form a coating on **ink**-receptive cured areas; e) curing the coating on the cured areas; and f) repeating steps d) and e) to attain a desired relief depth for the **ink**-receptive cured areas. In the practice of an embodiment of the invention, a modified rotary printing press may be employed to make a relief printing plate from a lithographic printing plate.

Inventors

HUANG JIANBING

Latest standardized assignees - inventors removed

KODAK POLYCHROME GRAPHICS

KODAK REALTY

NPEC

QUALEX

FAR EAST DEVELOPMENT

KODAK

KODAK AVIATION LEASING

FPC

LASER PACIFIC MEDIA

CREO MANUFACTURING AMERICA

PAKON

Family 140/200 - FAMPAT - ©Questel

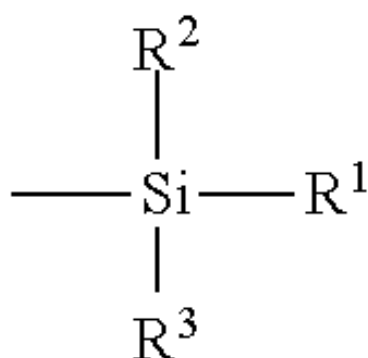
Title

(US8663896)

Resin composition for **laser** engraving, relief printing plate precursor for **laser** engraving and process for producing same, and relief printing plate and process for making same

Images

(1)



Publication data including kind & date

US20110293896	A1	2011-12-01	US20110293896
JP2011245752	A	2011-12-08	JP2011245752
CN102314079	A	2012-01-11	CN102314079
US8663896	B2	2014-03-04	US8663896



Abstract

(US8663896)

A resin composition for **laser** engraving is provided that includes (Component A) a compound having a hydrolyzable silyl group and/or a silanol group, (Component B) a depolymerization catalyst and/or a depolymerization catalyst precursor, and

(Component C) a depolymerizable binder polymer. There are also provided a relief printing plate precursor for **laser** engraving that includes a relief-forming layer containing the resin composition for **laser** engraving, a relief printing plate precursor for **laser** engraving having a crosslinked relief-forming layer formed by crosslinking by means of light and/or heat a relief-forming layer that includes the resin composition for **laser** engraving, a process for producing a relief printing plate precursor for **laser** engraving that includes a layer formation step of forming a relief-forming layer from the resin composition for **laser** engraving and a crosslinking step of crosslinking the relief-forming layer by light and/or heat to thus obtain a relief printing plate precursor having a crosslinked relief-forming layer, a process for making a relief printing plate that includes a layer formation step of forming a relief-forming layer from the resin composition for **laser** engraving, a crosslinking step of crosslinking the relief-forming layer by light and/or heat to thus obtain a relief printing plate precursor having a crosslinked relief-forming layer, and an engraving step of **laser**-engraving the relief printing plate precursor having a crosslinked relief-forming layer to thus form a relief layer, and a relief printing plate having a relief layer made by the process for making a relief printing plate.

Inventors

SUGASAKI ATSUSHI

Latest standardized assignees - inventors removed

FUJIFILM

Family 141/200 - FAMPAT - ©Questel

Title

(EP2597108)

Resin composition for **laser** engraving, flexographic printing plate precursor for **laser** engraving and process for producing same, and flexographic printing plate and process for making same

Images

	成分 A		成分 D	雕刻渣滓 的冲洗性	墨水转移 性
实施例 1	成分 A-1	KURAPRENE LIR-506	—	3	2
实施例 2	成分 A-2	Poly bd	—	3	2
实施例 3	成分 A-3	VYLON UR-3500	—	3	1
实施例 4	成分 A-3	聚酯型氨基甲酸酯 (P-1)	—	3	1
实施例 5	成分 A-1	KURAPRENE LIR-506	SYLOSPHERE C-1504	1	2
实施例 6	成分 A-2	Poly bd	SYLOPHOBIC 4004	1	2
实施例 7	成分 A-3	聚酯型氨基甲酸酯 (P-1)	SYLYSIA 470	2	1
比较例 1	成分 A-3 (比较)	聚酯型氨基甲酸酯 (P-2)	—	5	3
比较例 2	成分 A-3 (比较)	聚酯型氨基甲酸酯 (P-2)	SYLOPHOBIC 4004	4	4
比较例 3	成分 A-1 (比较)	聚异戊二烯(P-3)	—	5	3
比较例 4	成分 A-2 (比较)	聚丁二烯 (P-4)	—	5	3

Publication data including kind & date

EP2597108	A1	2013-05-29	EP2597108
US20130133533	A1	2013-05-30	US20130133533
CN103135345	A	2013-06-05	CN103135345
JP2013136238	A	2013-07-11	JP2013136238
JP5537638	B2	2014-05-09	JP5537638



Abstract

(EP2597108)

Disclosed are a resin composition for **laser** engraving, comprising (Component A) at least one polymer selected from the group consisting of following (Component A-1) to (Component A-3), (Component B) a polyfunctional ethylenically unsaturated compound, and (Component C) a polymerization initiator, (Component A-1) a polyisoprene that is a plastomer at 20°C and does not have an ethylenically unsaturated group at the ends of the main chain, (Component A-2) a polybutadiene that is a plastomer at 20°C and does not have an ethylenically unsaturated group at the ends of the main chain, and (Component A-3) an unsaturated polyester urethane that is a plastomer at 20°C, has an ethylenically unsaturated group in the interior of the main chain, and does not have an ethylenically unsaturated group at the ends of the main chain.

Inventors

SUGASAKI ATSUSHI

Latest standardized assignees - inventors removed

FUJIFILM

Family 142/200 - FAMPAT - ©Questel

Title

(EP1810836)

Lithographic printing plate

Images

Lightness Difference: $L^*2 - L^*1$

Publication data including kind & date

WO2006046279	A1	2006-05-04	WO200646279
EP1810836	A1	2007-07-25	EP1810836
CN101018674	A	2007-08-15	CN101018674
EP1810836	A4	2008-01-23	EP1810836
JPWO2006046279	A1	2008-05-22	JP2006046279W
US20080305427	A1	2008-12-11	US20080305427

**Abstract**

(EP1810836)

It relates to a processless lithographic printing plate requiring no post treatments after exposure to **laser**, wherein a difference between the lightness (L^*1) of a **laser** unexposed area and the lightness (L^*2) of a **laser** exposed area after irradiation with **laser** is $10 - |L^*2 - L^*1| \leq 100$. An object of the present invention is to provide plate bodies having excellent printing plate inspection in a lithographic printing plate in which drawing with **laser** light and processless are realized. When the lithographic printing plate of the present invention is used, it is possible to provide a processless lithographic printing plate, which is excellent in sensitivity and resolution, requires no treatments such as development, wiping-off or the like and is excellent in printing plate inspection in the **laser** exposed area by changing only the surface of the **laser** exposed area into the oleophilicity.

Inventors

SANADA TAKAYUKI

TERAUCHI TOMOYA

KOIDE AKIHIRO

KOBAYASHI YUKO

MIYAZAKI HIROKO

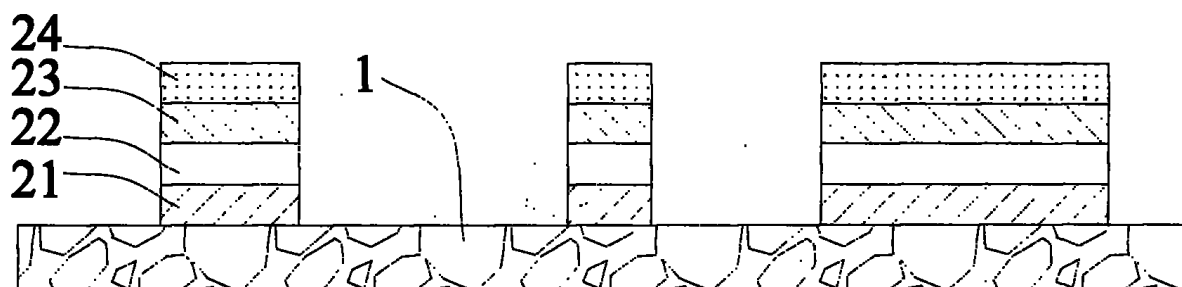
Latest standardized assignees - inventors removed

MITSUI CHEMICALS

Family 143/200 - FAMPAT - ©Questel

Title

(CN101966784B)

Manufacturing method of **laser** anti-counterfeit texture label**Images****Publication data including kind & date**

CN101966784	A	2011-02-09	CN101966784
CN101966784	B	2013-03-20	CN101966784B

**Abstract**

(CN101966784B)

The invention relates to a **laser** anti-counterfeit technology, in particular to a **laser** anti-counterfeit texture label and a manufacturing method thereof. The method of the invention comprises the following steps: step 1, manufacturing a texture carrier with **laser** holographic effect on one side; step 2, printing transparent **ink** or color **ink** on one side of a transparent photosensitive material by a digital printing mode, wherein the printed image-text units have diversity; step 3, carrying out high-strength ultraviolet exposure on the printed surface; step 4, washing the transparent photosensitive material layer uncovered by the transparent **ink** and a transparent release transfer layer and a metal layer under the photosensitive material layer with an alkaline solution; step 5, cutting the carrier by taking each image-text unit as a unit; and step 6, applying the anti-counterfeit unit to an anti-counterfeit package. The method of the invention realizes anti-counterfeiting by forming hollowed-out image-text units with the **laser** holographic effect and diversity on the carrier, i.e. the invention realizes **laser** variable data anti-counterfeiting.

Inventors

CHEN BIFENG

Family 144/200 - FAMPAT - ©Questel

Title

(EP-743177)

Lithographic printing plate for **laser** direct plate making requiring no liquid developing treatment process and printing method using the same**Publication data including kind & date**

EP0743177	A1	1996-11-20	EP-743177
JPH08310148	A	1996-11-26	JP08310148

**Abstract**

(EP-743177)

Disclosed is a lithographic printing plate for a **laser** direct plate making requiring no liquid developing treatment process, in which a pulsed ultraviolet **laser** having a wave length in an ultraviolet range is imagewise irradiated on a thermoplastic polymer film having the absorption band range in an ultraviolet range to impart hydrophilicity to the irradiated portion of the thermoplastic polymer, and a method for offset printing using the same.

Inventors

HIRAOKA HIROYUKI

TAKIMOTO YASUYUKI

ARIMATSU SEIJI

BR112012024714	A1	2013-06-25	BR112012024714
EP2554393	A4	2014-03-05	EP2554393
IN9001/CHENP/2012	A	2015-12-18	IN2012CN09001
BR112012024714	A2	2016-06-07	BR112012024714

**Abstract**

(EP2554393)

An flexographic printing plate precursor for **laser** engraving is provided that includes, above a support, a crosslinked relief-forming layer formed by subjecting a resin composition containing a chain-polymerizable monomer (A), a crosslinking agent (B) that crosslinks in a step-growth reaction, and a crosslinkable polymer (C) having a crosslinkable group that reacts with the crosslinking agent (B) to chain polymerization and step-growth crosslinking reactions, the crosslinked relief-forming layer having a storage modulus E' (MPa) at a frequency of 100 Hz and 25°C satisfying the relationship (a) below and having a maximum tensile elongation L (%) at break at 25°C satisfying the relationship (b) below. $1 \% \leq E' \leq 30$ $30 \% \leq L \leq 300$

Inventors

YAMASHITA KATSUHIRO

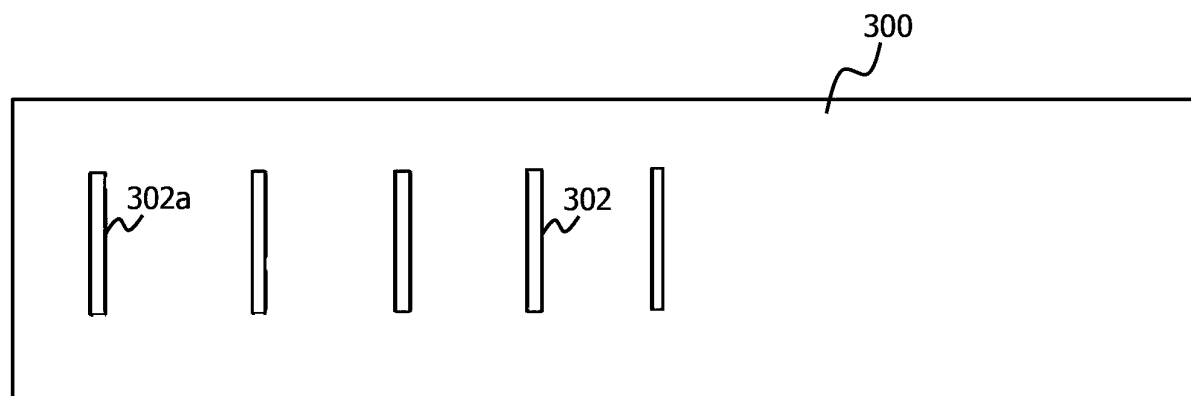
Latest standardized assignees - inventors removed

FUJIFILM

Family 146/200 - FAMPAT - ©Questel

Title

(CN103203918B)

Laser film and manufacturing method thereof**Images****Publication data including kind & date**

CN103203918	A	2013-07-17	CN103203918
CN103203918	B	2015-07-01	CN103203918B

**Abstract**

(CN103203918B)

The invention discloses a **laser** film comprising a base film layer, an **ink** layer, an aluminizing layer and a heat sealing layer, wherein the base film layer is a biaxially oriented polypropylene film (BOPP) or a biaxially oriented polyester film (BOPET); the **ink** layer prints the printing **ink** on the base film layer in a gravure overprint technology; the aluminizing layer is covered on the **ink** layer; the heat sealing layer is covered on the aluminizing layer; and the heat sealing layer is mixed material of polyethylene and polypropylene. A manufacturing method of the **laser** film is also disclosed by the invention. By adopting a new design mode of registering marks, the area requiring optoelectronic scanning on the base film surface is shielded by a cover which is covered by white printing **ink**; reflection of the base film surface on a pulse signal of an electrooptical device is avoided; the first registering mark is achieved in a hollow manner; and the other registering marks are arranged on the board. By adopting the **laser** film and the manufacturing method thereof disclosed by the invention, the problem that the reflection of the base film surface interferes the overprint technology is solved.

Inventors

CHEN CONGGONG

JIN FENG

YANG XIAOFENG

Latest standardized assignees - inventors removed

SHANGHAI PEOPLE S PLASTIC PRINTING FACTORY

Family 147/200 - FAMPAT - ©Questel

Title

(JP2009078472)

Resin composition for **laser** engraving, resin printing plate precursor for **laser** engraving, relief printing plate and manufacturing method of relief printing plate

Publication data including kind & date

JP2009078472	A	2009-04-16	JP2009078472
JP5297619	B2	2013-06-21	JP5297619

**Abstract**

(JP5297619)

PROBLEM TO BE SOLVED: To provide a resin composition which has high sensitivity of **laser** engraving and can be used for a printing plate precursor capable of direct print making by means of **laser** engraving, to provide a printing plate precursor and a relief printing plate using the resin composition, and to provide a manufacturing method of the relief printing plate.

SOLUTION: The resin composition for **laser** engraving comprises a polymerizable compound (A) having at least one acetal portion and a binder polymer (B). The printing plate precursor and the relief printing plate using the resin composition are provided. Further, the method of manufacturing the relief printing plate is also provided.

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Inventors

SUGAZAKI ATSUSHI

Latest standardized assignees - inventors removed

FUJIFILM

Family 148/200 - FAMPAT - ©Questel

Title

(EP-794055)

Waterless planographic printing plate and method of plate making using the same

Publication data including kind & date

EP0794055	A2	1997-09-10	EP-794055
JP09239942	A	1997-09-16	JP09239942
EP0794055	A3	1999-04-21	EP-794055
US5955238	A	1999-09-21	US5955238
EP0794055	B1	2002-06-19	EP-794055
DE69713418	D1	2002-07-25	DE69713418
DE69713418	T2	2002-10-17	DE69713418

**Abstract**

(EP-794055)

A waterless planographic printing plate, wherein the waterless planographic printing plate comprises a **laser**-light-sensitive layer which constitute a first layer provided on a support, containing a compound (A) generating an acid by irradiating an actinic light thereto, a compound (B) converting a **laser** light to heat and a polymer compound (C) which is decomposed by heat under an acidic condition; and a layer which constitutes a second layer having an **ink** repellent surface thereon. The entire surface of the waterless planographic printing plate is exposed with ultraviolet light. The printing plate is irradiated imagewisely with an infrared **laser** light to heat the portion irradiated with the **laser** light, and at least a layer having an **ink**

repellent surface at the portion irradiated with the **laser** light is removed. The present invention can provide a waterless planographic printing plate capable of **laser** recording with a high sensitivity and separation developing, and having a high resolving power and an excellent storability, and a method of plate making for the printing plate which is simple and accurate.

Inventors

YOKOYA HIROAKI

AOAI TOSHIKI

UENISHI KAZUYA

Latest standardized assignees - inventors removed

FUJIFILM

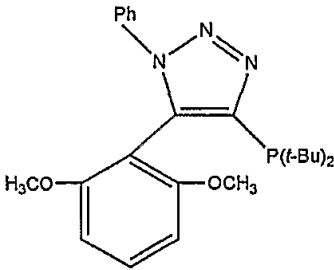
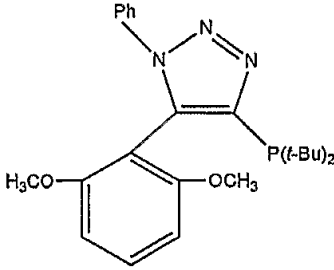
Family 149/200 - FAMPAT - ©Questel

Title

(EP1728644)

ink-jet authentication mark for a product or product packaging

Images

Sample	R ¹	Phosphine Ligand	Base	Yield
18	CH ₃		K ₃ PO ₄	95
19	CH ₃		K ₃ PO ₄	88

Publication data including kind & date

EP1728644	A1	2006-12-06	EP1728644
WO2006128839	A1	2006-12-07	WO2006128839
IN5537/CHENP/2007	A	2008-03-28	IN2007CN05537
CN101184628	A	2008-05-21	CN101184628
US20080192102	A1	2008-08-14	US20080192102
JP2008542073	A	2008-11-27	JP2008542073
EP1728644	B1	2009-01-21	EP1728644
DE602005012486	D1	2009-03-12	DE602005012486
CN101184628	B	2011-11-16	CN101184628B
US8070281	B2	2011-12-06	US8070281
IN272677	B	2016-04-22	IN-272677



Abstract

(EP1728644)

A method of **ink**-jet printing comprising in order the steps of: a) providing a coated **ink**-receiving layer containing a

polymeric binder and a curable compound; b) at least partially curing the coated **ink**-receiving layer according to a first image; and c) jetting at least one **ink**-jet **ink** on the **ink**-receiving layer according to a second image partially overlapping with the first image. The method can be advantageously used to provide authentication marks to a product, e.g. a security document or a product packaging.

