

16 Documents

Publication numbers	Title	Current assignees
CA2857335 A1	A personalized security article and methods of authenticating a security article and verifying a bearer of a security article	GEMALTO
WO2009121605 A2	Identification and authentication using liquid crystal material markings	SICPA
DE102005062132 A1	Security element	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
WO200618172 A1	Security element and method of manufacturing thereof	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
CA2898797 A1	Security device	SECTAGO
WO201015383 A1	Security arrangement	GIESECKE & DEVRIENT
US20040076310 A1	Authentication of documents and articles by moire patterns	ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE (EPFL)
WO200629744 A1	Security document	OVD KINEGRAM
WO200900530 A2	Security element having a magnified, three-dimensional moiré image	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
DE102004049118 A1	Safety element provided with an optically-variable layer and method for the production thereof	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
WO200900529 A2	Representation system	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
WO201046125 A2	Security element having pressure-sensitive appearance	GIESECKE & DEVRIENT CURRENCY TECHNOLOGY
US20070178295 A1	Foam security substrate	3M
WO2005105475 A1	Sheeting and methods for the production thereof	GIESECKE & DEVRIENT
DE102008046511 A1	Representation system	GIESECKE & DEVRIENT
US20100314861 A1	Authentication with built-in encryption by using moire parallax effects between fixed correlated s-random layers	ECOLE POLYTECHNIQUE FEDERATE DE LAUSANNE IC LSP

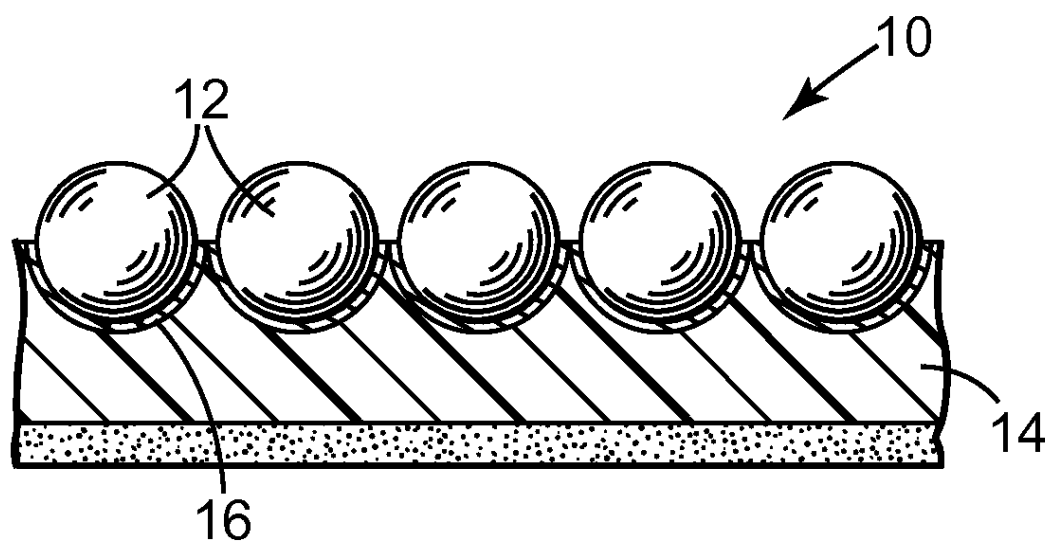
Family 1/16 - FAMPAT - ©Questel

Title

(EP2791716)

A personalized security article and methods of authenticating a security article and verifying a bearer of a security article

Images



Publication data including kind & date

CA2857335	A1	2013-06-20	CA2857335				
WO2013090586	A1	2013-06-20	WO2013090586				
US20130154250	A1	2013-06-20	US20130154250				
TW201345744	A	2013-11-16	TW201345744				
AU2012352206	A1	2014-06-12	AU2012352206				
CO6990695	A2	2014-07-10	CO6990695				
BR112014014110	A1	2014-08-19	BR112014014110				
CN103998955	A	2014-08-20	CN103998955				
EP2791716	A1	2014-10-22	EP2791716				
AU2012352206	B2	2015-04-09	AU2012352206				
BR112014014110	A2	2017-06-13	BR112014014110				
BR112014014110	A8	2017-06-13	BR112014014110				
BR112014014110	A8	2017-06-27	BR112014014110				
CN103998955	B	2018-06-01	CN103998955B				

Abstract

(EP2791716)

Security articles and methods of personalizing security articles. Specifically, this disclosure relates to security articles that contain a security feature that is a composite image, where the composite image includes laser-personalized security information.

Inventors

DUNN DOUGLAS S

POTTS TRAVIS L

CHEN-HO KUI

HAAS CHRISTOPHER K

Latest standardized assignees - inventors removed

GEMALTO

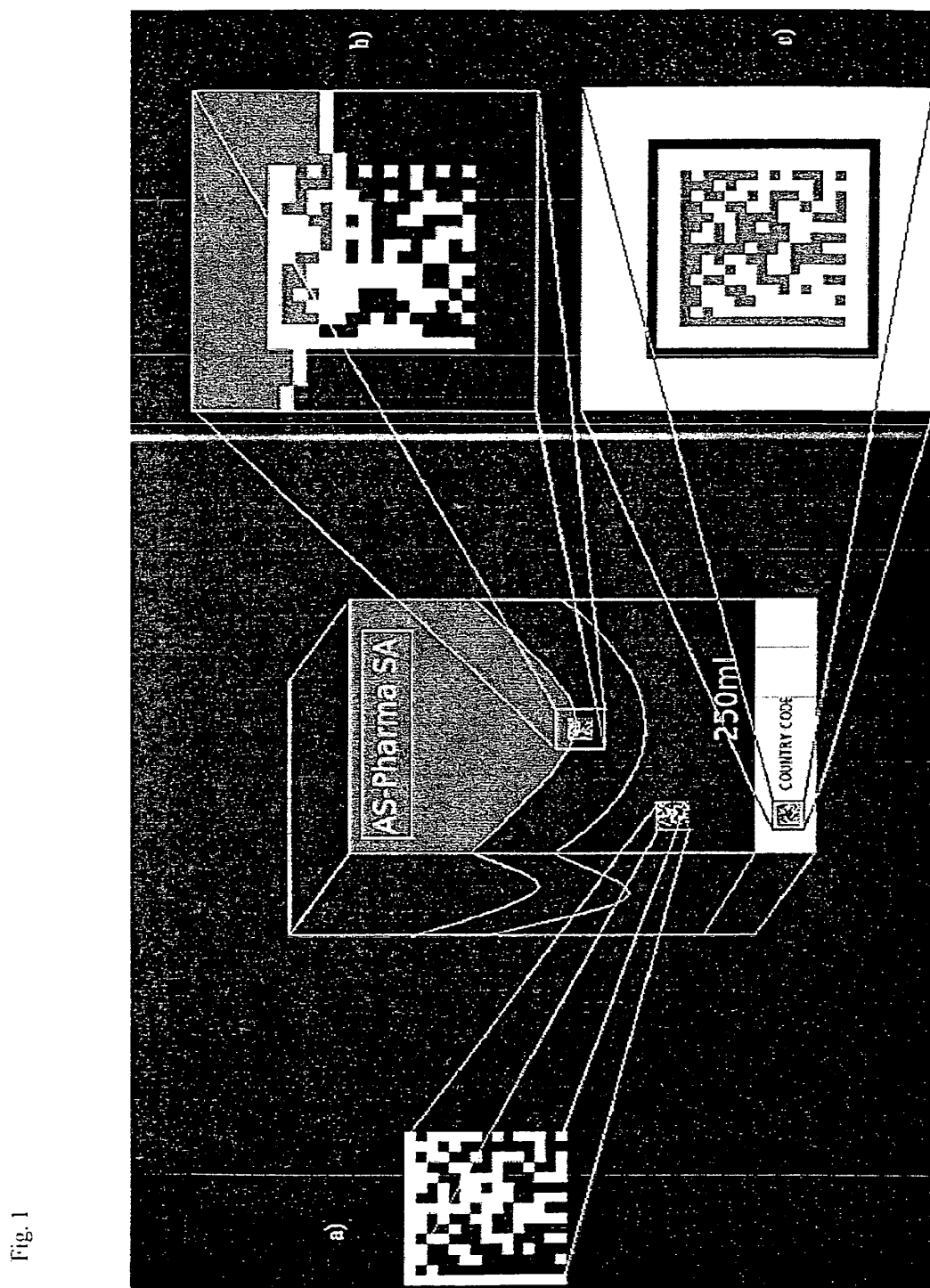
Family 2/16 - FAMPAT - ©Questel

Title

(EP2285587)

Identification and authentication using liquid crystal material markings

Images



Publication data including kind & date

WO2009121605	A2	2009-10-08	WO2009121605
CA2719793	A1	2009-10-08	CA2719793
AU2009231240	A1	2009-10-08	AU2009231240
TW200946365	A	2009-11-16	TW200946365
WO2009121605	A3	2009-12-30	WO2009121605



PE00042010	A1	2010-02-11	PE201000004				
WO2009121605	A4	2010-03-11	WO2009121605				
AR071463	A1	2010-06-23	AR--71463				
AP201005432	A0	2010-10-31	AP201005432				
AU2009231240	A2	2010-11-04	AU2009231240				
ECSP10010519	A	2010-11-30	EC201010519				
IL208439	A	2010-12-30	IL-208439				
KR20110005700	A	2011-01-18	KR20110005700				
EP2285587	A2	2011-02-23	EP2285587				
MX2010010820	A	2011-03-21	MX2010010820				
VN25570	A	2011-03-25	VN--25570				
MA32259	B1	2011-04-01	MA--32259				
CN102046391	A	2011-05-04	CN102046391				
US20110101088	A1	2011-05-05	US20110101088				
CO6290729	A2	2011-06-20	CO6290729				
ZA201006974	B	2011-06-29	ZA201006974				
EA201071132	A1	2011-06-30	EA201071132				
BRPI0909464	A2	2011-08-30	BR200909464				
JP2011524556	A	2011-09-01	JP2011524556				
IN2068/MUMNP/2010	A	2011-12-02	IN2010MN02068				
US20120273722	A1	2012-11-01	US20120273722				
UA100152	C2	2012-11-26	UA-100152				
EG26083	A	2013-02-07	EG--26083				
NZ588366	A	2013-03-28	NZ-588366				
CN102046391	B	2013-05-15	CN102046391B				
TWI422498	B	2014-01-11	TWI422498				
HK1156579	A1	2014-02-21	HK1156579				
JP2014041635	A	2014-03-06	JP2014041635				
AU2009231240	B2	2014-03-20	AU2009231240				
SA3414	B1	2014-05-21	SA---3414				
US8734679	B2	2014-05-27	US8734679				
US8740088	B2	2014-06-03	US8740088				
CA2719793	C	2014-10-07	CA2719793				
AP2996	A	2014-10-31	AP---2996				
JP5617087	B2	2014-11-05	JP5617087				
JP5633029	B2	2014-12-03	JP5633029				
IL208439	B	2015-10-29	IL-208439				
VN0014683	B	2015-11-25	VN--14683B				
EA022590	B1	2016-01-29	EA--22590				
EP2285587	B1	2016-11-23	EP2285587				