Inventors

DAEMS EDDIE

LEENDERS LUC

Latest standardized assignees - inventors removed

AGFA

Family 150/200 - FAMPAT - ©Questel

Title

(US7645567)

On-press development of high speed **laser** sensitive lithographic printing plates

Publication data including kind & date

US20060183049	A1	2006-08-17	US20060183049
US20070119323	A1	2007-05-31	US20070119323
US20080213700	A1	2008-09-04	US20080213700
US7427465	B2	2008-09-23	US7427465
US7645567	B2	2010-01-12	US7645567



Abstract

(US7645567)

A method of on-press developing a **laser** sensitive lithographic printing plate with **ink** and/or fountain solution is described. The printing member comprises on a substrate a photosensitive layer soluble or dispersible in **ink** and/or fountain solution and capable of hardening upon exposure to a **laser**. The plate is exposed with a **laser** and on-press developed with **ink** and/or fountain solution. The exposure and development are performed with the plate under lightings that contain no or substantially no radiation below a wavelength selected from 400 to 650 nm, or in the dark or substantially dark.

Inventors

TENG GARY GANGHUI

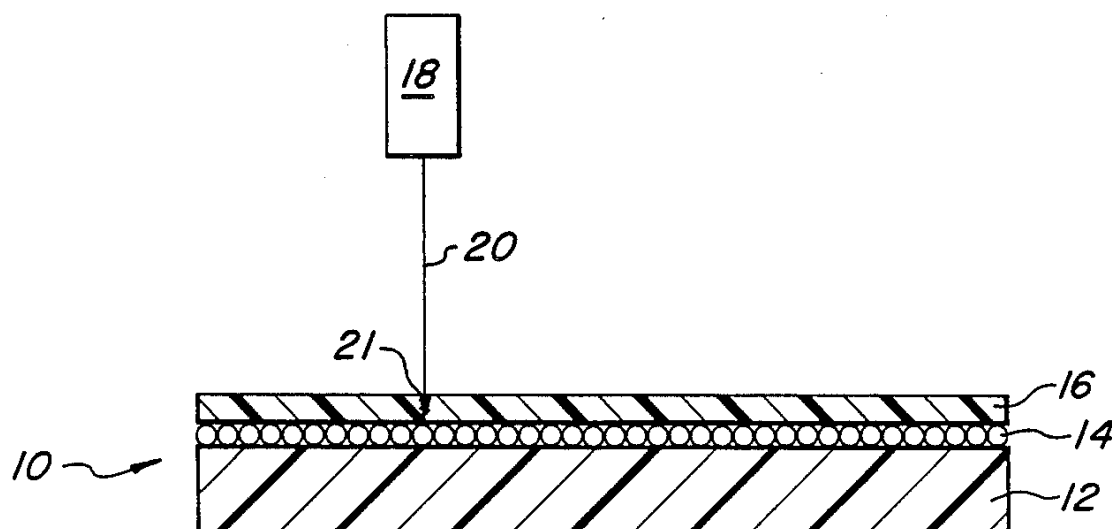
Family 151/200 - FAMPAT - ©Questel

Title

(US4621040)

Imaging element and process with **laser** absorptive **ink** barrier layer

Images



Publication data including kind & date

US4621040

A 1986-11-04 US4621040

**Abstract**

(US4621040)

A method for forming an image which comprises imagewise exposing an imaging element with a **laser**, said imaging element comprising a support carrying on a first surface, in sequence, a layer of microcapsules containing an **ink**, and a **laser**-absorptive, **ink** barrier layer; superposing an imaging-receiving layer adapted to receive **ink** from said microcapsules over said imaging element and rupturing said microcapsules; whereby **ink** from said microcapsules in the exposed areas of the imaging element diffuses to said superposed receiving layer forming an image corresponding to the **laser** exposure.

Inventors

VIOLA MICHAEL S

Latest standardized assignees - inventors removed

POLAROID

Family 152/200 - FAMPAT - ©Questel

Title

(CN102184674B)

Method for preparing **laser** rainbow code identifier**Images**

氢氧化钠	6%
硼酸钠	0. 25%
磷酸三钠	0. 5%
去离子水	93. 25% ;

Publication data including kind & date

CN102184674

A 2011-09-14 CN102184674

CN102184674

B 2014-04-02 CN102184674B

**Abstract**

(CN102184674B)

The invention relates to a method for preparing a **laser** rainbow code identifier, which mainly comprises the following steps of: 1, **laser** holographic plate making; 2, positioning die pressing; 3, positioning gravure; 4, positioning printing; 5, multilayer fine aluminum treatment; 6, coating compounding; 7, positioning printing of squeegee **ink**; and 8, forming. The method has the advantages that: 1, the production cost is low, raw materials used in the method can be purchased in a printing market

without being imported, the process is controllable, the operation process is simple, and after a user scrapes the squeegee **ink**, a variable numerical code cannot be damaged, simultaneously is kept complete and clear and is favorable for the user to inquire information and truth or falsity of goods; 2, after multilayer aluminum treatment is carried out, data is completely displayed, the yield of the **laser** rainbow code identifier is consistent with that of the common **laser** holographic digital product and cannot be reduced; and 3, the **laser** rainbow code identifier prepared by the method has high anti-counterfeiting performance, the numerical code is difficult to damage and the product has higher individuation.

Inventors

ZHANG QINYONG

TIAN CHENQI

GONG LEI

XU PIZHOU

GONG XIANGLIANG

Latest standardized assignees - inventors removed

SHANDONG TAIBAO PREVENTING COUNTERFEIT PRODUCT

Family 153/200 - FAMPAT - ©Questel

Title

(US8062832)

Method for on-press developing high speed **laser** sensitive lithographic plate

Publication data including kind & date

US20090297984	A1	2009-12-03	US20090297984
US8062832	B2	2011-11-22	US8062832



Abstract

(US8062832)

A method of on-press developing a high-speed **laser** sensitive lithographic printing plate with **ink** and/or fountain solution is described. The printing member comprises on a substrate a photosensitive layer soluble or dispersible in **ink** and/or fountain solution and capable of hardening upon exposure to a **laser**. The plate is exposed with a **laser** and on-press developed with **ink** and/or fountain solution. At least a portion of the on-press development is performed with the plate under a yellow-red light or in substantial darkness.

Inventors

TENG GARY GANGHUI

Family 154/200 - FAMPAT - ©Questel

Title

(US8053170)

Process for on-press developing high speed **laser** sensitive lithographic printing plate

Publication data including kind & date

US20090291396	A1	2009-11-26	US20090291396
US8053170	B2	2011-11-08	US8053170



Abstract

(US8053170)

A method of on-press developing a high-speed **laser** sensitive lithographic printing plate with **ink** and/or fountain solution is described. The printing member comprises on a substrate a photosensitive layer soluble or dispersible in **ink** and/or fountain solution and capable of hardening upon exposure to a **laser**. The plate is exposed with a **laser** and on-press developed with **ink** and/or fountain solution. At least a portion of the on-press development is performed with the plate under a yellow-red light or in substantial darkness, and at least a portion of the lithographic printing is performed under white light.

Inventors

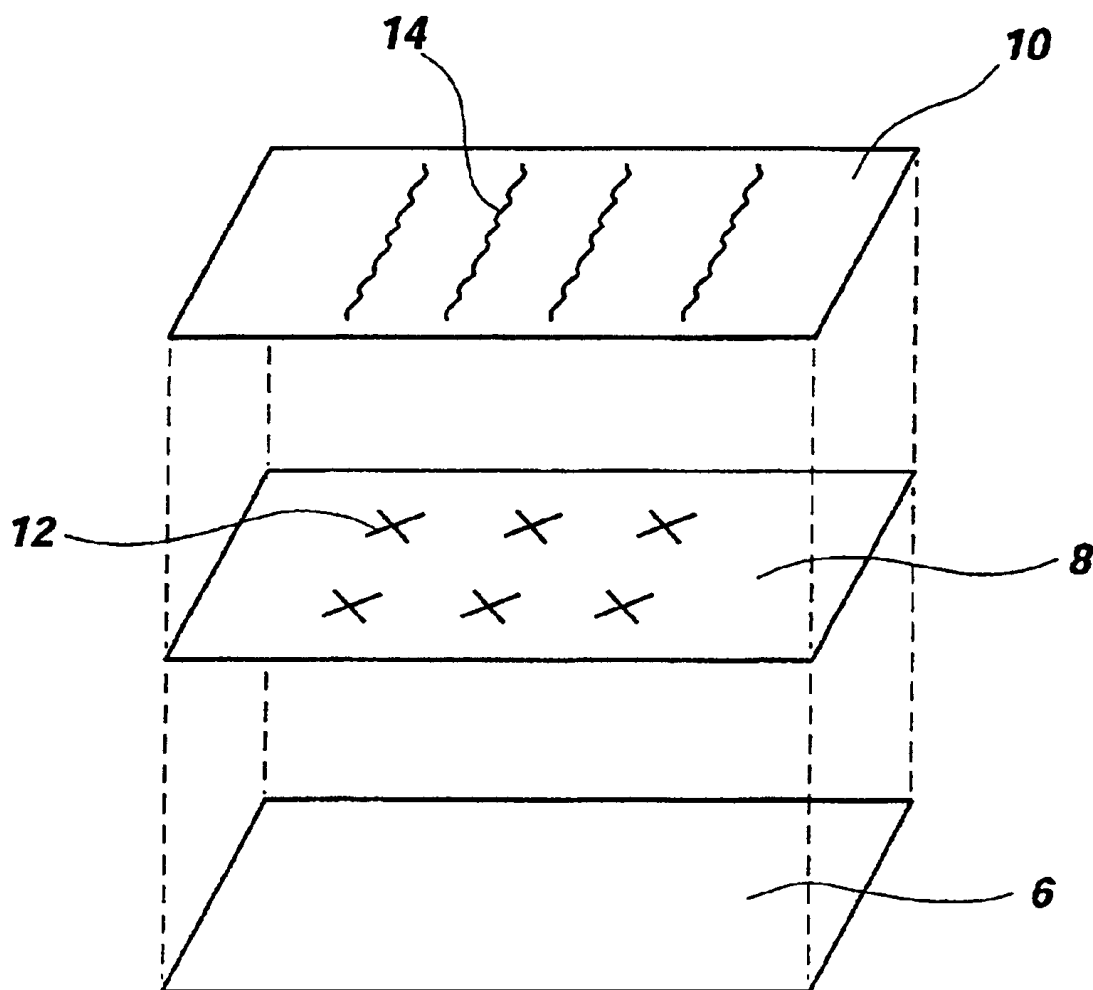
TENG GARY GANGHUI

Family 155/200 - FAMPAT - ©Questel

Title

(EP1281536)

Magnetic printing media for inkjet and laserjet

Images**Publication data including kind & date**

EP1281536	A2	2003-02-05	EP1281536
US20030025321	A1	2003-02-06	US20030025321
JP2003178420	A	2003-06-27	JP2003178420
EP1281536	A3	2004-03-17	EP1281536
US6776438	B2	2004-08-17	US6776438

**Abstract**

(EP1281536)

The present invention relates to a magnetic printing media that is used in a **laser** or inkjet printer. The magnetic printing media is comprised of at least three layers, including a base layer, at least one magnetic layer, and at least one **ink** receptive layer. Magnetically encoded information is recorded onto the magnetic layer(s), while text and graphics are printed onto the **ink** receptive layer(s). In a preferred embodiment, the magnetic printing media is used to verify the authenticity of a document. In an alternate embodiment, the magnetic printing media is used to record additional information that is protected from view and from photocopying. <IMAGE>

Inventors

LEE BRIAN CRAIG

Latest standardized assignees - inventors removed

HP

Family 156/200 - FAMPAT - ©Questel

Title

(US8252513)

Method for on-press developing **laser** sensitive lithographic printing plate**Publication data including kind & date**[US20090061363](#) A1 2009-03-05 US20090061363[US8252513](#) B2 2012-08-28 US8252513**Abstract**

(US8252513)

A method of on-press developing a high-speed **laser** sensitive lithographic printing plate with **ink** and/or fountain solution is described. The plate comprises on a substrate a photosensitive layer soluble or dispersible in **ink** and/or fountain solution and capable of hardening upon exposure to a **laser**. The plate is exposed with a **laser** and on-press developed with **ink** and/or fountain solution. At least a portion of the on-press development is performed with the plate under a yellow-red light, in substantial darkness, or under a light that is different from the light for printing and does not cause hardening of the photosensitive layer during on-press development.

Inventors

TENG GARY GANGHUI

Family 157/200 - FAMPAT - ©Questel

Title

(CN102700282B)

Polishing technology ensuring easy identification of **laser** transfer paper after bar code printing**Publication data including kind & date**[CN102700282](#) A 2012-10-03 CN102700282[CN102700282](#) B 2015-03-11 CN102700282B**Abstract**

(CN102700282B)

The invention particularly relates to a polishing technology ensuring easy identification of **laser** transfer paper after bar code printing. The polishing technology comprises the following steps: 1), manufacturing a transparent film; 2), casting a lateral gauge line and a transversal line; 3), connecting pages; 4), polishing a **laser** motherboard; 5), manufacturing republication; 6), manufacturing a work page; 7), pressing with a mold; 8), aluminizing; 9), combining; 10), slitting; and 11), printing white **ink**. Compared with the prior art, twice white **ink** printing is replaced by once on-line printing; repeated manual correction is avoided; the identification of a bar code printed on the white **ink** cannot be impacted by a **laser** film; the labor capacity of workers and the cost are low; and the finished product ratio and the operating efficiency are high.

Inventors

CUI XIJIN

XU GUOFANG

SUN JIAN

LI XUELI

LI SHUAI

SUN SHANSHAN

ZHANG LEI

Latest standardized assignees - inventors removed

SHANDONG TAIBAO PACKAGING PRODUCT

Family 158/200 - FAMPAT - ©Questel

Title

(US5645964)

Digital information recording media and method of using same

Images

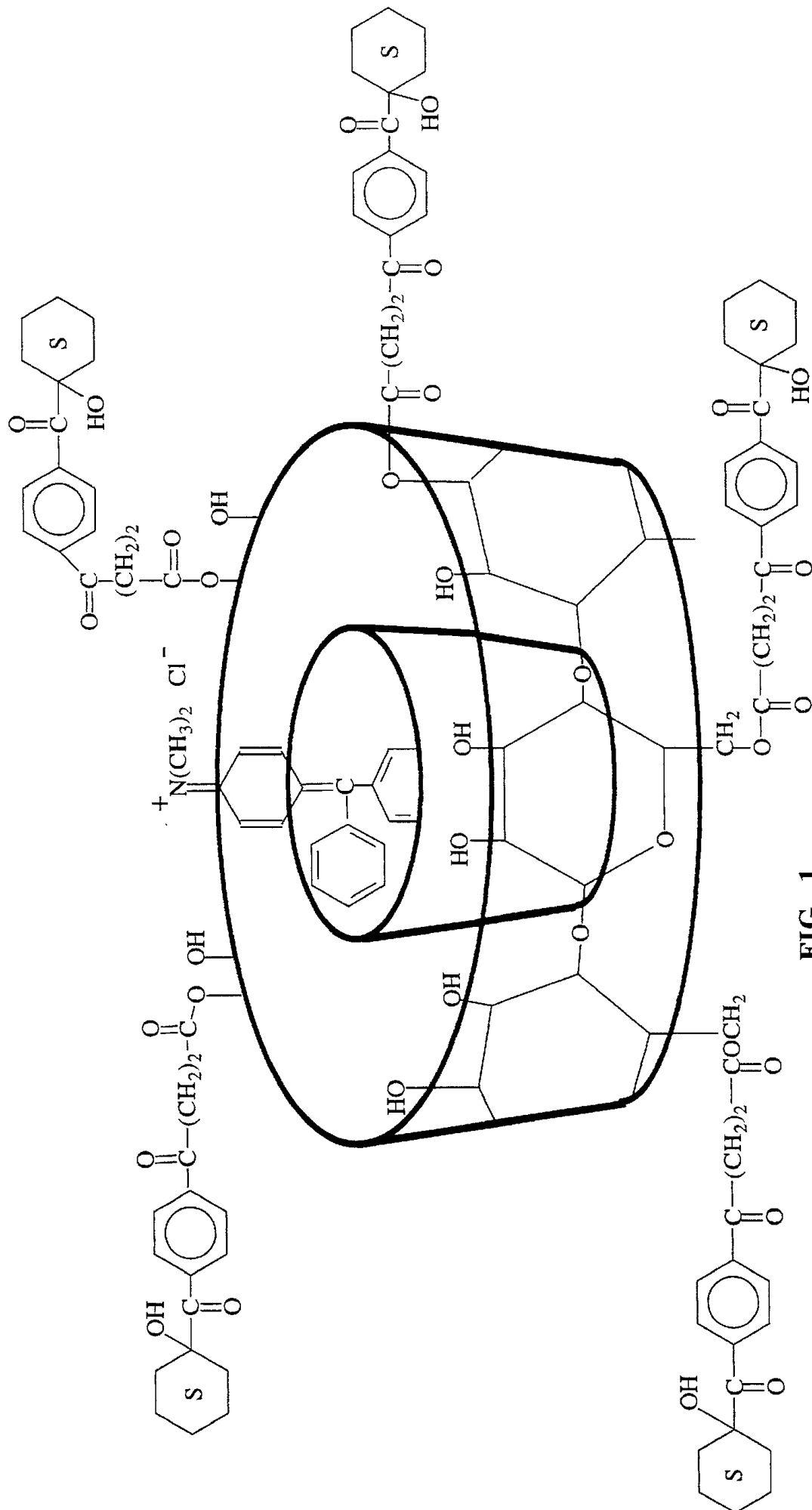


FIG. 1

Publication data including kind & date

[US5643356](#) A 1997-07-01 US5643356
[US5645964](#) A 1997-07-08 US5645964

**Abstract**

(US5645964)

A digital information recording media which includes a recording layer comprising a light-stable colored composition which composition is mutable or decolorizable upon exposure to a specific wavelength of ultraviolet radiation. The light-stable colored composition includes a colorant and an ultraviolet radiation transorber. The colorant, in the presence of the radiation transorber, is adapted, upon exposure of the transorber to specific, narrow bandwidth ultraviolet radiation, to be mutable. The radiation transorber also imparts light-stability to the colorant so that the colorant does not fade when exposed to sunlight or artificial light. The ultraviolet radiation transorber is adapted to absorb radiation and interact with the colorant to effect the irreversible mutation of the colorant. Especially useful radiation is incoherent, pulsed ultraviolet radiation produced by a dielectric barrier discharge excimer lamp or coherent, pulse radiation produced by an excimer **laser**. In another embodiment, the colored composition which comprises a colorant and an ultraviolet radiation transorber may also contain a molecular includant having a chemical structure which defines at least one cavity. Each of the colorant and radiation transorber is associated with the molecular includant. In some embodiments, the colorant is at least partially included within a cavity of the molecular includant and the ultraviolet radiation transorber is associated with the molecular includant outside of the cavity. In other embodiments, the radiation transorber is covalently coupled to the molecular includant.

Inventors

NOHR RONALD SINCLAIR
MACDONALD JOHN GAVIN

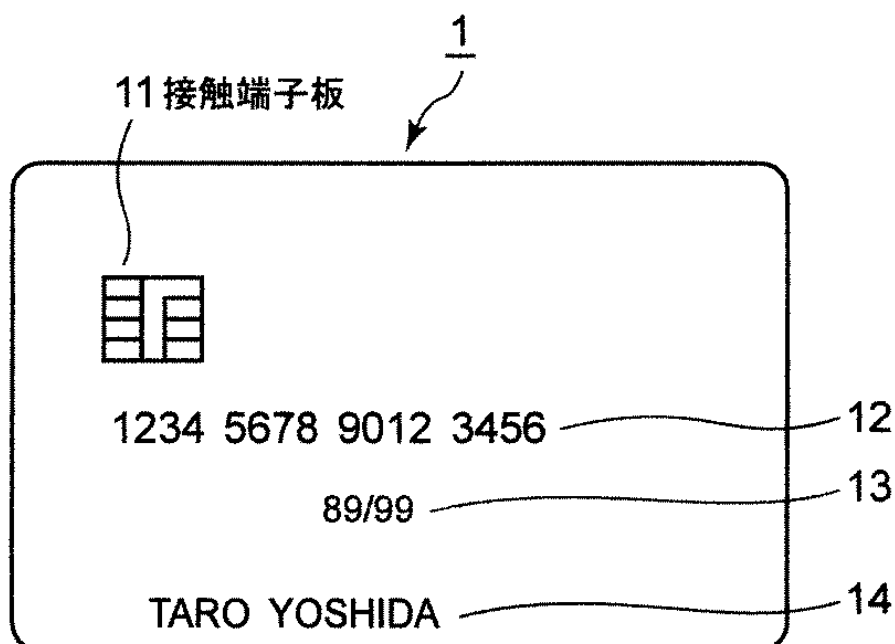
Latest standardized assignees - inventors removed

KIMBERLY CLARK WORLDWIDE

Family 159/200 - FAMPAT - ©Questel

Title

(JP2015013436)
Laser printing card

Images

Publication data including kind & date

JP2015013436	A	2015-01-22	JP2015013436
JP6244698	B2	2017-12-13	JP6244698

**Abstract**

(JP6244698)

PROBLEM TO BE SOLVED: To realize various coloring states except normal black coloring when a card is manufactured by using **laser**-printable base materials for the card, and characters are printed on a card surface. **SOLUTION:** This **laser** printing card 1 is characterized by providing pattern printing 104 and transparent overprinting 105 by offset printing after forming a transparent offset anchor layer 103 on a **laser** coloring layer 102 of a base material 100 for the card whose support layer 101 is white, or providing the pattern printing and the transparent overprinting by the offset printing after forming a silver printing layer 106 and a white printing layer 107 by silkscreen printing, etc., on the **laser** coloring layer of the base material for the card, and after that, irradiating **laser** beams from a transparent overprint surface to print silver or white characters on the surfaces of the silver printing layer or the white printing layer, and to print white or black characters on the **laser** coloring layer.

Inventors

Natsuko Takahashi

Hideo Noguchi

Latest standardized assignees - inventors removed

DAI NIPPON PRINTING

Family 160/200 - FAMPAT - ©Questel

Title

(CN103481692)

Method for marking anti-fake identification code by **laser** engraving at film lower-layer of composite film packing material**Publication data including kind & date**

CN103481692	A	2014-01-01	CN103481692
CN103481692	B	2016-08-17	CN103481692B

**Abstract**

(CN103481692B)

The invention relates to a method for marking an anti-fake identification code by **laser** engraving at the film lower-layer of a composite film packing material. A 532 nm green **laser** is used for generating a pulse **laser** beam with the peak power of 10-50 kw, the frequency of 10-50 khz and the pulse width of 10-50 ns, and the pulse **laser** beam passes through a transparent or semitransparent film of the composite film packing material and acts on the surface of lower-layer material of the transparent or semitransparent film. On one hand, the anti-fake identification code marked by engraving is never worn; on the other hand, the transparent or semitransparent film at the surface layer of the composite film packing material is not damaged; thus the organization layer structure and the original composite film packing material cannot be damaged, and the problems that **ink**-sprayed marks are easily wiped, the film structure of the composite film packing material can be damaged by the traditional **laser** marking mode to cause air leakage, and the like are overcome.

Inventors

KE XIJUN

HE MEIYING

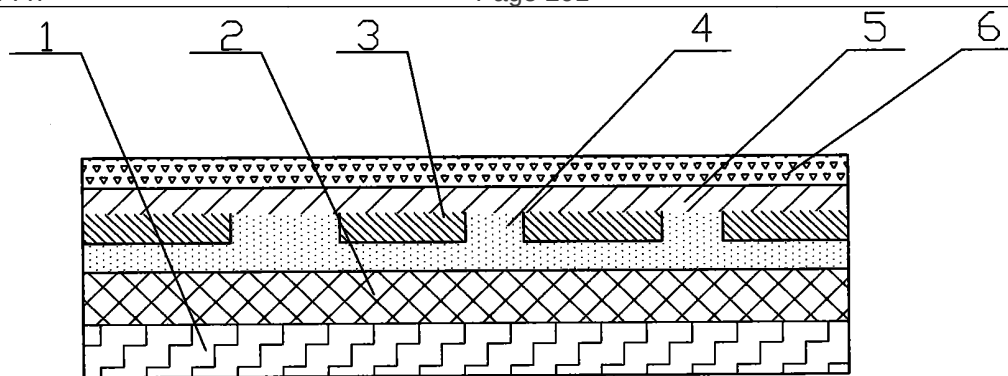
Latest standardized assignees - inventors removedWUHAN LEAD **LASER**

Family 161/200 - FAMPAT - ©Questel

Title

(CN203957577U)

Cigarette packet lining paper with **laser**-effect character and pattern parts**Images**

**Publication data including kind & date**

CN203957577

U 2014-11-26 CN203957577U

**Abstract**

(CN203957577U)

The utility model belongs to the field of packing materials and particularly relates to a piece of cigarette packet lining paper with **laser**-effect character and pattern parts. The cigarette packet lining paper comprises a piece of base paper, a bonding agent layer, an aluminized layer, a printing **ink** layer, a **laser** holographical layer and a release layer, wherein the bonding agent layer is arranged on the base paper; the aluminized layer is arranged on the bonding agent layer; the **laser** holographical layer is arranged on the aluminized layer; the printing **ink** layer is positioned between the aluminized layer and the **laser** holographical layer; the printing **ink** layer partially covers the **laser** holographical layer; the part, uncovered by the printing **ink** layer, of the **laser** holographical layer is in direct contact with the aluminized layer; the release layer is arranged on the **laser** holographical layer. The cigarette packet lining paper has the advantages of both package and counter forgery. The profile and the function of traditional cigarette packet lining paper are overturned, the way that the traditional full-page aluminized cigarette packet lining paper only serves as a wrapper is changed into the way that characters and patterns with the **laser** holographical effect are added, so that the character and pattern parts become prominent, and the cigarette packet lining paper can play the role of counter forgery while serving as the wrapper.

Inventors

ZHANG LEI

ZHAO ZHENHU

WANG QINGLIN

Latest standardized assignees - inventors removed

SHANDONG TAIBAO PACKAGING PRODUCT

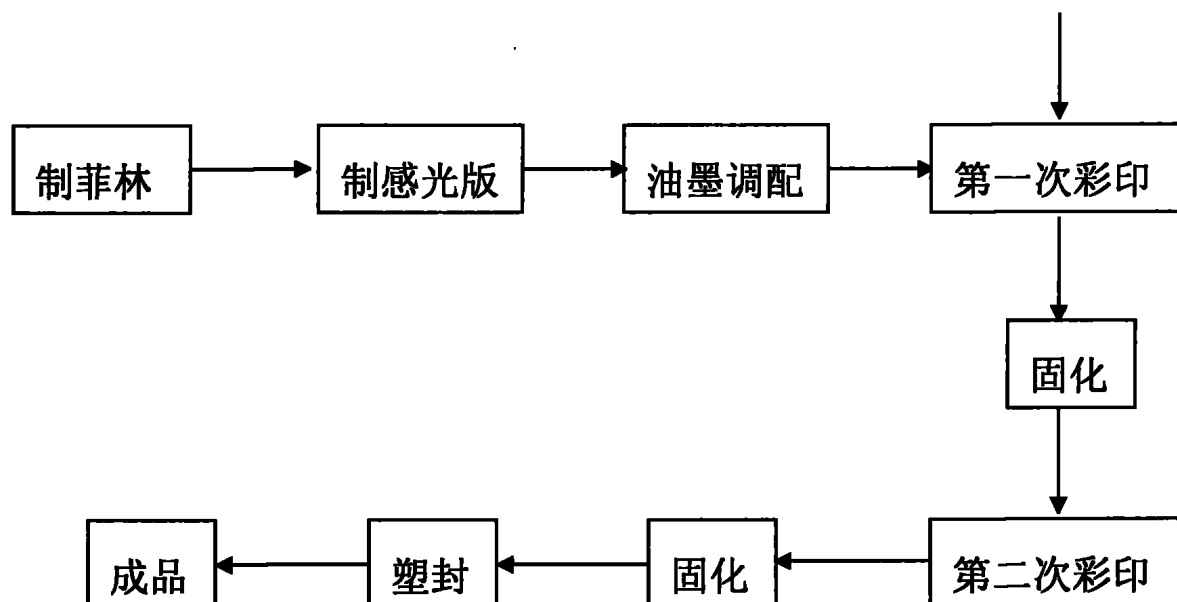
Family 162/200 - FAMPAT - ©Questel

Title

(CN101380161B)

Technique of applying temperature-sensing discolored **ink** in noble metal coin (badge)**Images**

贵金属币（章）坯饼



Publication data including kind & date

CN101380161	A	2009-03-11	CN101380161
CN101380161	B	2011-06-22	CN101380161B



Abstract

(CN101380161B)

The invention disclose a process used for the application of temperature-sensing color-changing **ink** on noble metal coin or noble metal seal; the process is characterized in that temperature-sensing color-changing **ink** as well as the metal **ink** is disposed on an imprinted noble metal coin or noble metal seal blank by superposed color-printing, secondarily color-printed, solidified and plastic-sealed in vacuum, thus realizing the color changes of patterns under different temperatures; the detailed process comprises the steps as follows: preparing film, preparing photosensitive plate, matching **ink**, secondary color-printing, solidifying and plastic-sealing in vacuum. The process further enlarges the application field of the temperature-sensing color-changing **ink** on anti-counterfeiting products, especially on the manufacture process of the metal coin; compared with the prior art, the process increases the anti-counterfeiting performance of the product, enriches the artistic expression of the coin or noble metal seal and improves the ornament and collection value of the products.

Inventors

ZHANG BO

YANG YICHUN

GU HAIYONG

Latest standardized assignees - inventors removed

CHINA BANKNOTE PRINTING & MINT

Family 163/200 - FAMPAT - ©Questel

Title

(FR2396337)

METHOD OF MANUFACTURE OF FLAT FORMS OF PRINTING WITH THE AID OF **LASER** BEAMS

Publication data including kind & date

IT7850029	D0	1978-06-26	IT7850029
BE868456	A	1978-12-27	BE-868456
FI782028	A	1978-12-28	FI7802028
DK285578	A	1978-12-28	DK7802855
NO782198	L	1978-12-28	NO-782198
SE7807170	A	1978-12-28	SE7807170



NL7806816	A	1978-12-29	NL7806816			
ES471135	A2	1979-01-16	ES-471135			
DE2728858	A1	1979-01-18	DE2728858			
FR2396337	A2	1979-01-26	FR2396337			
JPS5412907	A	1979-01-31	JP54012907			
BR7804021	A	1979-04-03	BR7804021			
ZA7803642	B	1979-06-27	ZA7803642			
AU3687478	A	1979-12-13	AU7836874			
GB1583330	A	1981-01-28	GB1583330			
CA1103507	A	1981-06-23	CA1103507			
AU521791	B2	1982-04-29	AU-521791			
FR2396337	B2	1983-07-29	FR2396337			
DE2728858	C2	1986-03-13	DE2728858			
JPH0251732	B2	1990-11-08	JP90051732			

Abstract

(FR2396337)

PROCESS FOR THE PREPARATION OF PLANOGRAPHIC PRINTING FORMS BY MEANS OF **LASER** BEAMS This invention relates to an improvement in the process for the preparation of a planographic printing form wherein a recording material comprising a support of anodically oxidized aluminum with an oxide layer weighing at least 3 grams per square meter and a light-sensitive recording layer on the oxide layer is imagewise irradiated with a **laser** beam, thus rendering the irradiated portions of the recording layer oleophilic and/or insoluble, and the non-irradiated areas of the recording layer are then removed with a developer liquid, the improvement comprising employing a recording layer which comprises a negative-working, light-hardenable, water-soluble diazo compound.

(From CA1103507 A)

Inventors

UHLIG, FRITZ, DIPL.-CHEM. DR., 6200 WIESBADEN, DE

Latest standardized assignees - inventors removed

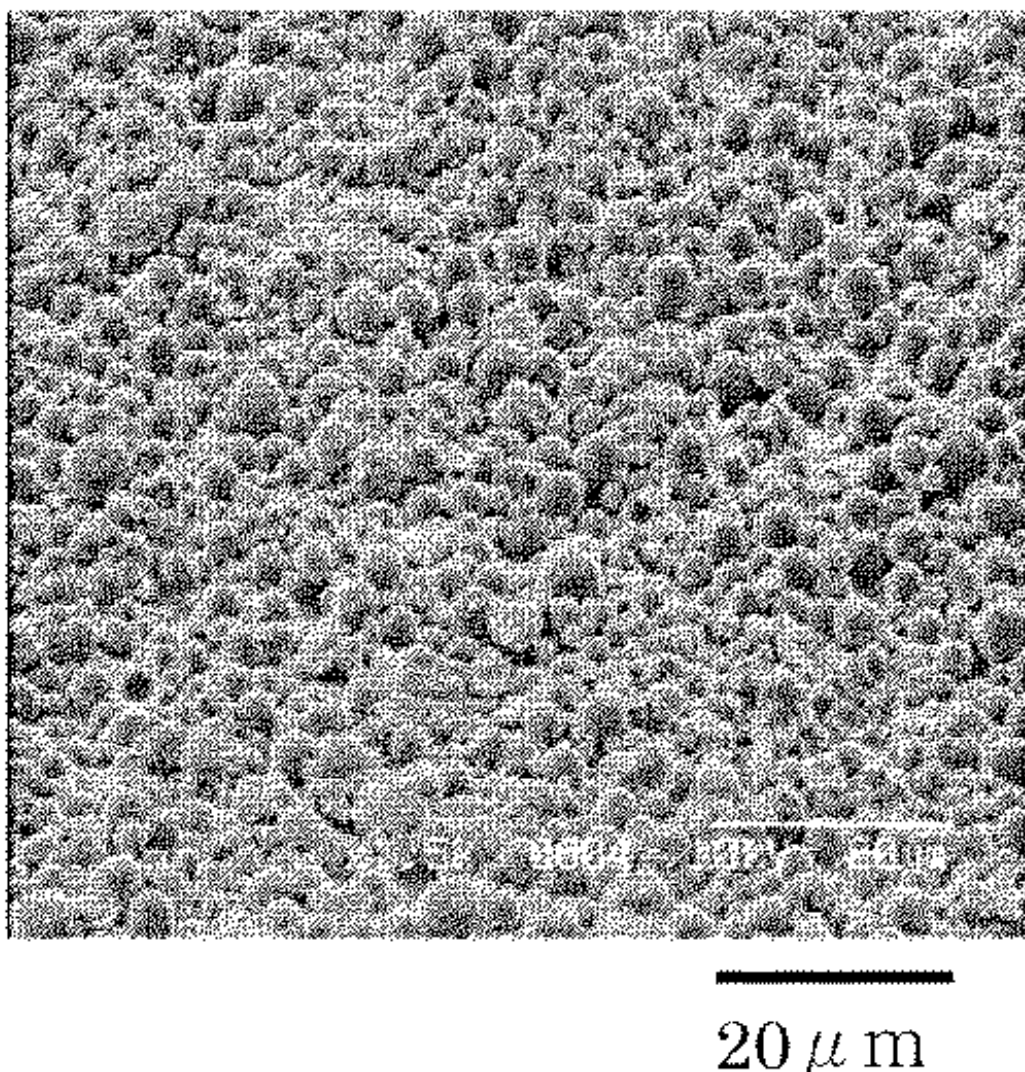
HOECHST

Family 164/200 - FAMPAT - ©Questel

Title

(JP2004174757)

Laser engraved printing plate**Images**

**Publication data including kind & date**

JP2004174757	A	2004-06-24	JP2004174757
JP4024135	B2	2007-10-12	JP4024135

**Abstract**

(JP4024135)

PROBLEM TO BE SOLVED: To provide a flexographic plate on which generation of a residue is suppressed when a relief image is directly engraved by **laser**, the residue can be easily removed, a shape of engraving is excellent, and tack of a printed surface is small.