Abstract

(EP2285587)

The present invention relates to a marking of polymeric liquid crystal material having determined optical characteristics allowing its authentication and reading by a machine and its authentication by the human eye. The marking is applied onto an item, good or article by a variable information printing process. The marking is in the form of indicia representing a unique code which allows for an easy authentication by the human eye and a secure tracking and tracing of the marked item, good or article throughout its life cycle.

Inventors

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 GREMAUD FRÉDÉRIC
 COMMEUREUC AURÉLIEN
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 TILLER THOMAS
 ROZUMEK OLIVIER

Latest standardized assignees - inventors removed

SICPA

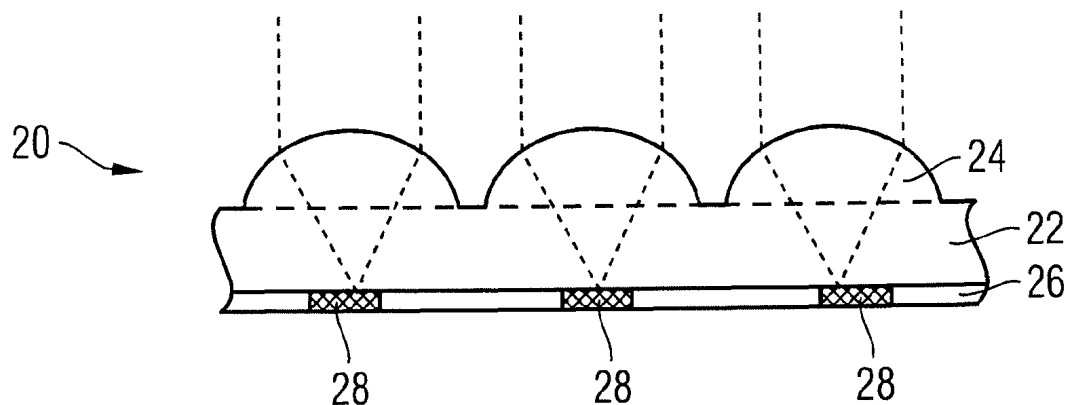
Family 3/16 - FAMPAT - ©Questel

Title

(EP1965990)

Security element

Images



Publication data including kind & date

DE102005062132	A1	2007-07-05	DE102005062132
WO2007076952	A2	2007-07-12	WO200776952
CA2632018	A1	2007-07-12	CA2632018
WO2007076952	A3	2007-11-01	WO200776952
EP1965990	A2	2008-09-10	EP1965990
US20090008923	A1	2009-01-08	US20090008923
CN101346244	A	2009-01-14	CN101346244
IN2327/KOLNP/2008	A	2009-01-16	IN2008KN02327
RU2008129384	A	2010-01-27	RU2008129384
CN101346244	B	2011-06-22	CN101346244B
RU2426655	C2	2011-08-20	RU2426655
US8149511	B2	2012-04-03	US8149511
EP1965990	B1	2016-07-20	EP1965990
IN300717	B	2018-09-04	IN-300717



Abstract

(EP1965990)

The invention relates to a security element (20) for security papers, value documents and similar, comprising a micro-optical Moire magnification arrangement with a motif image made up of a periodic or at least locally periodic arrangement

of a number of micro motif elements (28) applied to a planar or curved surface and a periodic or at least locally periodic arrangement of a number of micro focusing elements (24) arranged on a planar or curved surface for the Moire magnifying observation of the micro motif elements (28) of the motif image, wherein the arrangement of the micro motif elements (28) and/or the arrangement of the micro focusing elements (24) in the planar case have no axis of symmetry in the plane of the arrangement in the periodic or at least locally periodic regions.

Inventors

KAULE WITTICH

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Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

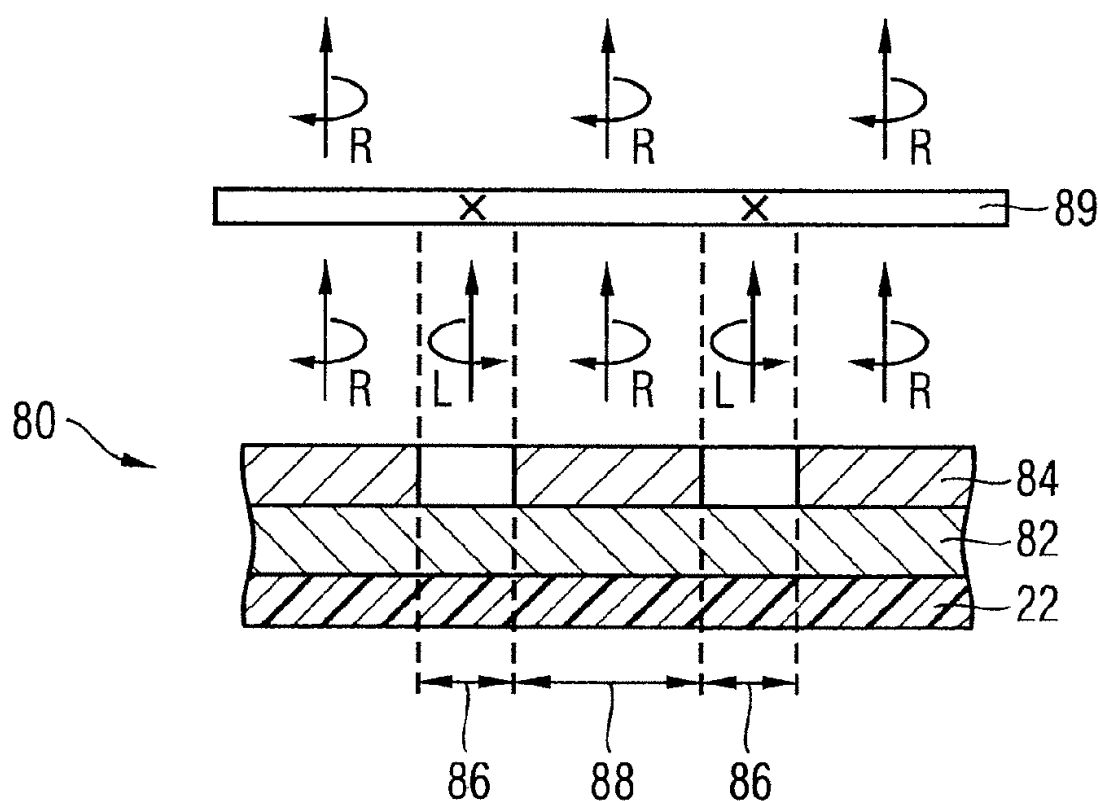
Family 4/16 - FAMPAT - ©Questel

Title

(EP2269837)

Security element and method of manufacturing thereof

Images



Publication data including kind & date

WO2006018172	A1	2006-02-23	WO200618172
WO2006018171	A2	2006-02-23	WO200618171
CA2577208	A1	2006-02-23	CA2577208
CA2575498	A1	2006-02-23	CA2575498
AU2005274464	A1	2006-02-23	AU2005274464
DE102004039355	A1	2006-02-23	DE102004039355
WO2006018171	A3	2006-07-13	WO200618171
EP1778501	A2	2007-05-02	EP1778501
MX2007001545	A	2007-06-25	MX2007001545



IN0249/KOLNP/2007	A	2007-06-29	IN2007KN00249				
CN1993236	A	2007-07-04	CN1993236				
IN0362/KOLNP/2007	A	2007-07-06	IN2007KN00362				
CN101001758	A	2007-07-18	CN101001758				
EP1836057	A1	2007-09-26	EP1836057				
US20070246933	A1	2007-10-25	US20070246933				
MX2007001546	A	2008-03-04	MX2007001546				
US20080054621	A1	2008-03-06	US20080054621				
BRPI0515003	A	2008-07-01	BR200515003				
BRPI0515003	A1	2008-07-01	BRPI0515003				
BRPI0515000	A	2008-07-01	BR200515000				
BRPI0515000	A1	2008-07-01	BRPI0515000				
ZA200702028	B	2008-07-30	ZA200702028				
RU2007108660	A	2008-09-20	RU2007108660				
RU2007108437	A	2008-09-20	RU2007108437				
ZA200702029	B	2008-09-25	ZA200702029				
CN100469590	C	2009-03-18	CN100469590C				
CN100560380	C	2009-11-18	CN100560380C				
RU2381907	C2	2010-02-20	RU2381907				
RU2384416	C2	2010-03-20	RU2384416				
EP1836057	B1	2010-10-13	EP1836057				
AT484398	T	2010-10-15	ATE484398				
DE502005010400	D1	2010-11-25	DE502005010400				
EP2269837	A1	2011-01-05	EP2269837				
SI1836057	T1	2011-01-31	SI1836057T				
AU2005274464	B2	2011-02-10	AU2005274464				
ES2352848	T3	2011-02-23	ES2352848				
BRPI0515000	A2	2012-06-12	BR200515000				
AU2005274464	C1	2013-07-25	AU2005274464				
EP1778501	B1	2013-07-31	EP1778501				
ES2428360	T3	2013-11-07	ES2428360				
US8622435	B2	2014-01-07	US8622435				
IN261417	B	2014-06-27	IN-261417				
IN261367	B	2014-06-27	IN-261367				
CA2577208	C	2015-10-13	CA2577208				
AU2005274464	C1	2016-01-07	AU2005274464				
EP2269837	B1	2016-10-12	EP2269837				
EP2269837	B8	2017-04-19	EP2269837				
BRPI0515003	A2	2017-08-15	BRPI0515003				
EP1778501	B2	2018-09-26	EP1778501				

Abstract

(EP2269837)

The security element production process involves applying an effect layer (34) to a plastic support film (32), and an auxiliary transfer layer (36) to the entire surface of both. The adhesion of the auxiliary transfer layer to the support film is less than that to the effect layer. An adhesive layer (38) is then applied to the target substrate (35) to transfer the formed layer compound.