SOLUTION: In this printing plate, an uneven pattern is formed by applying **laser** to a layer composed of a photo-cured material of a photosensitive resin composition for **laser** engraving. After wiping off the engraving residue generated by the **laser** engraving, inorganic porous particles exist in an exposed state on the surface of an engraved part engraved by **laser** irradiation. When elementary analysis on the surface is performed by a fluorescent X-ray method, the value of the expression, $(I_e/I_c)/(I_{e0}/I_{c0})$, is 1.5 or more. In the expression, I_e represents the characteristic X-ray intensity of a specific element in the inorganic porous body particulate detected from the surface of the carved part; I_c represents the characteristic X-ray intensity of carbon detected from the surface of the carved part; I_{e0} represents the characteristic X-ray intensity of the specific element detected from the surface of an unengraved part; and I_{c0} represents the characteristic X-ray intensity of carbon detected from the surface of the unengraved part.

COPYRIGHT: (C)2004,JPO

Inventors

Hiroshi Yamada

Leader Reina

Latest standardized assignees - inventors removed

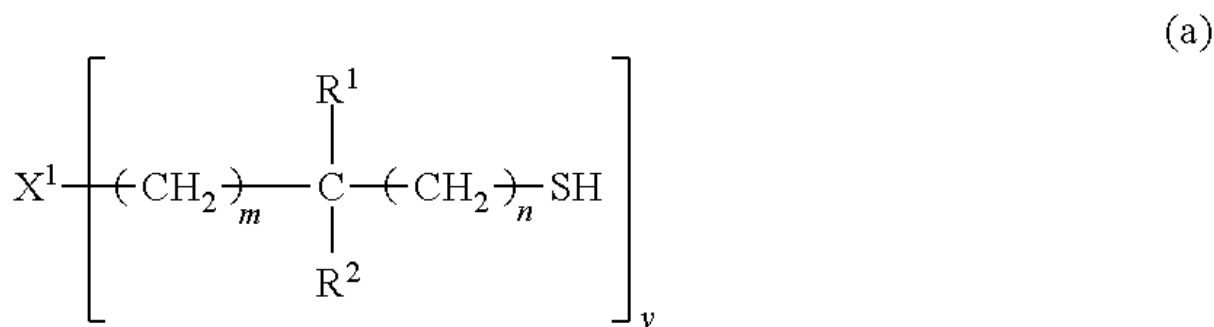
ASAHI KASEI CHEMICALS

Family 165/200 - FAMPAT - ©Questel

Title

(US8431637)

Resin composition for **laser** engraving, relief printing plate precursor for **laser** engraving, process for producing relief printing plate and relief printing plate

Images**Publication data including kind & date**

US20110318537	A1	2011-12-29	US20110318537
CN102314080	A	2012-01-11	CN102314080
JP2012030587	A	2012-02-16	JP2012030587
US8431637	B2	2013-04-30	US8431637

**Abstract**

(US8431637)

There are provided a resin composition for **laser** engraving that can give a relief printing plate having excellent hardness, film elasticity, printing durability, and aqueous **ink** transfer properties and that has excellent rinsing properties for engraving residue generated when **laser**-engraving a printing plate and excellent engraving sensitivity in **laser** engraving, a relief printing plate precursor employing the resin composition for **laser** engraving, a process for producing a relief printing plate employing the same, and a relief printing plate obtained thereby.

Inventors

YOSHIDA KENTA

Latest standardized assignees - inventors removed

FUJIFILM

Family 166/200 - FAMPAT - ©Questel

Title

(JP2004262076)

Seamless-printing original plate capable of being subjected to **laser** engraving, and forming method therefor

Publication data including kind & date

JP2004262076	A	2004-09-24	JP2004262076
JP4220271	B2	2008-11-21	JP4220271

**Abstract**

(JP4220271)

PROBLEM TO BE SOLVED: To provide a forming method for a cylindrical seamless-printing original plate capable of being subjected to **laser** engraving, which suppresses the occurrence of scum when a relief image is produced by directly performing the **laser** engraving, which enables the scum to be removed with ease, and which enables the manufacture of a printing plate with an excellent engraved shape and a low tack on the printing surface.

SOLUTION: This forming method for the seamless-printing original plate for flexographic printing, which can be subjected

to the **laser** engraving, is characterized by comprising: a process (i) for forming a seamless photosensitive resin composition layer on a cylindrical substrate; a process (ii) for hardening the whole surface of the formed photosensitive resin composition layer by irradiating the whole surface thereof with light; and a process (iii) for removing irregularities on a surface of an obtained photosensitive resin-hardened matter layer by irradiating/scanning the surface of the hardened matter layer with a **laser** beam so as to cut the surface of the hardened matter layer.

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Inventors

Hiroshi Yamada

Leader Reina

Latest standardized assignees - inventors removed

ASAHI KASEI CHEMICALS

Family 167/200 - FAMPAT - ©Questel

Title

(JP2004148587)

Laser-carved printing original plate

Publication data including kind & date

JP2004148587	A	2004-05-27	JP2004148587
JP4156902	B2	2008-07-18	JP4156902



Abstract

(JP4156902)

PROBLEM TO BE SOLVED: To provide a printing original plate which sharply increases a carving speed on the occasion when a pattern easy to remove by **laser** light irradiation and minute is formed by direct **laser** carving.

SOLUTION: As to this **laser**-carved printing original plate, the printing original plate constituted of a cured resin which can be carved by a **laser** contains organic microcapsules having an average particle diameter of 0.1 to 100 μm . The thickness of the husk of the microcapsule is 0.01 to 5 μm . The density ρ of the printing original plate is made 0.2 to 0.95 ρ_0 in the case when the density of an organic series not containing the microcapsules is ρ_0 .

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Inventors

Masaki Matsumoto

Hiroshi Yamada

Leader Reina

Latest standardized assignees - inventors removed

ASAHI KASEI CHEMICALS

Family 168/200 - FAMPAT - ©Questel

Title

(FR2668735)

PAPER AND **INK** <unknown>REIMPRIMABLES</unknown> AND ERASABLE, AND SYSTEM FOR PRINTING AND ERASING USING THIS PAPER AND THIS **INK**.

Images

1/8

FIG. 1

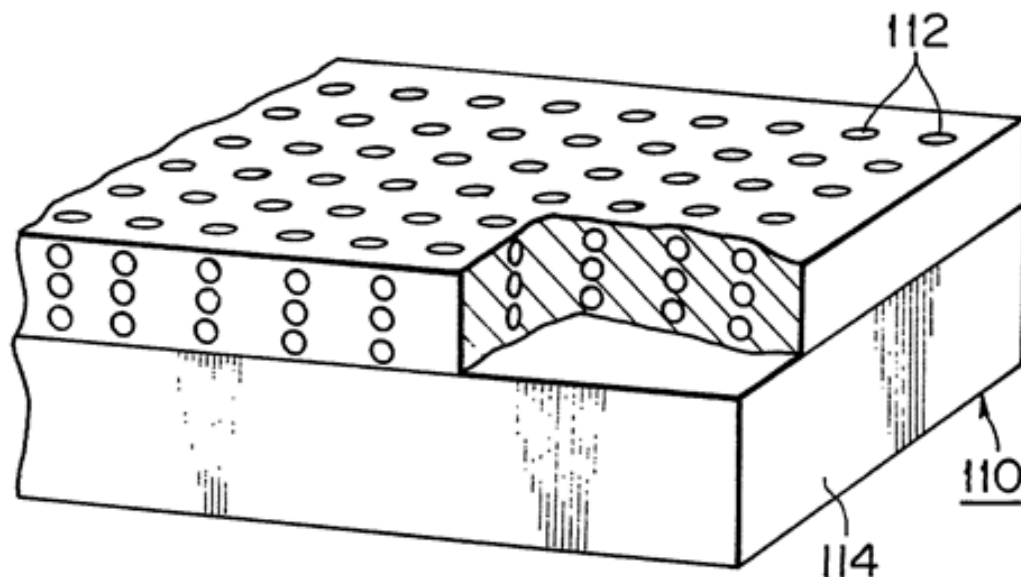
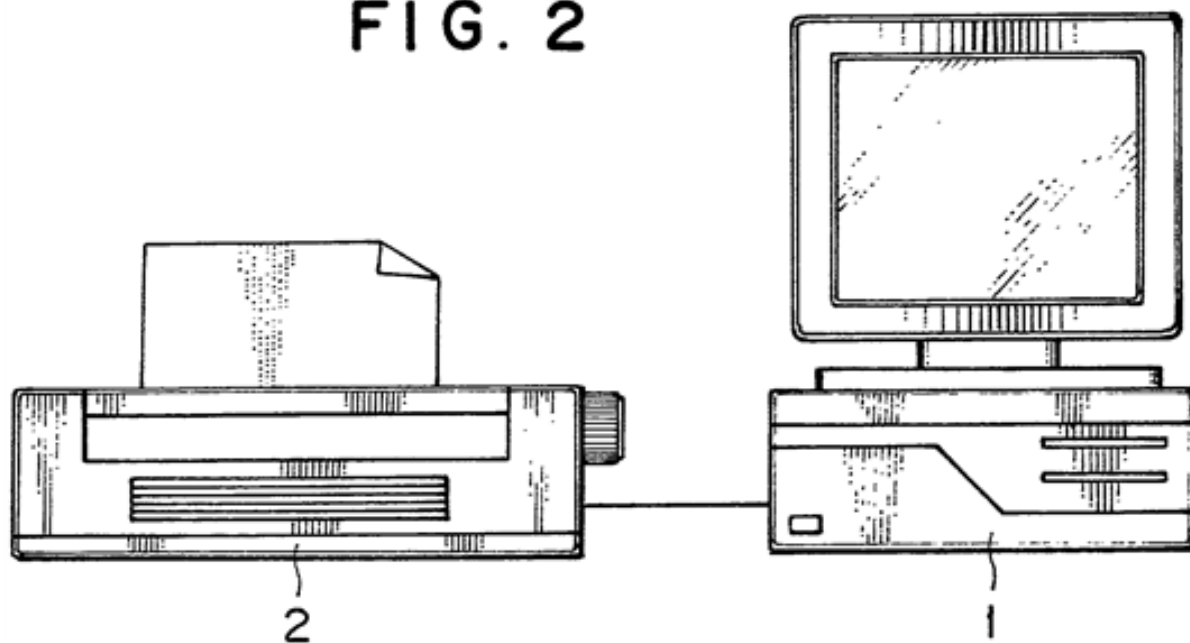


FIG. 2



Publication data including kind & date

CA2053094	A1	1992-04-19	CA2053094
DE4132288	A1	1992-04-23	DE4132288



FR2668735	A1	1992-05-07	FR2668735
JPH04153079	A	1992-05-26	JP04153079
FR2668735	B1	1996-12-06	FR2668735

**Abstract**

(FR2668735)

Paper is made of materials (112) which can be reversibly changed from a visible to an invisible state so that a printed pattern can be erased and the paper reused. The material can have a refractive index or reflectance which changes with heat due to a phase change, or an opto-magnetic layer whose polarisation plane can be changed magnetically, or it can be photochromic and respond to light of different wavelengths. The system has equipment for printing and erasing and can use an **ink** which has visible/invisible properties. USE/ADVANTAGE - The reusable paper is partic. useful in office automation applications.

(From DE4132288 A1)

Inventors

TETUJI AOYAGI

Latest standardized assignees - inventors removed

DIGITAL STREAM

Family 169/200 - FAMPAT - ©Questel

Title

(EP-795998)

Producing a lithographic printing plate by sequentially exposing a thermo-sensitive imaging element by a set of radiation beams

Images

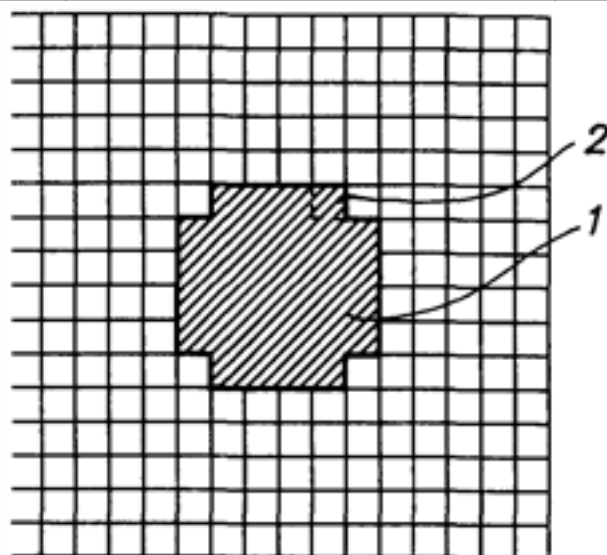


FIG. 1

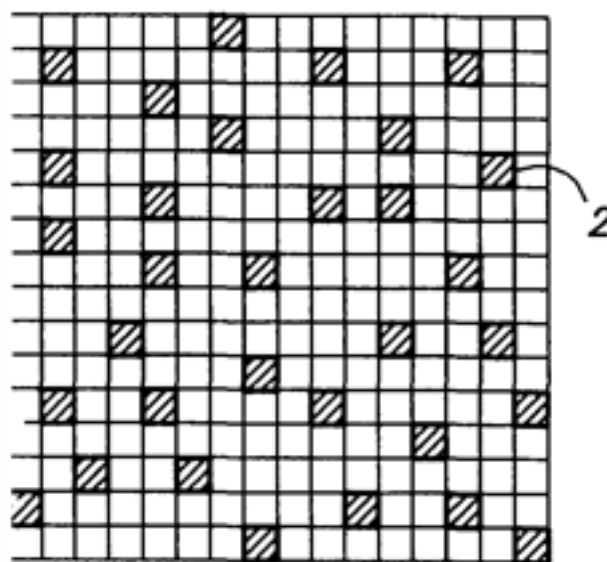


FIG. 2

Publication data including kind & date

EP0795998	A1	1997-09-17	EP-795998
EP0795997	A1	1997-09-17	EP-795997
EP0795995	A1	1997-09-17	EP-795995
JP10026831	A	1998-01-27	JP10026831
JP10029342	A	1998-02-03	JP10029342
JP10058637	A	1998-03-03	JP10058637
JP3083490	B2	2000-09-04	JP3083490



[EP0795995](#)

B1 2001-11-21 EP-795995

[DE69617200](#)

D1 2002-01-03 DE69617200

[DE69617200](#)

T2 2002-07-04 DE69617200

**Abstract**

(EP-795998)

A method for generating on a lithographic printing plate a screened reproduction of a contone image, comprising the steps of: (1) transporting a thermo-sensitive imaging element through an exposure area; (2) scanwise exposing the thermo-sensitive imaging element according to screened data representative for tones of a contone image with a set (s) of radiation beams (b) as the thermo-sensitive imaging element is transported through the exposure area, characterised in that at any given moment ($t_a + \Delta t$) during the exposure at least two radiation beams (b_i, b_j) of the set of radiation beams impinge on different microdots ($m_a, m_a + \Delta m$) of a scanline (l_a) on the imaging element, so that by completion of the exposure step each effective microdot of the scanline has been impinged by all effective radiation beams of the set.

Inventors

VAN HUNSEL JOHAN

BOSSCHAERTS JOHAN

VERMEERSCH JOAN

OVERMEER ROBERT

MARLAND FRED WILLIAM

Latest standardized assignees - inventors removed

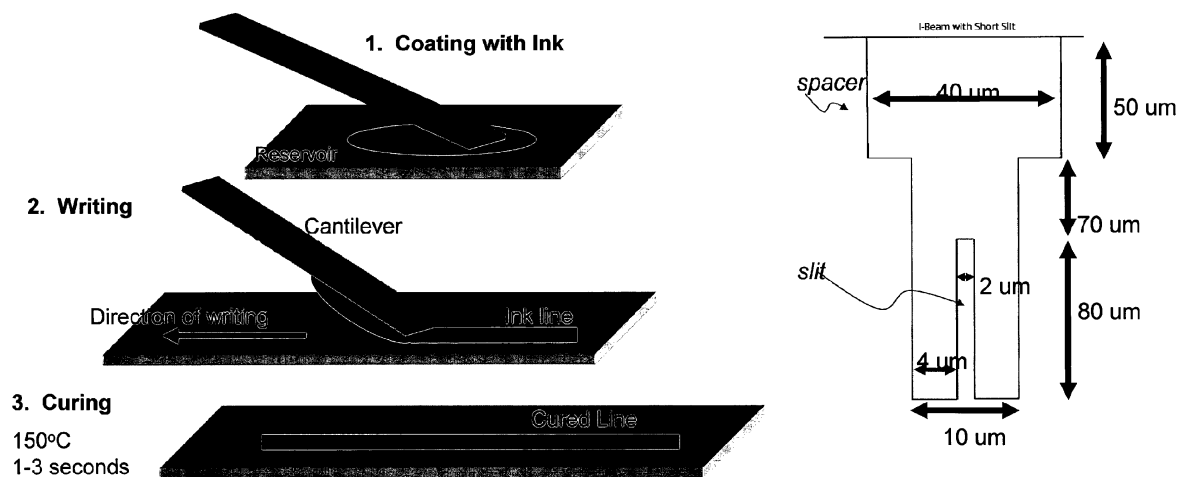
AGFA GEVAERT

Family 170/200 - FAMPAT - ©Questel

Title

(EP1726193)

Micrometric direct-write methods for patterning conductive material and applications to flat panel display repair

Images**Publication data including kind & date**[WO2005084092](#)

A2 2005-09-09 WO200584092

[CA2557472](#)

A1 2005-09-09 CA2557472

[WO2005084092](#)

A3 2005-11-24 WO200584092

[TW200604692](#)

A 2006-02-01 TW200604692

[EP1726193](#)

A2 2006-11-29 EP1726193

[KR20070029151](#)

A 2007-03-13 KR20070029151

[CN101002513](#)

A 2007-07-18 CN101002513

[JP2007528796](#)

A 2007-10-18 JP2007528796



KR101165484

B1 2012-07-13 KR101165484

CA2557472

C 2013-05-07 CA2557472

**Abstract**

(EP1726193)

A new, low temperature method for directly writing conductive metal traces with micron and sub-micron sized features. In this method, a flat beam is used, such as an AFM cantilever, with or without a tip, to draw traces of metal precursor **ink** onto a substrate. The dimensions of the metal traces can be directly controlled by the geometry of the cantilever, so that one can controllably deposit traces from 1 micron to over 100 microns wide with microfabricated cantilevers. Cantilevers with sharp tips can be used to further shrink the minimum features sizes to sub-micron scale. The height of the features can be increased by building layers of similar or different material. To obtain highly conductive and robust patterns with this deposition method, two general **ink** formulation strategies were designed. The key component of both **ink** systems is nanoparticles with diameters less than 100 nm. Because nanoparticles typically have significantly lower melting points than the bulk material, one can fuse, sinter, or coalesce collections of discrete particles into continuous (poly)crystalline films at very low temperatures (less than about 300 °C, and as low as about 120 °C). In the first strategy, one can disperse hydrocarbon-capped nanoparticles in a suitable solvent, deposit them on a surface in the form of a pattern, and then anneal the film by heating to form continuous metallic patterns. In the second strategy, one can deliver metal compounds to the surface in the presence of a reducing matrix and then form nanoparticles in situ by heating that subsequently coalesce to form continuous metallic patterns. In studies with platinum and gold inks, both nanoparticle-based methods yield micron sized traces on glass and oxidized silicon that have low resistivity (4 microhm.cm), and excellent adhesion properties.