Inventors

KRETSCHMAR FRIEDRICH DR

BURCHARD THEODOR DR
 HEIM MANFRED DR
 PILLO THORSTEN DR
 HOFFMÜLLER WINFRIED DR
 RUCK JÜRGEN

Latest standardized assignees - inventors removed
 GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

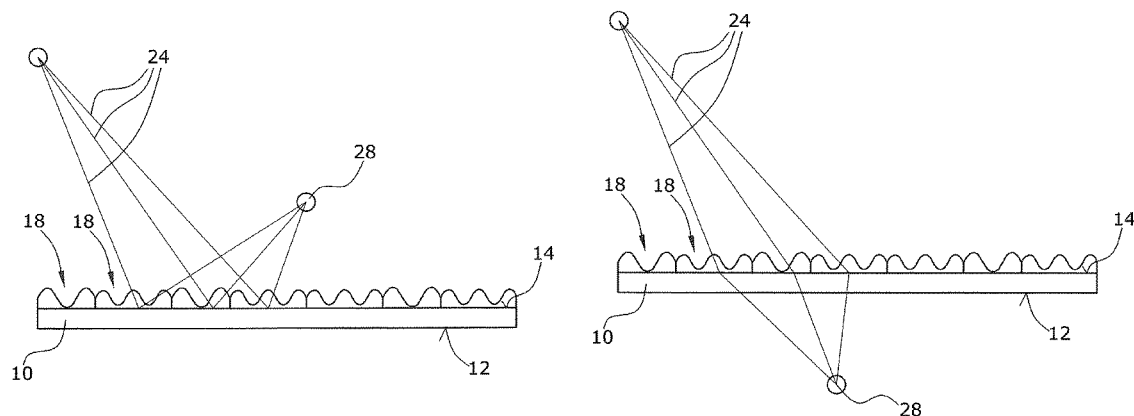
Family 5/16 - FAMPAT - ©Questel

Title

(EP2885135)

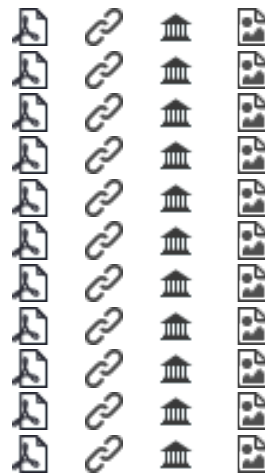
Security device

Images



Publication data including kind & date

CA2898797	A1	2014-08-21	CA2898797
WO2014124781	A1	2014-08-21	WO2014124781
EP2885135	A1	2015-06-24	EP2885135
AU2014218193	A1	2015-08-06	AU2014218193
US20150352881	A1	2015-12-10	US20150352881
CN105339179	A	2016-02-17	CN105339179
JP2016513028	A	2016-05-12	JP2016513028
US9731538	B2	2017-08-15	US9731538
EP2885135	B1	2018-01-10	EP2885135
AU2014218193	B2	2018-02-08	AU2014218193
CN105339179	B	2018-06-22	CN105339179B



Abstract

(EP2885135)

The invention relates to a security device for improving the security against the falsification of articles, having a support element (10). A plurality of diffractive surface elements (18) are arranged on the surface of the support element (10). Each surface element (18) forms multiple surface element groups, the surface structures of which match one another so as to make precisely one point (28) of the corresponding symbol to be displayed visible to an observer under specified viewing conditions. By changing the angle of incidence of the light and/or the angle of observation of the observer, a continuous movement of the at least one symbol is perceived by the observer.

Inventors

SEILS FRANK
 KOCH MARKUS
 ROGIN PETER

Latest standardized assignees - inventors removed

SECTAGO

Family 6/16 - FAMPAT - ©Questel

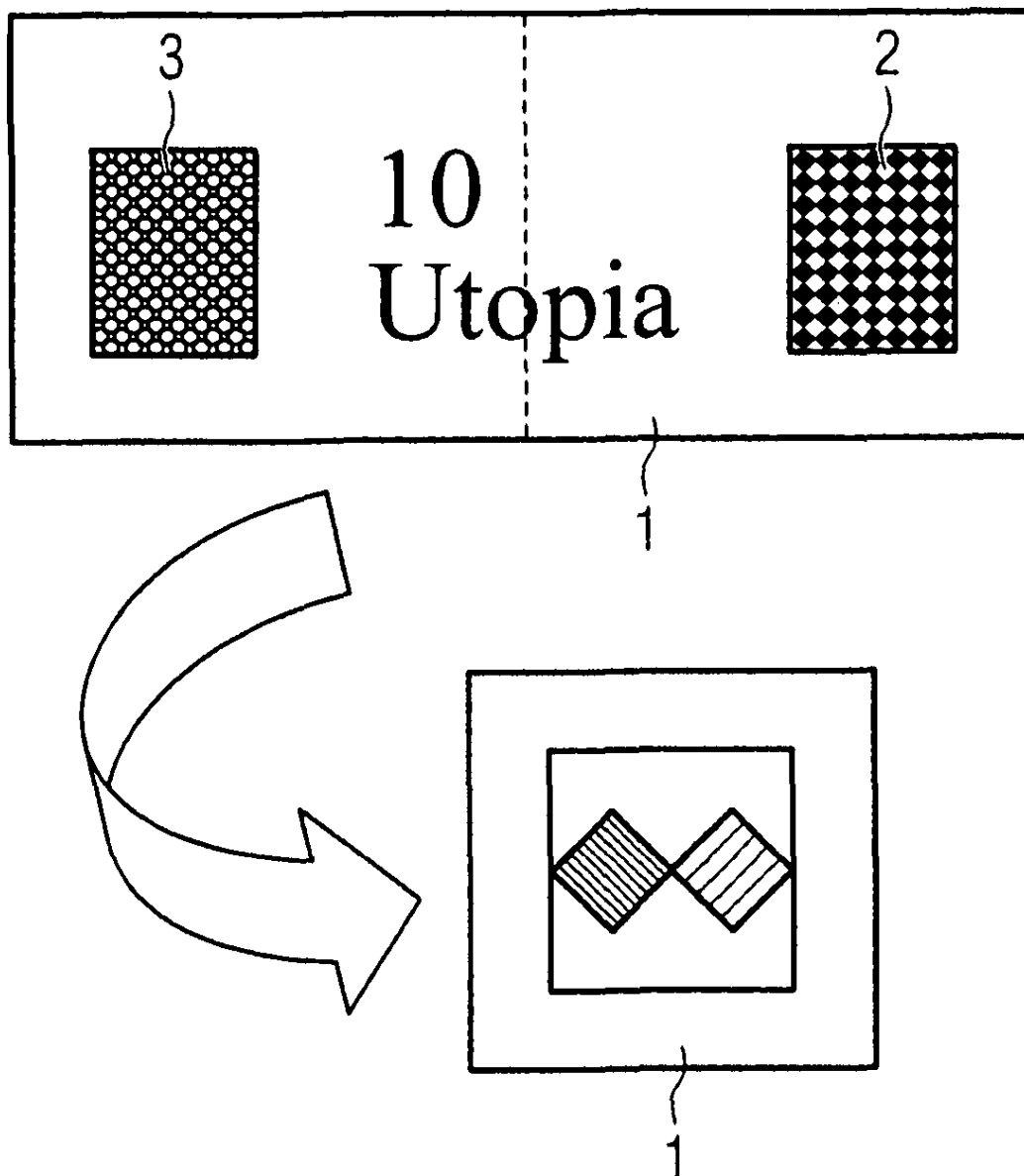
Title

(EP2338150)

Security arrangement

Images

FIG 1



Publication data including kind & date

WO2010015383	A1	2010-02-11	WO201015383
WO2010015382	A2	2010-02-11	WO201015382
CA2732989	A1	2010-02-11	CA2732989
CA2732976	A1	2010-02-11	CA2732976
AU2009278275	A1	2010-02-11	AU2009278275
AU2009278274	A1	2010-02-11	AU2009278274



DE102008036482	A1	2010-02-11	DE102008036482				
WO2010015382	A3	2010-05-27	WO201015382				
MX2011001353	A	2011-04-26	MX2011001353				
EP2321673	A1	2011-05-18	EP2321673				
EP2338150	A2	2011-06-29	EP2338150				
CN102112896	A	2011-06-29	CN102112896				
ZA201009116	B	2012-05-01	ZA201009116				
AU2009278275	B2	2012-07-12	AU2009278275				
RU2011108217	A	2013-06-10	RU2011108217				
AU2009278274	B2	2013-08-01	AU2009278274				
RU2011108225	A	2013-11-10	RU2011108225				
AU2009278275	C1	2014-06-05	AU2009278275				
RU2547700	C2	2015-04-10	RU2547700				
RU2553417	C2	2015-06-10	RU2553417				
CN106873056	A	2017-06-20	CN106873056				

Abstract

(EP2338150)

A security arrangement comprises a security element (2), having in at least one first partial region a first micromotif grid, and a verification means (3) that is arranged in the direction of view of an observer in front of the security element for verifying the security element. A first motif that cannot be detected on the security element (2) is made detectable for an observer, wherein the first motif grid is designed such that the first motif is a dynamic motif, the size of which can be varied by rotating the verification means (3) between a first and a second angular alignment relative to the security element (2).