Inventors

AMRO NABIL

DEMERS LINETTE

DISAWAL SANDEEP

ZHANG HUA

ELGHANIAN ROBERT

CRUCHON-DUPEYRAT SYLVAIN

BUSSAN JOHN

Latest standardized assignees - inventors removed

NANOINK

Family 171/200 - FAMPAT - ©Questel

Title

(JP2004255812)

Cylindrical flexographic printing original plate capable of undergoing **laser** engraving**Publication data including kind & date**

JP2004255812

A 2004-09-16 JP2004255812

JP4323186

B2 2009-06-12 JP4323186

**Abstract**

(JP4323186)

PROBLEM TO BE SOLVED: To provide a cylindrical flexographic printing original plate capable of undergoing **laser** engraving, which suppresses the occurrence of scum when a relief image is produced by directly performing the **laser** engraving, enables the scum to be removed with ease, makes an engraved shape excellent, reduces tackiness of a printed surface, makes printing quality excellent, and which enables the production of an easy-to-handle printing plate.

SOLUTION: This cylindrical flexographic printing original plate capable of undergoing the **laser** engraving is a laminate wherein a seamless cushion layer (B) and a photosensitive resin hardened matter layer (C) capable of undergoing the **laser** engraving are laminated on a cylindrical support (A) in this order; and the cushion layer includes air bubbles having partitions.

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Inventors

YAMADA HIROSHI

MATSUMOTO MASAKI

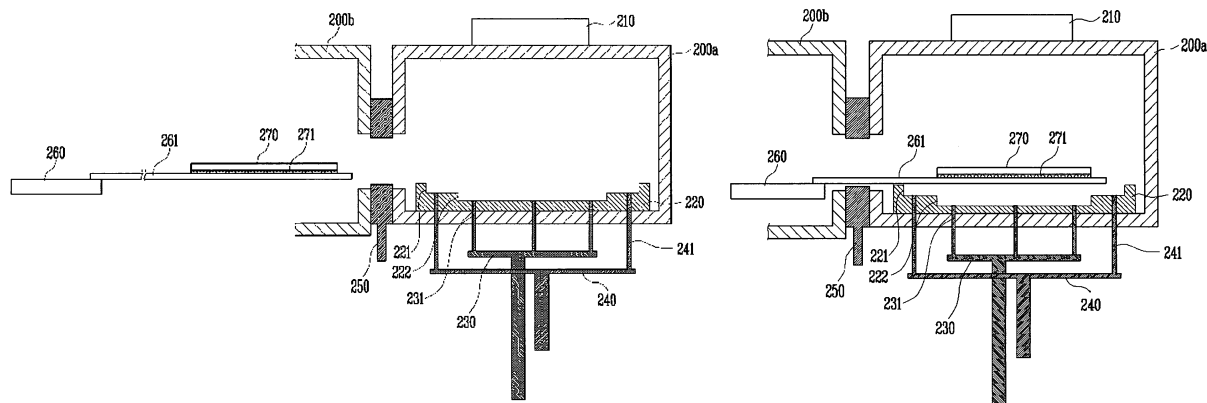
Latest standardized assignees - inventors removed

ASAHI KASEI E-MATERIALS

Family 172/200 - FAMPAT - ©Questel

Title

(US7666570)

Laser induced thermal imaging method and fabricating method of organic light-emitting diode using the same**Images****Publication data including kind & date**

KR100700831	B1	2007-03-28	KR100700831
US20070111117	A1	2007-05-17	US20070111117
TW200721567	A	2007-06-01	TW200721567
JP2007141816	A	2007-06-07	JP2007141816
CN1982076	A	2007-06-20	CN1982076
US7666570	B2	2010-02-23	US7666570
TWI335682	B	2011-01-01	TWI335682
CN1982076	B	2011-05-18	CN1982076B
JP4901391	B2	2012-01-13	JP4901391

**Abstract**

(US7666570)

A **laser** induced thermal imaging method capable of effectively laminating a donor film and an acceptor substrate using a magnetic force; and a fabricating method of an organic light-emitting diode using the same. The **laser** induced thermal imaging method includes arranging an acceptor substrate, in which a first magnet is formed in one surface thereof, on a substrate stage in a processing chamber; arranging on the acceptor substrate a donor film including a second magnet; laminating the donor film and the acceptor substrate using a magnetic force acting between the first and second magnets; and transferring at least one region of an imaging layer onto the acceptor substrate by scanning a **laser** on the donor film. The **laser** induced thermal imaging method improved adhesion between the donor film and the acceptor substrate improves a life span, a yield and a reliability of the organic light-emitting diode.

Inventors

NOH SOK WON

YANG NAM CHOUL

LEE JAE HO

SONG MYUNG WON

KWAK NOH MIN

Latest standardized assignees - inventors removed

SAMSUNG DISPLAY

Family 173/200 - FAMPAT - ©Questel

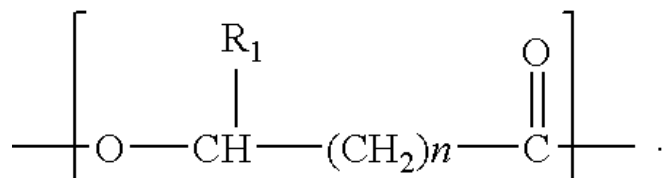
Title

(EP2095970)

Resin composition for **laser** engraving, resin printing plate precursor for **laser** engraving, relief printing plate and method for production of relief printing plate

Images

Formula (a)

**Publication data including kind & date**

EP2095970	A1	2009-09-02	EP2095970
US20090220753	A1	2009-09-03	US20090220753
JP2009226946	A	2009-10-08	JP2009226946
US8389198	B2	2013-03-05	US8389198
JP5409045	B2	2013-11-15	JP5409045

**Abstract**

(EP2095970)

The present invention provides a resin composition comprising: a binder polymer comprising a polyester; and an oxy compound of at least one of metal and metalloid selected from Groups 1 to 16 of periodic table. This composition is especially suitable for making a **laser** engravable relief-forming layer of a resin printing plate or a precursor thereof.

Inventors

SUGASAKI ATSUSHI

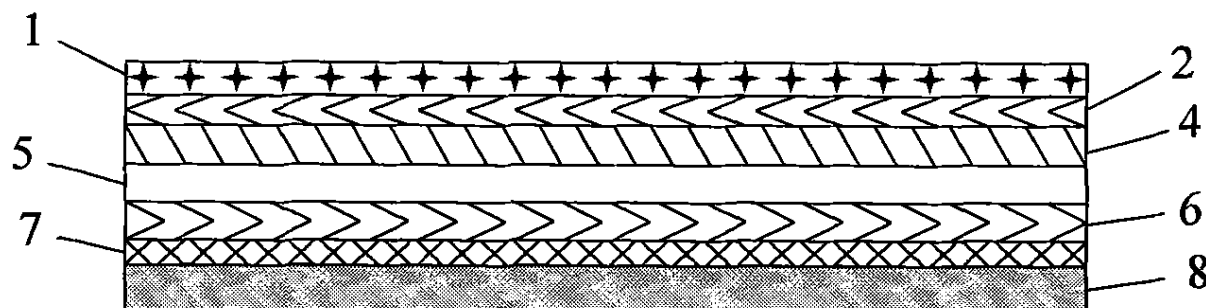
Latest standardized assignees - inventors removed

FUJIFILM

Family 174/200 - FAMPAT - ©Questel

Title

(CN201732519U)

Laser film label**Images****Publication data including kind & date**

CN201732519	U	2011-02-02	CN201732519U
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**Abstract**

(CN201732519U)

The utility model discloses a **laser** film label which comprises release paper and a film, wherein a silicon protective layer is coated on the front surface of the release paper, an adhesive layer is coated on the back surface of the film, the film is stuck on the front surface of the release paper, an **ink** layer is coated on the front surface of the film, the **ink** layer is a

transparent **ink** layer and/or a colored **ink** layer, a self-adhesive paper layer is coated on the **ink** layer, and a **laser** marker layer is die-molded on the self-adhesive paper layer. The **laser** marker instead of the **laser** film is directly die-molded on the label and doesn't strip off, thereby achieving the effect of forgery prevention and avoiding environmental pollution.

Inventors

YE XIANMIN

Latest standardized assignees - inventors removed

SHENZHEN YESIHEHNG TECHNOLOGICAL PRINTING

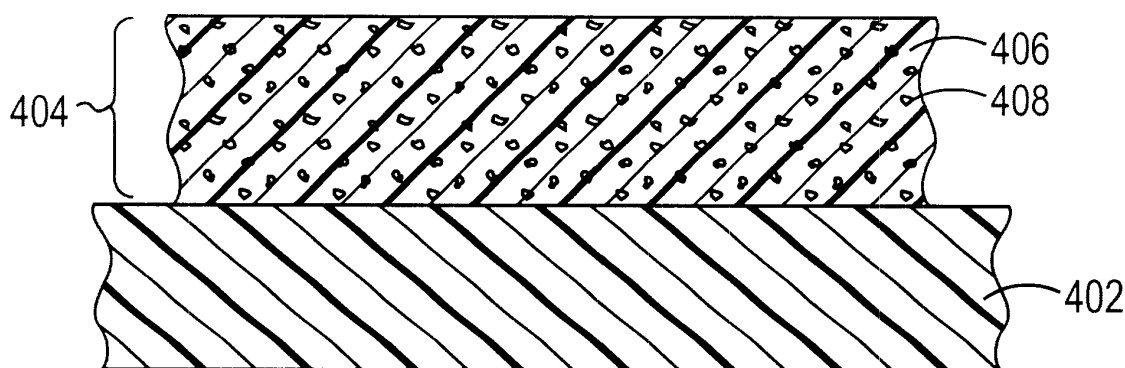
Family 175/200 - FAMPAT - ©Questel

Title

(EP1278633)

Lithographic imaging with printing members having multiphase laser-responsive layers

Images



Publication data including kind & date

WO02070258	A1	2002-09-12	WO200270258				
CA2407773	A1	2002-09-12	CA2407773				
US20020162469	A1	2002-11-07	US20020162469				
EP1278633	A1	2003-01-29	EP1278633				
CN1462239	A	2003-12-17	CN1462239				
US6684785	B2	2004-02-03	US6684785				
JP2004519355	A	2004-07-02	JP2004519355				
AU2002252128	B2	2004-09-23	AU2002252128				
EP1278633	B1	2005-06-15	EP1278633				
DE60204634	D1	2005-07-21	DE60204634				
TWI245162	B	2005-12-11	TWI245162				
DE60204634	T2	2006-05-11	DE60204634				
CN1273291	C	2006-09-06	CN1273291C				
CA2407773	C	2007-05-22	CA2407773				
JP4129181	B2	2008-05-23	JP4129181				

Abstract

(EP1278633)

The present invention provides a printing member having a single radiation-absorptive multiphase layer over a substrate layer that may be imaged with or without ablation.

Inventors

HARWOOD GERALD P JR

Latest standardized assignees - inventors removed

PRESSTEK

Family 176/200 - FAMPAT - ©Questel

Title

(JP10058636)

Original plate for **laser**-sensitive lithographic plate**Publication data including kind & date**

JP10058636 A 1998-03-03 JP10058636

**Abstract**

(JP10058636)

PROBLEM TO BE SOLVED: To improve workability for manufacturing an original plate for a printing plate and enable **ink** repellency equal to or higher than a PS lithographic plate to be displayed by generating the destructive absorption by a swelling layer through sensing of active light provided by a **laser** emission, in an original plate for a lithographic plate with a **laser**-sensitive hydrophilic swelling layer. SOLUTION: The master for a lithographic plate with a **laser**-sensitive hydrophilic swelling layer formed on a base has such a function that the hydrophilic swelling layer displays its destructive absorption through sensing of active light provided by a **laser** emission. Black pigment or black dye is in the ratio of 3-70wt.%, preferably, 5-50wt.% for the entire hydrophilic swelling layer in terms of solid base. If the ratio of the black substance exceeds 70wt.%, the **ink** repellency of the hydrophilic swelling layer is significantly deteriorated. However, if the ratio of the black substance is not more than 3wt.%, the sensitivity of the hydrophilic swelling layer to the **laser** emission is insufficient so that the ratio is not appropriate. The preferable coat thickness of the **laser**-sensitive hydrophilic swelling layer is 0.1-20g/m².

Inventors

TABATA KENICHI

Ikeda Norimasa

IKEDA NORIMASA

Latest standardized assignees - inventors removed

TORAY INDUSTRIES

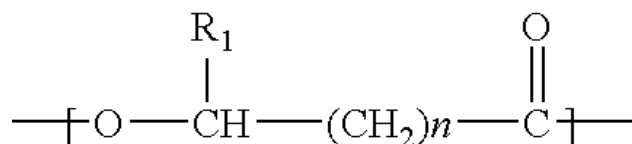
Family 177/200 - FAMPAT - ©Questel

Title

(EP2058123)

Resin printing plate precursor for **laser** engraving, relief printing plate and method for production of relief printing plate**Images**

Formula (a)

**Publication data including kind & date**

EP2058123	A2	2009-05-13	EP2058123
CN101430505	A	2009-05-13	CN101430505
US20090123712	A1	2009-05-14	US20090123712
JP2009132150	A	2009-06-18	JP2009132150
EP2058123	A3	2011-01-19	EP2058123
EP2058123	B1	2012-09-26	EP2058123
US8361702	B2	2013-01-29	US8361702
CN101430505	B	2013-04-17	CN101430505B
JP5408967	B2	2013-11-15	JP5408967

**Abstract**

(EP2058123)

A resin composition for laser engraving comprising a binder polymer contains at least one polyester (A) selected from the group consisting of a polyester containing a hydroxycarboxylic acid unit, polycaprolactone, poly(butylene succinic acid), and derivatives thereof.

Inventors

SUGASAKI ATSUSHI

Latest standardized assignees - inventors removed

FUJIFILM

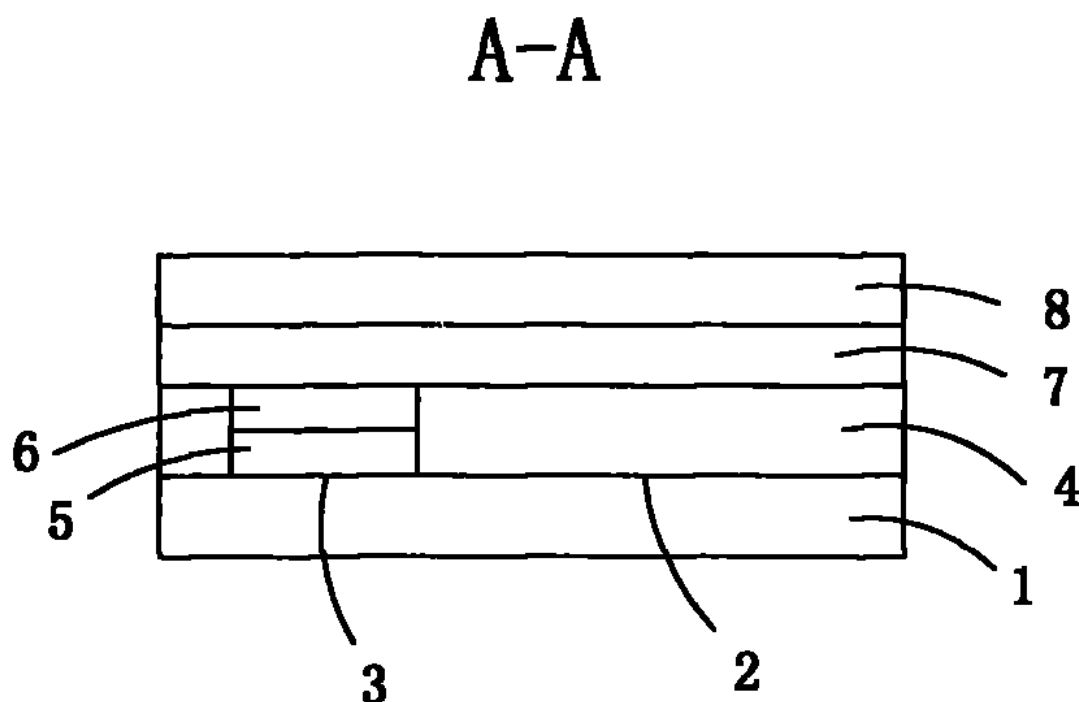
Family 178/200 - FAMPAT - ©Questel

Title

(CN201381030U)

Positioning laser anti-fake complex film

Images



Publication data including kind & date

CN201381030

Y

2010-01-13

CN201381030U



Abstract

(CN201381030U)

The utility model discloses a positioning **laser** anti-fake complex film and a production method thereof. The complex film is provided with a printing-bearing layer, wherein the printing-bearing layer is provided with a printing area and an adhesion area, the printing area is provided with an **ink** layer, the adhesion area is coated with a first adhesion layer, and the first adhesion layer is bonded with a **laser** anti-fake pattern layer; and the **ink** layer and the **laser** anti-fake pattern layer are provided with a second adhesion layer and a protection layer. The positioning **laser** anti-fake complex film can effectively protect the **laser** anti-fake pattern layer and can prevent the **laser** anti-fake pattern layer from dropping off.