Inventors

KECK ANGELIKA

HEINE ASTRID

MENGEL CHRISTOPH

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

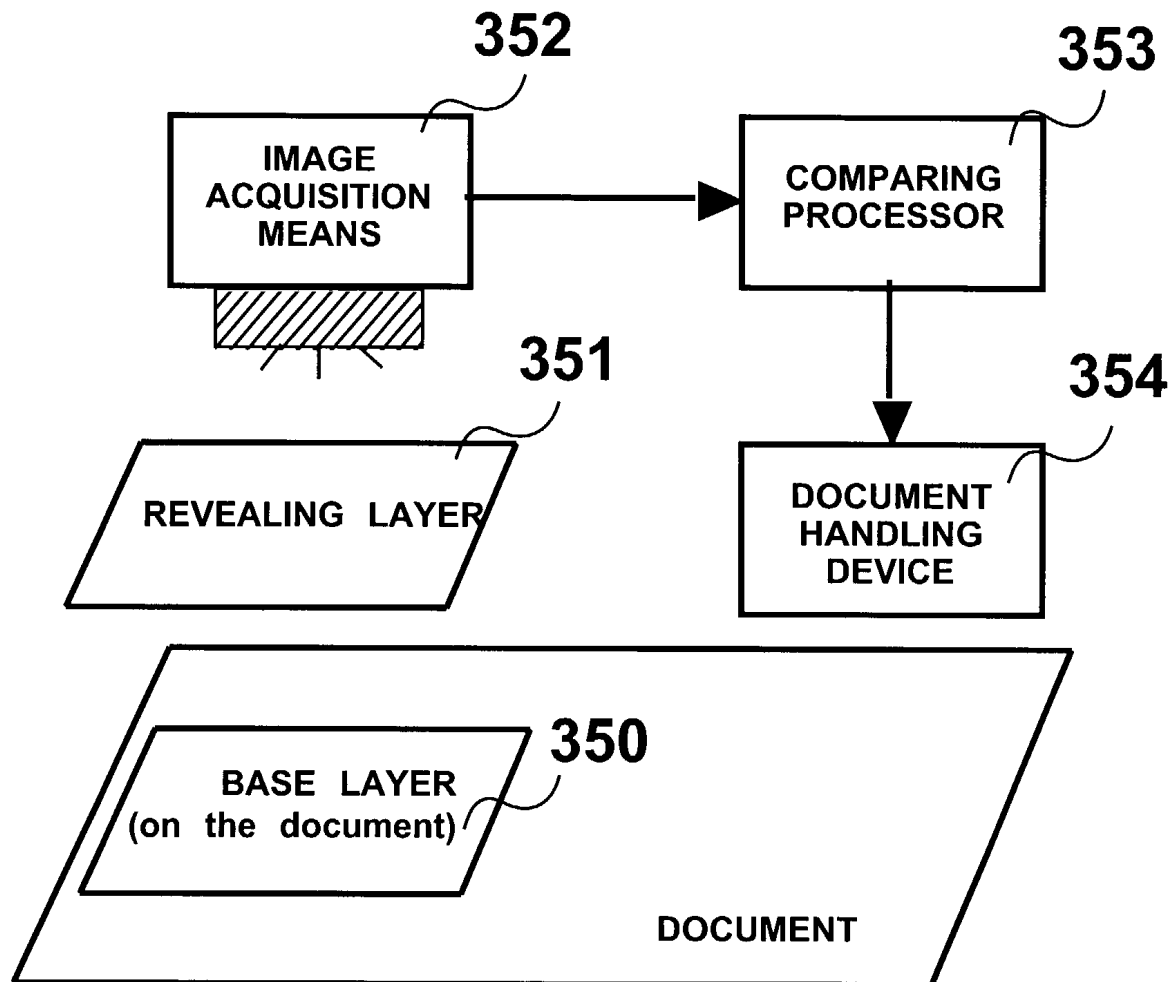
Family 7/16 - FAMPAT - ©Questel

Title

(EP1554700)

Authentication of documents and articles by moire patterns

Images



Publication data including kind & date

US20040076310	A1	2004-04-22	US20040076310
WO2004036507	A2	2004-04-29	WO200436507
CA2534797	A1	2004-04-29	CA2534797
AU2003260925	A1	2004-05-04	AU2003260925
WO2004036507	A3	2004-11-11	WO200436507
KR20050051707	A	2005-06-01	KR20050051707
MXPA05003834	A	2005-06-22	MX2005PA003834
EP1554700	A2	2005-07-20	EP1554700
BR0315389	A	2005-08-23	BR200315389
BRPI0315389	A1	2005-08-23	BRPI0315389
RU2005114618	A	2005-10-10	RU2005114618
CN1689050	A	2005-10-26	CN1689050
PL376174	A1	2005-12-27	PL2003376174
ZA200502978	B	2006-02-22	ZA200502978
NZ539378	A	2006-04-28	NZ-539378
JP2006516337	A	2006-06-29	JP2006516337
EP1554700	B1	2007-01-03	EP1554700
AT350734	T	2007-01-15	ATE350734
DE60310977	D1	2007-02-15	DE60310977
US7194105	B2	2007-03-20	US7194105
ES2280842	T3	2007-09-16	ES2280842



DE60310977	T2	2007-10-25	DE60310977				
RU2328036	C2	2008-06-27	RU2328036				
AU2003260925	B2	2009-01-08	AU2003260925				
CN100520804	C	2009-07-29	CN100520804C				
JP4427796	B2	2010-03-10	JP4427796				
HK1082833	A1	2010-05-07	HK1082833				
CA2534797	C	2011-05-31	CA2534797				
KR101119653	B1	2012-03-16	KR101119653				
BRPI0315389	A2	2014-07-29	BR200315389				
PL219620	B1	2015-06-30	PL-219620				
BRPI0315389	B1	2016-05-10	BR200315389				

Abstract

(EP1554700)

The present invention relies on the moiré patterns generated when superposing a base layer made of base band patterns and a revealing line grating (revealing layer). The produced moiré patterns comprise an enlargement and a transformation of the individual patterns located within the base bands. Base bands and revealing line gratings may be rectilinear or curvilinear. When translating or rotating the revealing line grating on top of the base layer, the produced moiré patterns evolve smoothly, i.e. they may be smoothly shifted, sheared, and possibly be subject to further transformations. Base band patterns may incorporate any combination of shapes, intensities and colors, such as letter, digits, text, symbols, ornaments, logos, country emblems, etc... They therefore offer great possibilities for creating security documents and valuable articles taking advantage of the higher imaging capabilities of original imaging and printing systems, compared with the possibilities of the reproduction systems available to potential counterfeiters. Since the revealing line grating reflects a relatively high percentage of the incident light, the moiré patterns are easily apparent in reflective mode and under normal illumination conditions. They may be used for the authentication of any kinds of documents (banknotes, identity documents, checks, diploma, travel documents, tickets) and valuable articles (optical disks, CDs, DVDs, CD-ROMs, packages for medical drugs, bottles, articles with affixed labels).