Inventors

CENG WENMING

SUN GUOJIN

Latest standardized assignees - inventors removed

ZHEJIANG GOLDSTONE PACKING

Family 179/200 - FAMPAT - ©Questel

Title

Latest standardized assignees - inventors removed

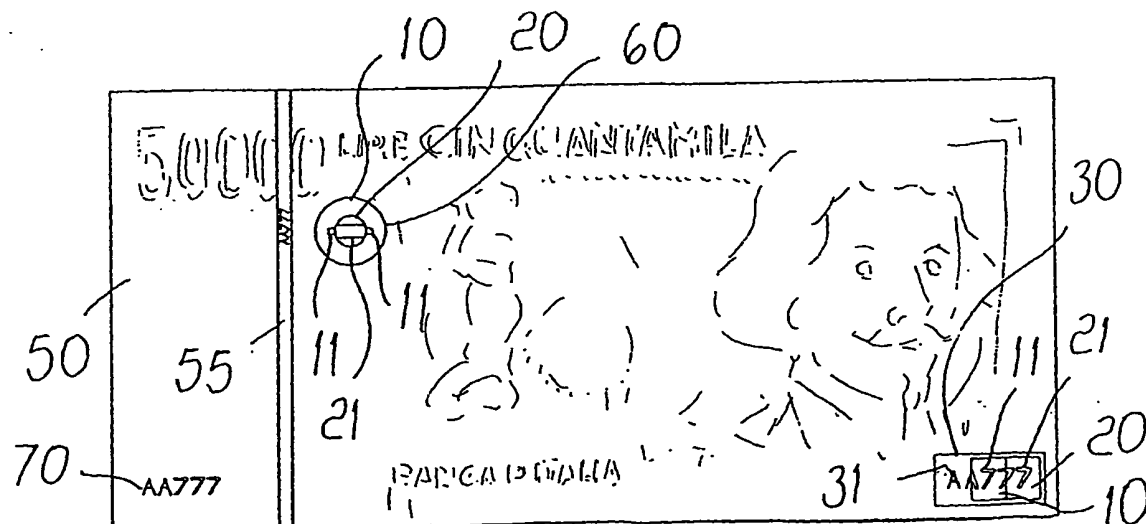
FUJIFILM

Family 180/200 - FAMPAT - ©Questel

Title

(EP1291827)

Document and method against counterfeiting and forgery of the same

Images**Publication data including kind & date**

ITMI20011889	D0	2001-09-10	IT2001MI1889
ITMI20011889	A1	2003-03-10	IT2001MI1889
EP1291827	A1	2003-03-12	EP1291827
WO03023723	A1	2003-03-20	WO200323723
CA2460082	A1	2003-03-20	CA2460082
EP1291827	B1	2003-06-11	EP1291827
AT242903	T	2003-06-15	ATE242903
DK1291827	T3	2003-07-14	DK1291827T
DE60100362	D1	2003-07-17	DE60100362
PT1291827	E	2003-09-30	PT1291827
ES2194817	T3	2003-12-01	ES2194817
DE60100362	T2	2004-02-19	DE60100362
NO20041071	L	2004-04-16	NO20041071
BR0212459	A	2004-10-19	BR200212459
BRPI0212459	A1	2004-10-19	BRPI0212459
US20040232691	A1	2004-11-25	US20040232691
CN1575483	A	2005-02-02	CN1575483
KR20050016280	A	2005-02-21	KR20050016280
JP2005508263	A	2005-03-31	JP2005508263
RU2004110050	A	2005-09-20	RU2004110050
CN1285060	C	2006-11-15	CN1285060C
RU2294016	C2	2007-02-20	RU2294016
NO325388	B1	2008-04-21	NO-325388
JP4310188	B2	2009-05-15	JP4310188
KR100949127	B1	2010-03-25	KR100949127
CA2460082	C	2012-04-03	CA2460082



BRPI0212459

A2 2016-04-19 BR200212459

Abstract

(EP1291827)

A method for customising security documents, particularly banknote, checks and documents representing a value in general. The method is suitable to prevent their forgery and alteration and comprises the steps that consist in superimposing at least two materials (10, 20) having different resistances to **laser** and being arranged adjacent to each other onto a substrate (30) having a higher resistance to **laser** than each of the superimposed materials (10, 20) and treating said superimposed materials (10, 20) with a **laser** beam which is guided along a preset path in order to modify by sublimation a part of each superimposed material (10, 20) by subjecting it to said **laser** beam without substantially burning or sublimating said substrate (30).

Inventors

LAZZERINI MAURIZIO

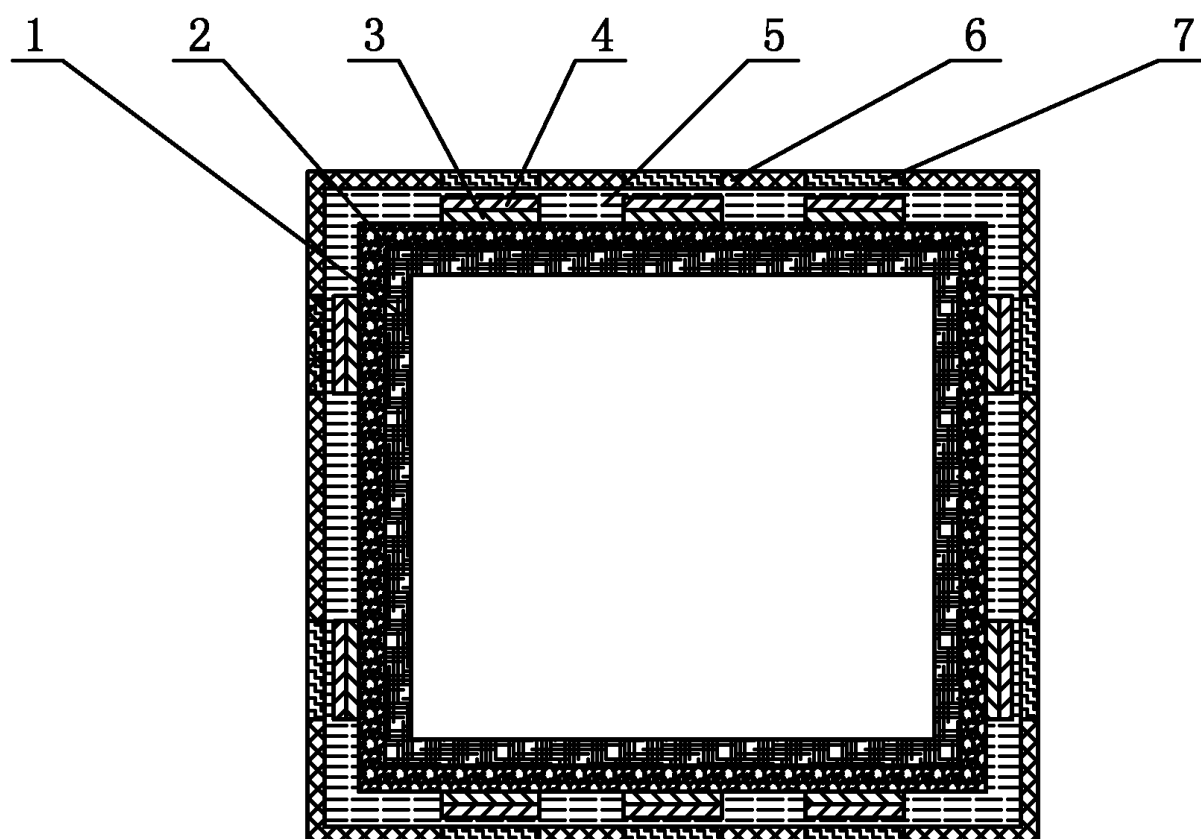
Latest standardized assignees - inventors removed

FABRIANO SECURITIES

Family 181/200 - FAMPAT - ©Questel

Title

(CN201842337U)

Laser rainbow code security box**Images****Publication data including kind & date**

CN201842337

U 2011-05-25 CN201842337U

**Abstract**

(CN201842337U)

The utility model particularly relates to a **laser** rainbow code security box for manufacturing of **laser** rainbow code security paper, which comprises a paper box body. The **laser** rainbow code security box is characterized in that the outer side of the box body is provided with a composite adhesive layer, a rainbow digital layer, a varnish layer, an **ink** printing layer and a scraping layer in sequence, the rainbow digital layer is regularly arranged between the composite adhesive layer and the varnish layer and comprises an **ink** code-spraying layer and a holographic aluminum-plated layer, the **ink** printing layer and

the scraping layer are just sleeved on the varnish layer in a covering way, the position of the scraping layer corresponds to the position of the rainbow digital layer, and part or all of the scraping layer blocks the rainbow digital layer. The packaging box body has the security function, the traditional technical bias is broken, and the utility model has the advantages that the **laser** rainbow code security box can not be manufactured easily and has good security effect. The contents of the changeable rainbow digital layer can be changed, and can be managed in a database to form an information base, and thus the difficulty in counterfeiting is increased. Moreover, the rainbow digital layer has the **laser** effect and is attractive.

Inventors

ZHANG QINYONG

TIAN YIJIN

GONG LEI

XU PIZHOU

TIAN CHENYUAN

Latest standardized assignees - inventors removed

SHANDONG TAIBAO PREVENTING COUNTERFEIT

Family 182/200 - FAMPAT - ©Questel

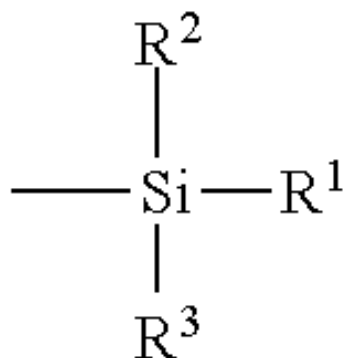
Title

(US8637224)

Thermally crosslinkable resin composition for **laser** engraving, relief printing starting plate for **laser** engraving and process for producing the same, and relief printing plate and process for making same

Images

(1)



Publication data including kind & date

US20110159438	A1	2011-06-30	US20110159438
JP2011136429	A	2011-07-14	JP2011136429
JP5393438	B2	2013-10-25	JP5393438
US8637224	B2	2014-01-28	US8637224



Abstract

(US8637224)

A process for making a relief printing plate is provided, the process including a layer formation step of forming a relief-forming layer from a resin composition containing (Component A) a compound having a hydrolyzable silyl group and/or a silanol group and (Component B) a conjugated diene monomer unit-containing polymer, and at least either further containing (Component C) a vulcanizing agent having a sulfur atom or Component A above being a compound further having a sulfur atom, a crosslinking step of thermally crosslinking the relief-forming layer to thus obtain a relief printing starting plate having a crosslinked relief-forming layer, and an engraving step of **laser**-engraving the relief printing starting plate having a crosslinked relief-forming layer to thus form a relief layer.

Inventors

SATO HIROSHI

Latest standardized assignees - inventors removed

FUJIFILM

Family 183/200 - FAMPAT - ©Questel

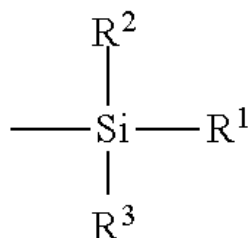
Title

(US8632957)

Thermally crosslinkable resin composition for **laser** engraving, relief printing plate precursor for **laser** engraving and process for producing same, and relief printing plate and process for making same

Images

(1)

**Publication data including kind & date**

US20110159439	A1	2011-06-30	US20110159439
JP2011136431	A	2011-07-14	JP2011136431
JP5409340	B2	2013-11-15	JP5409340
US8632957	B2	2014-01-21	US8632957

**Abstract**

(US8632957)

A process for making a relief printing plate is provided that includes a layer formation step of forming a relief-forming layer from a resin composition that contains (Component A) a compound having a hydrolyzable silyl group and/or a silanol group, (Component B) a binder polymer, and (Component C) a peroxide, a crosslinking step of thermally crosslinking the relief-forming layer to thus obtain a relief printing plate precursor having a crosslinked relief-forming layer, and an engraving step of **laser**-engraving the relief printing plate precursor having a crosslinked relief-forming layer to thus form a relief layer.

Inventors

KAWASHIMA TAKASHI

Latest standardized assignees - inventors removed

FUJIFILM

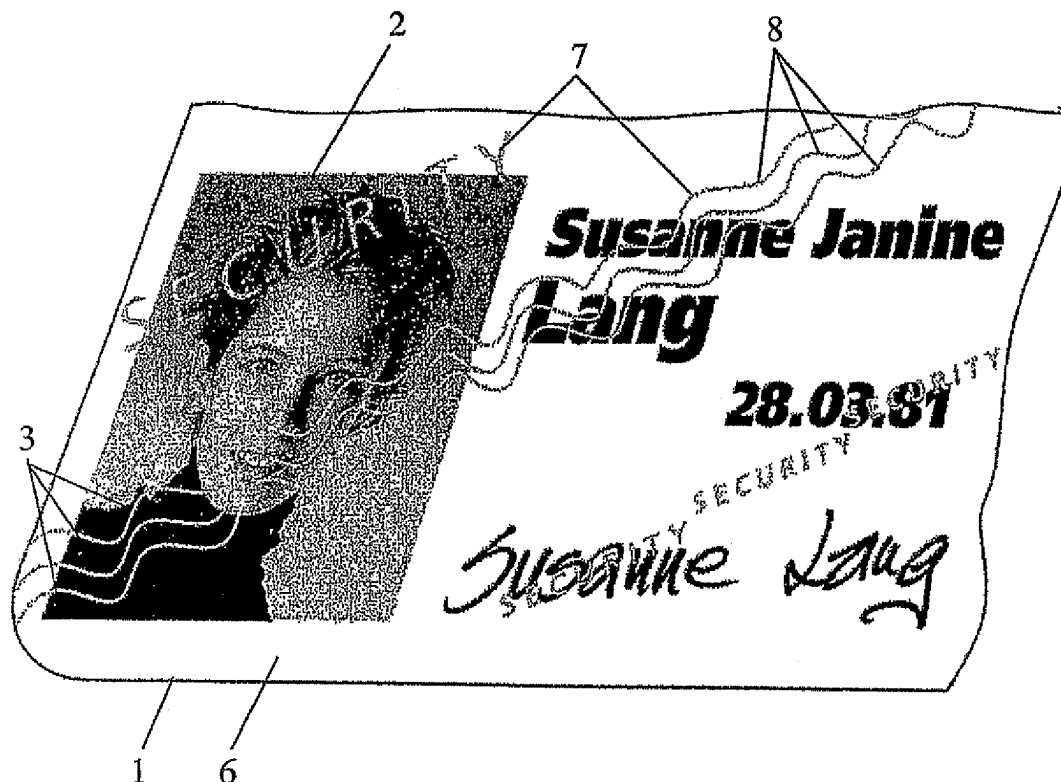
Family 184/200 - FAMPAT - ©Questel

Title

(EP1934893)

Method for producing a data carrier

Images



Publication data including kind & date

EP1775675	A1	2007-04-18	EP1775675
WO2007041882	A1	2007-04-19	WO200741882
CA2625657	A1	2007-04-19	CA2625657
AU2006301794	A1	2007-04-19	AU2006301794
AP200804412	A0	2008-04-30	AP200804412
EP1934893	A1	2008-06-25	EP1934893
EA200800778	A1	2008-08-29	EA200800778
US20080224463	A1	2008-09-18	US20080224463
BRPI0617585	A2	2011-08-02	BR200617585
US8419069	B2	2013-04-16	US8419069
CA2625657	C	2015-03-31	CA2625657
EP1934893	B1	2017-09-13	EP1934893
DK1934893	T3	2017-10-16	DK1934893T
ES2645444	T3	2017-12-05	ES2645444



Abstract

(EP1934893)

In order to produce a data carrier (1) a substrate (6) is printed with a printing ink and personalized by means of a laser. The printing ink is laser-active and is converted at least in regions during the personalization in such a way that, for example, a silver-grade pigment is formed which is readily visible only when the substrate (6) is inclined. In particular, the printing ink has a comparatively small proportion of carbon black that is converted by the laser essentially without disturbing combustion and overall formation.

Inventors

EGLI STEFAN

HOFSTETTER STEPHAN

CHRISTEN PAUL

Latest standardized assignees - inventors removed

GEMALTO

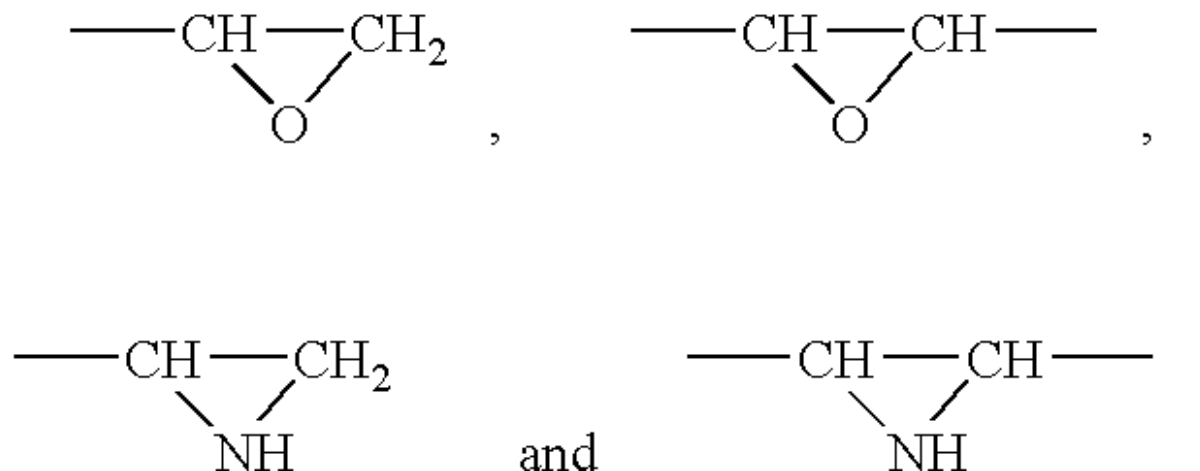
Family 185/200 - FAMPAT - ©Questel

Title

(EP1260361)

Method for making lithographic printing plate

Images



Publication data including kind & date

EP1260361	A2	2002-11-27	EP1260361
JP2002351088	A	2002-12-04	JP2002351088
US20030013043	A1	2003-01-16	US20030013043
US6706463	B2	2004-03-16	US6706463
EP1260361	A3	2004-03-24	EP1260361
EP1260361	B1	2006-07-19	EP1260361
AT333367	T	2006-08-15	ATE333367
DE60213156	D1	2006-08-31	DE60213156
DE60213156	T2	2007-06-14	DE60213156



Abstract

(EP1260361)

A method for making a lithographic printing plate comprises the steps of imagewise exposing, to a **laser** beam, a PS plate comprising a substrate, a heat-sensitive layer containing at least one light-heat conversion agent and a binder polymer formed on the substrate and a hydrophilic or lipophobic layer applied onto the heat-sensitive layer; and then removing the hydrophilic or lipophobic layer on the **laser**-exposed area by developing the imagewise exposed printing plate within 120 seconds from the completion of the **laser**-exposure to thus give a lithographic printing plate, wherein the developing treatment comprises the step of rubbing the exposed printing plate surface with an abrasion means in the absence of any liquid. This method permits the production of a lithographic printing plate without causing any deterioration of the developing properties of the PS plate even when the imagewise exposed PS plate is developed within a short period of time after the completion of the **laser**-exposure.

Inventors

INNO TOSHIFUMI

HIRANO TSUMORU

Latest standardized assignees - inventors removed

FUJIFILM

Family 186/200 - FAMPAT - ©Questel

Title

(JP09157416)

Plastic molding product having **laser** marking applied thereto

Publication data including kind & date

JP09157416

A 1997-06-17 JP09157416

**Abstract**

(JP09157416)

PROBLEM TO BE SOLVED: To obtain the subject molding product, capable of simply applying a marking to the molding product having a complicated shape and useful as an automotive part, etc., by joining sheets containing a **laser** marking layer and then irradiating the joined sheet with **laser** beams. **SOLUTION:** This plastic molding product is obtained by simultaneously molding and processing a sheet containing a **laser** marking layer with a plastic molten material, joining the resultant sheet to the front surface and/or back surface of a molding product, then irradiating the resultant molding product with **laser** beams and developing a color in the **laser** marking layer. The **laser** marking layer is preferably formed of a **laser** marking **ink** consisting essentially of a color former, e.g. 3-diethylamino-7-o-fluorophenylfluorane and a developer having ≥ 200 deg.C melting point, e.g. 2,2',6,6'-tetramethyl-4,4'-sulfonyldiphenol dispersed in water and/or an organic solvent.

Inventors

TOMIYAMA TAKESHI

MARUYAMA TSUTOMU

AKIYAMA ATSUSHI

Latest standardized assignees - inventors removed

KANSAI PAINT

Family 187/200 - FAMPAT - ©Questel

Title

(GB1489308)

Laser imagable dry planographic printing plate blank**Publication data including kind & date**

DE2512038

A1 1975-10-02 DE2512038

FR2264671

A1 1975-10-17 FR2264671

JPS50158405

A 1975-12-22 JP50158405

GB1489308

A 1977-10-19 GB1489308

FR2264671

B1 1978-08-18 FR2264671

CA1050805

A 1979-03-20 CA1050805

DE2512038

B2 1979-12-06 DE2512038

DE2512038

C3 1980-08-28 DE2512038

**Abstract**

(FR2264671)

1489308 Coated products SCOTT PAPER CO 10 March 1975 [18 March 1974] 9922/75 Heading B2E [Also in Division G2]
A planographic primary plate blank comprises an oleophilic substrate, e.g. aluminium coated with an oleophilic resin or paper or plastics material, an intermediate layer of a **laser**-responsive material containing particles, e.g. carbon which absorb **laser** energy, a binder which oxidises on exposure to **laser** beams e.g. nitrocellulose, and a crosslinkable resin e.g. a novolak, and a cross linking agent, and a layer of **ink**-repellant silicone rubber.

(From GB1489308 A)

Inventors

EAMES, ARNOLD CHARLES, WESTBROOK, ME. (V.ST.A.)

Latest standardized assignees - inventors removed

SCOTT PAPER

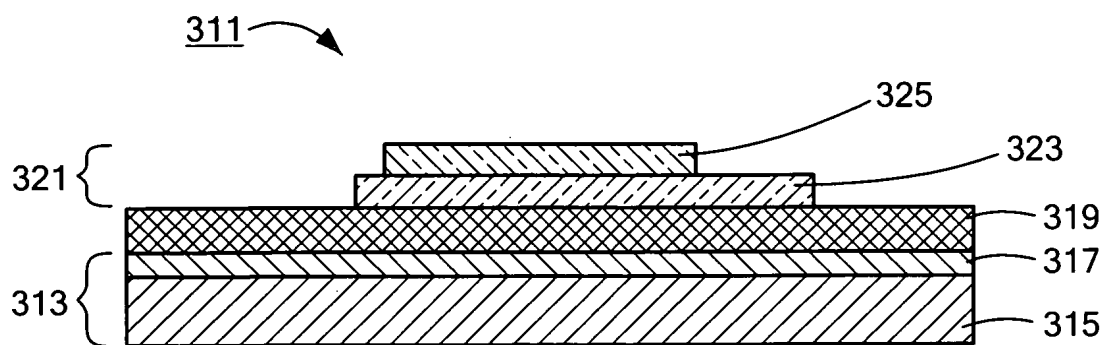
Family 188/200 - FAMPAT - ©Questel

Title

(EP2270277)

Heat-transfer label

Images



Publication data including kind & date

WO2004050262	A1	2004-06-17	WO200450262				
CA2508202	A1	2004-06-17	CA2508202				
AU2003297620	A1	2004-06-23	AU2003297620				
US20050100689	A1	2005-05-12	US20050100689				
MXPA05005811	A	2005-08-18	MX2005PA005811				
EP1578542	A1	2005-09-28	EP1578542				
CN1741862	A	2006-03-01	CN1741862				
JP2006507962	A	2006-03-09	JP2006507962				
EP1578542	A4	2006-11-22	EP1578542				
US20070009732	A1	2007-01-11	US20070009732				
JP2007276486	A	2007-10-25	JP2007276486				
US20070275319	A1	2007-11-29	US20070275319				
CN100389888	C	2008-05-28	CN100389888C				
JP2008120086	A	2008-05-29	JP2008120086				
JP2008207558	A	2008-09-11	JP2008207558				
HK1087376	A1	2008-09-12	HK1087376				
IN2566/DELNP/2005	A	2009-03-27	IN2005DN02566				
AU2003297620	B2	2009-06-18	AU2003297620				
IN241001	B	2010-06-18	IN-241001				
EP2267218	A1	2010-12-29	EP2267218				
EP2270277	A1	2011-01-05	EP2270277				
US7906189	B2	2011-03-15	US7906189				
US20110079651	A1	2011-04-07	US20110079651				
JP4700651	B2	2011-06-15	JP4700651				
JP2011126281	A	2011-06-30	JP2011126281				
EP1578542	B1	2013-10-09	EP1578542				
JP5409661	B2	2013-11-15	JP5409661				
ES2438529	T3	2014-01-17	ES2438529				
US8647740	B2	2014-02-11	US8647740				
US20140110042	A1	2014-04-24	US20140110042				
EP2267218	B1	2016-08-24	EP2267218				
US9499937	B2	2016-11-22	US9499937				
ES2599061	T3	2017-01-31	ES2599061				
EP2270277	B1	2018-05-23	EP2270277				
ES2676522	T3	2018-07-20	ES2676522				
TR201808896	T4	2018-07-23	TR201808896				

Abstract

(EP2270277)

A method for labeling fabrics, such as fabric garments, and a heat-transfer label (311) well-suited for use in said method. In one embodiment, the heat-transfer label (311) comprises (i) a support portion (313), the support portion (313) comprising a carrier (315) and a release layer (317); (ii) a wax layer (319), the wax layer overcoating the release layer (317); and (iii) a transfer portion (321), the transfer portion (321) comprising an adhesive layer (323) printed directly onto the wax layer (319) and an **ink** design layer (325) printed directly onto the adhesive layer (323). Each of the adhesive layer (323) and the **ink** design layer includes a non-cross-linked PVC resin. The **ink** design layer may be screen printed onto the adhesive layer (323) or may be printed onto the adhesive layer (323) using thermal transfer printing, **ink** jet printing or **laser** printing.

Inventors

TSAI KUOLIH

HSEIH DONG-TSAI

FERGUSON SCOTT WAYNE

SHU LI

EDWARDS N DAVID

MORGENTHAU ALAN

CHIAO YI-HUNG

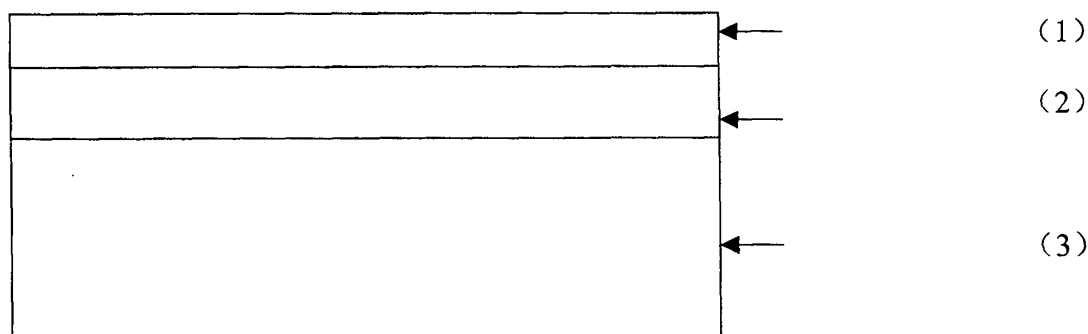
Latest standardized assignees - inventors removed

AVERY DENNISON

Family 189/200 - FAMPAT - ©Questel

Title

(CN100529967C)

Direct platemaking offset plate of **ink**-jetting computer**Images****Publication data including kind & date**[CN1818786](#)

A 2006-08-16 CN1818786

[CN100529967](#)

C 2009-08-19 CN100529967C

**Abstract**

(CN100529967C)

A method for preparing direct plate making offset plate of **ink**-jet computer includes coating a layer of **ink**-jet receiving layer on photosensitive layer of normal aluminum based positive drawing PS plate, forming said **ink**-jet receiving layer by water soluble polymer and surface active agent with their weight ratio of 3-60:1 and by adding multihole particle filler into two said materials.

Inventors

LI SANBAO

Latest standardized assignees - inventors removed

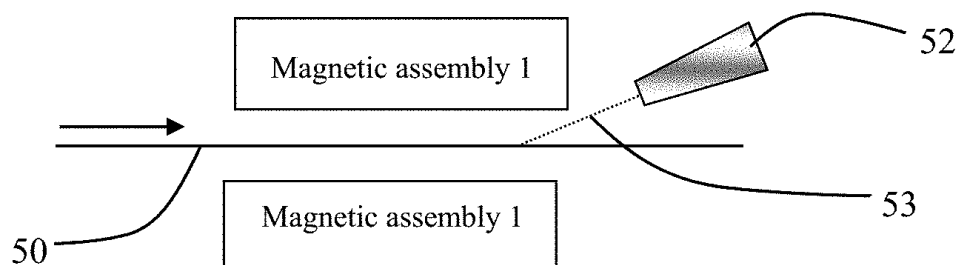
SHI SHENQUAN

Family 190/200 - FAMPAT - ©Questel

Title

(EP3170566)

Method and apparatus for forming an image on a substrate

Images**Publication data including kind & date**

EP2468423	A1	2012-06-27	EP2468423				
US20120162344	A1	2012-06-28	US20120162344				
CN102555434	A	2012-07-11	CN102555434				
US8633954	B2	2014-01-21	US8633954				
US20140102363	A1	2014-04-17	US20140102363				
EP2468423	B1	2016-05-11	EP2468423				
PT2468423	T	2016-07-11	PT2468423T				
DK2468423	T3	2016-08-22	DK2468423T				
CN102555434	B	2016-08-24	CN102555434B				
ES2584629	T3	2016-09-28	ES2584629				
PL2468423	T3	2016-11-30	PL2468423				
US20170001216	A1	2017-01-05	US20170001216				
HUE029986	T2	2017-04-28	HUE029986				
EP3170566	A1	2017-05-24	EP3170566				
US10226790	B2	2019-03-12	US10226790				

Abstract

(EP3170566)

A scanning **laser** having a wavelength compatible with a coating binder so as to cure it as the **laser** scans and irradiates the coating on a moving web. A system and method for curing flakes by providing a scanning **laser** which scans across a moving coated substrate in a magnetic field allows images to be formed as magnetically aligned flakes are cured into a fixed position. The images have regions of cured aligned flakes. The scanning **laser** cures the magnetically aligned flakes within it region it irradiates. Alternatively an array of lasers can be used wherein individual lasers can be switched on and off to fix irradiated coating as a moving web is moved at a high speed.

Inventors

TEITELBAUM NEIL

RAKSHA VLADIMIR P

HRUSKA CURTIS R

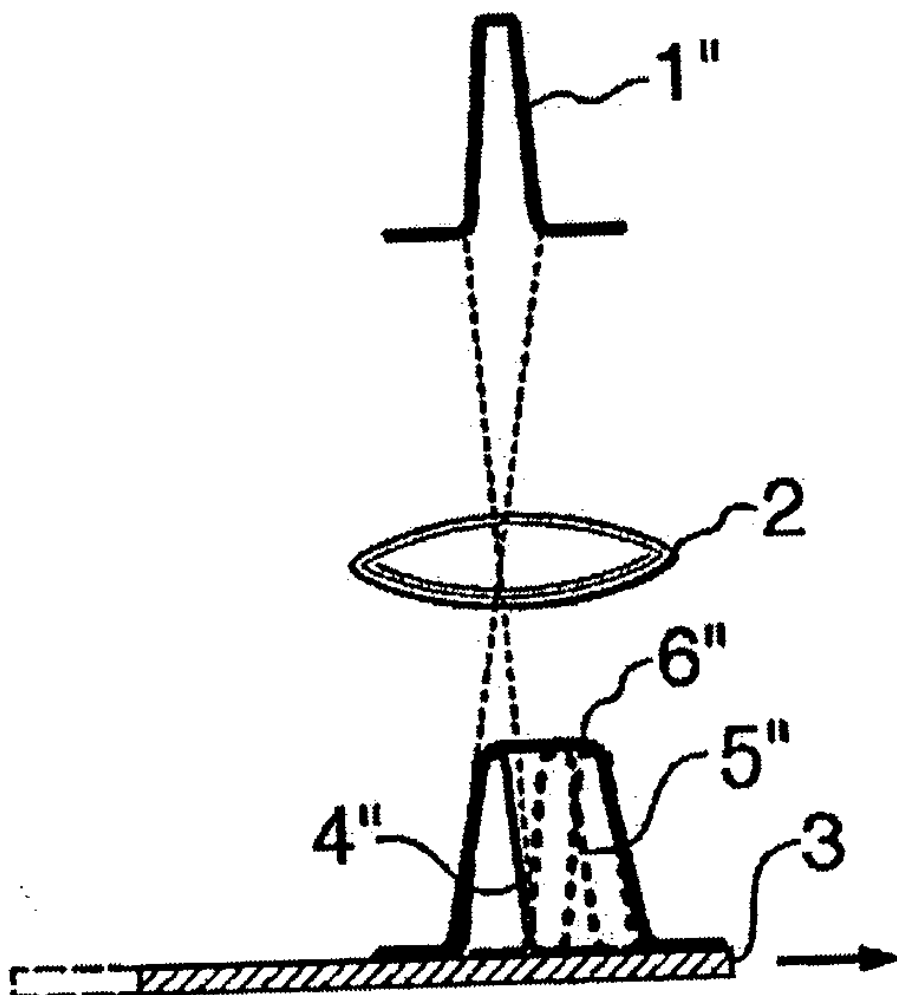
Latest standardized assignees - inventors removed

VIAVI SOLUTIONS

Family 191/200 - FAMPAT - ©Questel

Title

(US20030162131)

Laser recording method for imaging materials coated on-site**Images****Publication data including kind & date**

US20030162131	A1	2003-08-28	US20030162131
JP2003285415	A	2003-10-07	JP2003285415
DE10308311	A1	2003-10-09	DE10308311

**Abstract**

(US20030162131)

A method for the on-site creation of a lithographic printing surface by imagewise illuminating an imaging element based on thermally imageable material, which is itself applied and prepared on-site, with a shaped **laser** recording spot. The shaped **laser** recording spot has an energy profile with a very sharp transition between the writing and non-writing area in both dimensions, and is created by a shaping the **laser** energy into a line narrower than the desired spot size and scanning this line to create a square spot. The sharp transition is less sensitive to variation in exposure characteristics of the imaging element. The imaging element is prepared on-site by coating an imageable material onto a lithographic surface and performing all the steps of curing, imaging and development on the press and/or in an off-press platemaking device.

Subsequent cleaning of the printing surface, in order to reuse the lithographic base, may also be performed on the same equipment. The lithographic surface can be a printing plate lithographic base, the printing cylinder of a printing press, or a sleeve mounted around the printing cylinder of a printing press. This cylinder can be conventional or seamless. The lithographic printing surface may be used for printing long run lengths on lower quality paper and in the presence of pressroom chemicals.

Inventors

PALMER BRADLEY J F

WALKER LAUREN

Latest standardized assignees - inventors removed

KODAK GRAPHIC COMMUNICATIONS

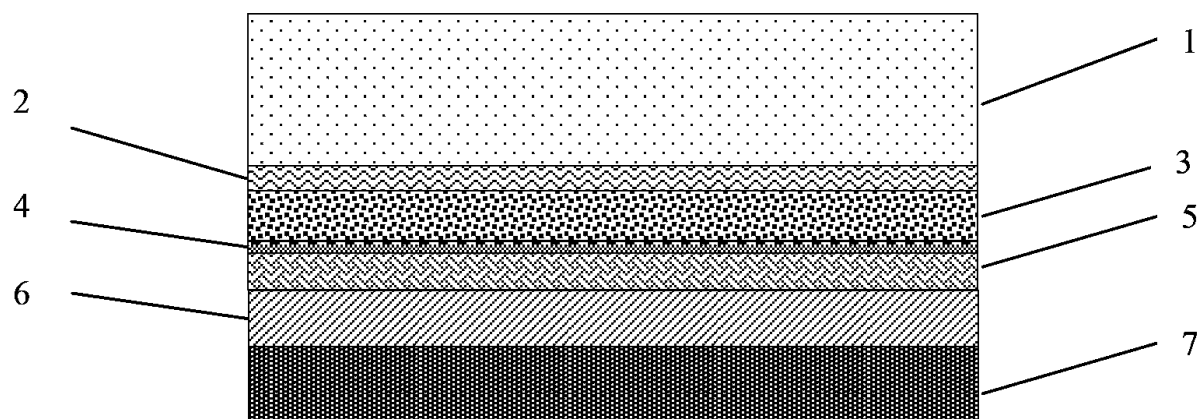
Family 192/200 - FAMPAT - ©Questel

Title

(CN103354059B)

Perspective **laser** holography anti-fake film with reflecting effect and preparing method thereof

Images



Publication data including kind & date

CN103354059	A	2013-10-16	CN103354059
CN103354059	B	2015-07-15	CN103354059B



Abstract

(CN103354059B)

The invention relates to the technical field of physic anti-fake parts of legal certificates, in particular to a perspective **laser** holography anti-fake film with a reflecting effect and a preparing method thereof. The anti-fake film comprises a base material layer, an information layer, a reflecting layer, a protection layer, a blocking layer and a bonding layer which are combined together in sequence form top to bottom, wherein a sequestration layer is arranged between the base material layer and the information layer, the base material layer is a PET polyester film, the information layer is an acrylic resin layer, and the base material layer and the information layer are integrated through the sequestration layer. The prepared method of the anti-fake film comprises the steps of (1) copying of a **laser** holography working version, (2) treating of the surface of the PET base material, (3) coating of the sequestration layer, (4) key opening treatment, (5) coating of the information layer, (6) transferring and copying of a holographic grating, (7) manufacturing of the reflecting layer, (8) protecting of the reflecting layer, (9) curing, (10) fine chemical etching, (11) coating of the blocking layer, (12) corona, and (13) coating of the bonding layer. According to the perspective **laser** holography anti-fake film with the reflecting effect and the preparing method thereof, a major breakthrough is made in respects of certificate binding force, hologram image diffraction efficiency and visual identification of certificate information.

Inventors

HUANG DOUXING

LIU QINGPEI

ZHU YUNFENG

GU WENJIA

Latest standardized assignees - inventors removed

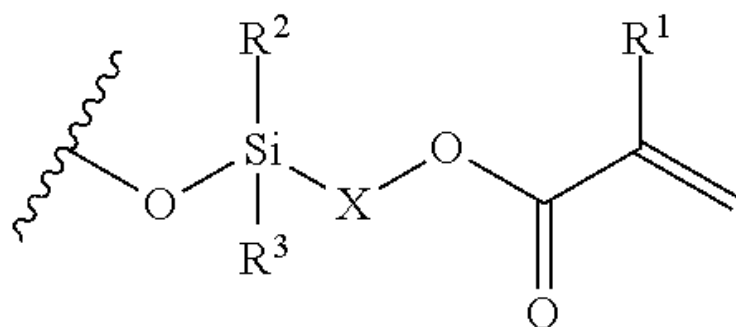
SHANGHAI HONGDUN ANTI COUNTERFEIT MATERIAL

Family 193/200 - FAMPAT - ©Questel

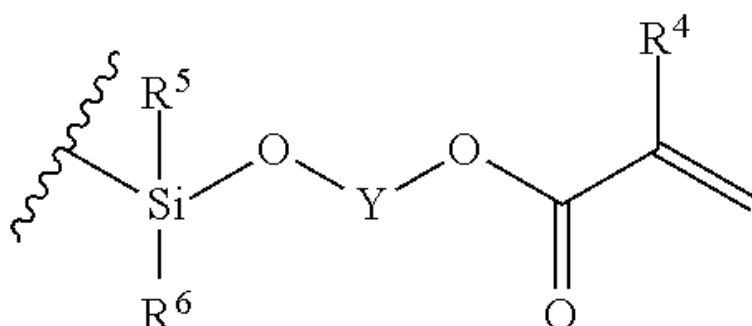
Title

(US20130133540)

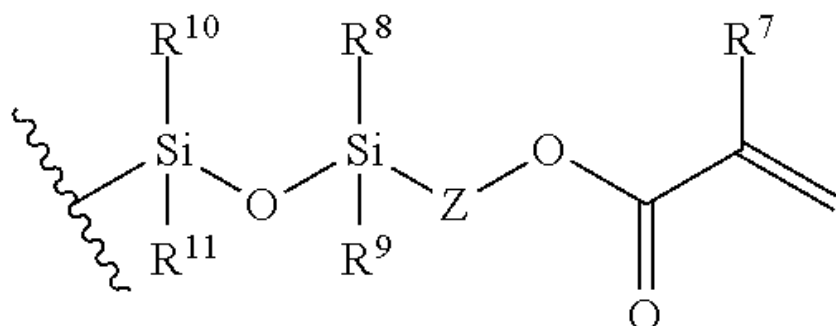
Resin composition for **laser** engraving, flexographic printing plate precursor for **laser** engraving and process for producing same, and flexographic printing plate and process for making same

Images

(I)



(II)



(III)

Publication data including kind & date

US20130133540	A1	2013-05-30	US20130133540
CN103135349	A	2013-06-05	CN103135349
JP2013111902	A	2013-06-10	JP2013111902
JP5466688	B2	2014-01-31	JP5466688

**Abstract**

(US20130133540)

A resin composition for **laser** engraving that comprises (Component A) a resin that has a group selected from the group consisting of groups represented by Formula (I) to Formula (III) and is a plastomer at 20° C.; (Component B) an ethylenically unsaturated compound; and (Component C) a polymerization initiator. In Formula (I) to Formula (III), X, Y, and Z independently denote an alkylene group having 1 to 30 carbons, R1, R4, and R7 independently denote a hydrogen atom or a methyl group, R2, R3, R5, R6, R8, R9, R10, and R11 independently denote an alkyl group, an alkoxy group, a halogen atom, or a hydroxy group, and a wavy line portion denotes a position of bonding to another structure.

Inventors

KANCHIKU SHIGEFUMI

Latest standardized assignees - inventors removed

FUJIFILM

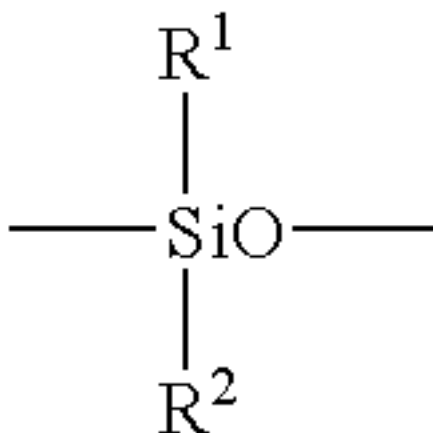
Family 194/200 - FAMPAT - ©Questel

Title

(US6613496)

Method for forming a dampening-waterless lithographic plate and method for forming an image using a dampening-waterless lithographic plate

Images



Publication data including kind & date

JP10100361	A	1998-04-21	JP10100361
US6613496	B1	2003-09-02	US6613496
JP3789569	B2	2006-04-07	JP3789569



Abstract

(US6613496)

A method for forming a dampening-waterless lithographic plate comprising an irradiation step of irradiating a dampening-waterless lithographic blank plate imagewise with a **laser** beam, the blank plate comprising a support, a photothermal conversion layer provided on the support for converting **laser** beam energy to heat, and an **ink**-repellent layer provided on the photothermal conversion layer a first rubbing step of rubbing the surface of the **ink**-repellent layer without use of a liquid so as to remove at least a portion of the **ink**-repellent layer in areas irradiated with a **laser** beam and a second rubbing step of rubbing the surface of the partially removed **ink**-repellent layer through use of a liquid.

Inventors

INNO TOSHIFUMI

YOKOYA HIROAKI

FUKAYA MASAHIKO

Latest standardized assignees - inventors removed

FUJIFILM

Family 195/200 - FAMPAT - ©Questel

Title

(JP11291654)

Laser sensitive lithographic printing plate original plate and its manufacture

Publication data including kind & date

[JP11291654](#)

A 1999-10-26 JP11291654



Abstract

(JP11291654)

PROBLEM TO BE SOLVED: To obtain a high **ink** repellency and excellent printing durability by sequentially providing an **ink** receiving layer, a heat sensitive layer and a hydrophilic swelling layer in this order on a base plate, forming the heat sensitive layer of a thin film of a carbon and/or metal of a specific film thickness, and forming the **ink** receiving layer of a specific compound. **SOLUTION:** To efficiently absorb a **laser** beam, a heat sensitive layer is formed of a thin film having a film thickness of 1,000 Angstrom or less made of a carbon and/or a metal. An **ink** receiving layer has rigid adhesive properties of the plate to the sensitive layer and carries a role of a thermal insulating layer. The receiving layer is made of a polymer compound obtained from a monomer having a hydroxyl group, carbonyl group, carboxyl group, isocyanate group, or epoxy group or a compound having a hydroxyl group, carbonyl group, carboxyl group, or epoxy group. Since the receiving layer contains a chemical bond having such an oxygen or a functional group having an oxygen, adhesive properties of the receiving layer to a hydrophilic swelling layer become rigid, and an **ink** repellency and printing durability are improved.

Inventors

TABATA KENICHI

Gotou Kazuki

TAKAHASHI HIROMITSU

Latest standardized assignees - inventors removed

TORAY INDUSTRIES

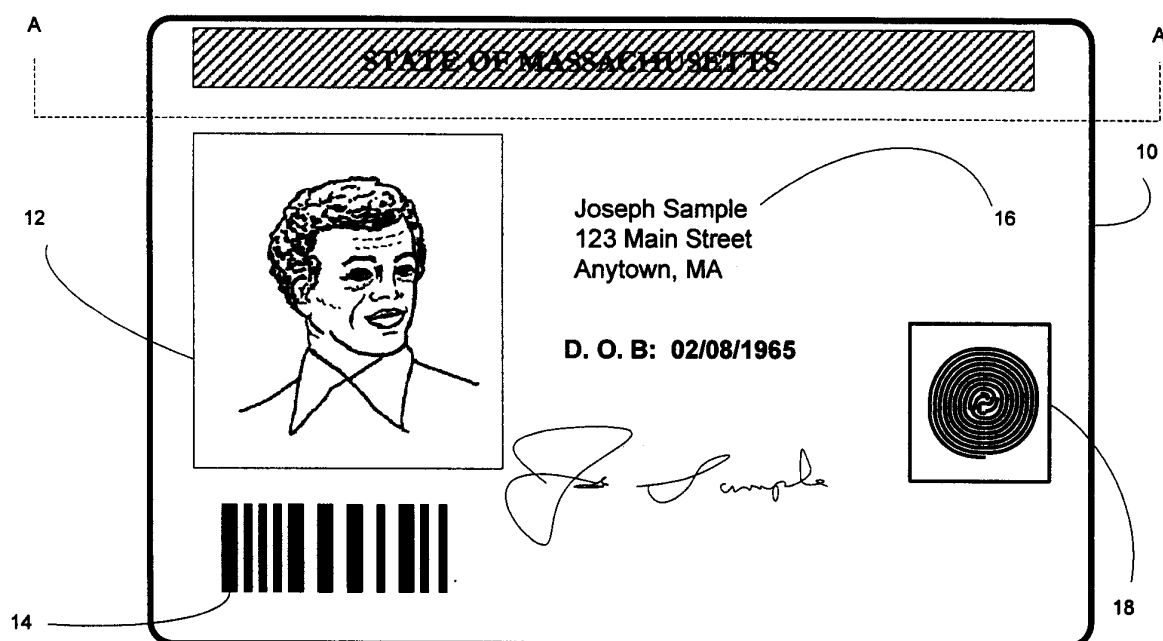
Family 196/200 - FAMPAT - ©Questel

Title

(WO200671732)

Id document structure with pattern coating providing variable security features

Images



Publication data including kind & date

[WO2006071732](#)

A2 2006-07-06 WO200671732

[WO2006071732](#)

A3 2007-03-29 WO200671732

[MX2007007949](#)

A 2007-09-11 MX2007007949



[US20080272587](#)

A1 2008-11-06

US20080272587

[US7866559](#)

B2 2011-01-11

US7866559

**Abstract**

(WO200671732)

A security feature for an identification document and method for making it provide layers of security, including, for example, tamper evidence, optically variable effects, and personalized information that links the security information to the document and its bearer. The feature is made by printing a first material representing first information on a core layer of the document. This first material at least partially covers the core layer. One example is Xerographic printing of information about the ID document applicant and the applicant's photo. The process then applies a second material representing second information at least partially overlapping the first material, and cures the second material. One example is **ink** jet printing of personal information with a UV curable **ink** in the form of a relief pattern on the core layer. Finally, the process applies a laminate layer over the core layer. The laminate layer covers the first and second materials. The first and second materials adhere differently to the laminate and core layers such that removal of the laminate layer from the core layer causes a separation of the first and second materials. The relief pattern is made to give the document a tactile feel as well as create optically variable effects.

Inventors

BI DAOSHEN

JONES ROBERT L

YEH TUNG-FENG

HAIGH SCOTT D

Latest standardized assignees - inventors removed

L 1 SECURE CREDENTIALING

Family 197/200 - FAMPAT - ©Questel

Title

(EP1315998)

On-press development of thermosensitive lithographic plates

Images

$$\left\{ \frac{1}{N} \sum_{j=1}^N \left[\frac{x_j - \bar{x}}{\sigma} \right]^4 \right\} - 3$$

Publication data including kind & date[WO200221215](#)

A1 2002-03-14

WO200221215

[AU8693401](#)

A 2002-03-22

AU200186934

[US6482571](#)

B1 2002-11-19

US6482571

[EP1315998](#)

A1 2003-06-04

EP1315998

[CN1452731](#)

A 2003-10-29

CN1452731

[JP2004512192](#)

A 2004-04-22

JP2004512192

[CN1452731](#)

B 2011-06-29

CN1452731B

**Abstract**

(EP1315998)

This application describes on-press **ink** and/or fountain solution development of lithographic plates having on a substrate a thermosensitive layer capable of hardening or solubilization upon exposure to infrared **laser** radiation. The plate can be imagewise exposed with an infrared **laser** and then on-press developed with **ink** and/or fountain solution by rotating the plate cylinder and engaging **ink** and/or fountain solution roller. The developed plate can then directly print images to the receiving sheets. The imagewise exposure can be performed off the press or with the plate being mounted on the plate cylinder of a lithographic press.

Inventors

TENG GARY GANGHUI

Latest standardized assignees - inventors removed

ROHM & HAAS ELECTRONIC MATERIALS

Family 198/200 - FAMPAT - ©Questel

Title

(CN102700281)

Environment friendly **laser** fine dealumination method**Publication data including kind & date**

CN102700281 A 2012-10-03 CN102700281

**Abstract**

(CN102700281)

The invention relates to the holographic anti-fake printing industry and particularly relates to an environment friendly **laser** fine dealumination method which is free of pollution, simple, rapid, and controllable in location and high in accuracy. A dot matrix picture file is obtained by scanning of a scanner, a dealumination pattern data are generated by aids of a computer, a dealumination pattern track is manufactured, technological parameters of dealumination equipment is determined, short pulse **laser** beams and inert gas shielding are used, the short pulse **laser** beams of a **laser** is used for scanning the basement membrane aluminum layer surface in a net point mode, the basement membrane aluminum layer surface occurs vaporization phenomena, an aluminum membrane is removed from a presumptive area, fine hollowed edge outlines with the line accuracy of 0.05mm are formed on the exposed basement membrane surface, line fineness is combined with printing pattern net points, gradually-changed effects are obvious, the appearance has remarkable effects, and the environment friendly **laser** fine dealumination method is free of discharge, safe and environment friendly and precise in manufacture and control, improves anti-fake complexity, improves anti-fake function and achieves the visual effects of bright image and pattern administrative levels and beautiful colors.

Inventors

WANG HONGZHI

Latest standardized assignees - inventors removed

HUBEI UNITED TIANCHENG ANTICOUNTERFEIT TECHNOLOGY

Family 199/200 - FAMPAT - ©Questel

Title

(JP2004262135)

Photosensitive resin composition for printing original plate capable of being subjected to **laser** engraving**Publication data including kind & date**

JP2004262135 A 2004-09-24 JP2004262135

JP4425551 B2 2009-12-18 JP4425551

**Abstract**

(JP4425551)

PROBLEM TO BE SOLVED: To provide a printing original plate capable of being subjected to **laser** engraving on which the occurrence of scum is suppressed when a relief image is produced by directly performing the **laser** engraving, from which the scum can be removed with ease, and which enables the making of a printing plate with an excellent engraved shape

and a low-tack printed surface.

SOLUTION: A photosensitive resin composition contains a resin (a) whose number-average molecular weight is in a range of $\geq 1,000$ and $\leq 200,000$, an organic compound (b) whose number-average molecular weight is less than 1,000 and whose molecule includes a polymerizable unsaturated group, an inorganic porous body (c), and coloring matter (d). When a ratio of light passing through 1 cm of a solution, wherein the coloring matter (d) is dissolved in a concentration of 1 mg/l, is defined as a light transmittance of the coloring matter, the light transmittance of the coloring matter is 5% or more in a wavelength range of 300-600 nm, and 80% or less in a wavelength range of 700-2,000 nm.

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Inventors

Hiroshi Yamada

Leader Reina

Latest standardized assignees - inventors removed

ASAHI KASEI E-MATERIALS

Family 200/200 - FAMPAT - ©Questel

Title

(US7674571)

Laser sensitive lithographic printing plate comprising specific acrylate monomer and initiator

Publication data including kind & date

US20070172766	A1	2007-07-26	US20070172766
US7674571	B2	2010-03-09	US7674571



Abstract

(US7674571)

High speed violet or ultraviolet **laser** sensitive lithographic printing plate comprising on a substrate a specific photosensitive composition is described. The photosensitive layer comprises a multifunctional (meth)acrylate monomer, a hexaarylbiimidazole compound, and a sensitizing dye. Combination of both multifunctional urethane (meth)acrylate monomer and multifunctional non-urethane (meth)acrylate monomer can be advantageously used. The plate is imagewise exposed with a violet or ultraviolet **laser** at a dosage of less than 1000 $\mu\text{J}/\text{cm}^2$, and then developed either off press or on press.

Inventors

TENG GARY GANGHUI