Inventors

HERSCH ROGER D

CHOSSON SYLVAIN

Latest standardized assignees - inventors removed

ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE (EPFL)

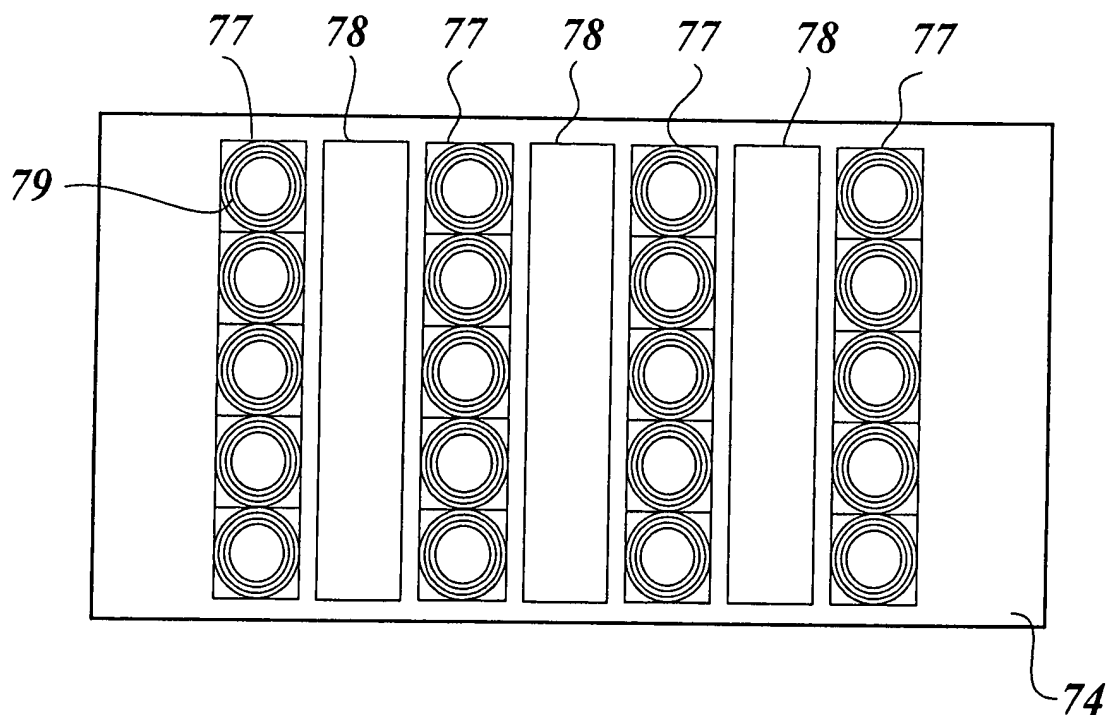
Family 8/16 - FAMPAT - ©Questel

Title

(EP1800271)

Security document

Images



Publication data including kind & date

WO2006029744	A1	2006-03-23	WO200629744
CA2581142	A1	2006-03-23	CA2581142
AU2005284440	A1	2006-03-23	AU2005284440
DE102004044458	A1	2006-03-30	DE102004044458
TW200624294	A	2006-07-16	TW200624294
KR20070058569	A	2007-06-08	KR20070058569
EP1800271	A1	2007-06-27	EP1800271
CN101019155	A	2007-08-15	CN101019155
US20080067801	A1	2008-03-20	US20080067801
JP2008513816	A	2008-05-01	JP2008513816
BRPI0515056	A	2008-07-01	BR200515056
BRPI0515056	A1	2008-07-01	BRPI0515056
RU2007114065	A	2008-10-27	RU2007114065
EP1800271	B1	2008-11-05	EP1800271
AT413673	T	2008-11-15	ATE413673
DE502005005912	D1	2008-12-18	DE502005005912
RU2376641	C2	2009-12-20	RU2376641
DE102004044458	B4	2010-01-07	DE102004044458
US7762591	B2	2010-07-27	US7762591
AU2005284440	B2	2011-01-06	AU2005284440
CN101019155	B	2011-06-22	CN101019155B
TWI361147	B	2012-04-01	TWI361147
KR101153508	B1	2012-06-12	KR101153508
JP5014995	B2	2012-08-29	JP5014995
CA2581142	C	2013-02-19	CA2581142
BRPI0515056	A2	2017-04-18	BRPI0515056
BRPI0515056	B1	2017-12-12	BRPI0515056
BRPI0515056	B1	2017-12-12	BR200515056



Abstract

(EP1800271)

The invention relates to a security document (7) with a first transparent area (72), inside of which a first transparent optical element (74) is placed, and with a second area (71), inside of which a second opaque optical element (73) is placed. The second opaque optical element (73) exhibits a first optical effect. The first area (72) and the second area (71) are placed in an interspaced manner on a support (75) of the security document whereby enabling the first and second areas to be superimposed. When the second optical element is overlapped by the first optical element with a first distance (26) between the first and second optical elements, a second optical effect is produced, and when the second optical element is overlapped by the first optical element with a second distance (25) between the first and the second optical elements, which is greater than the first distance (26), a third optical effect (51) is produced that differs from the second optical effect.

Inventors

PETERS JOHN ANTHONY

TOMPKIN WAYNE ROBERT

SCHILLING ANDREAS

Latest standardized assignees - inventors removed

OVD KINEGRAM

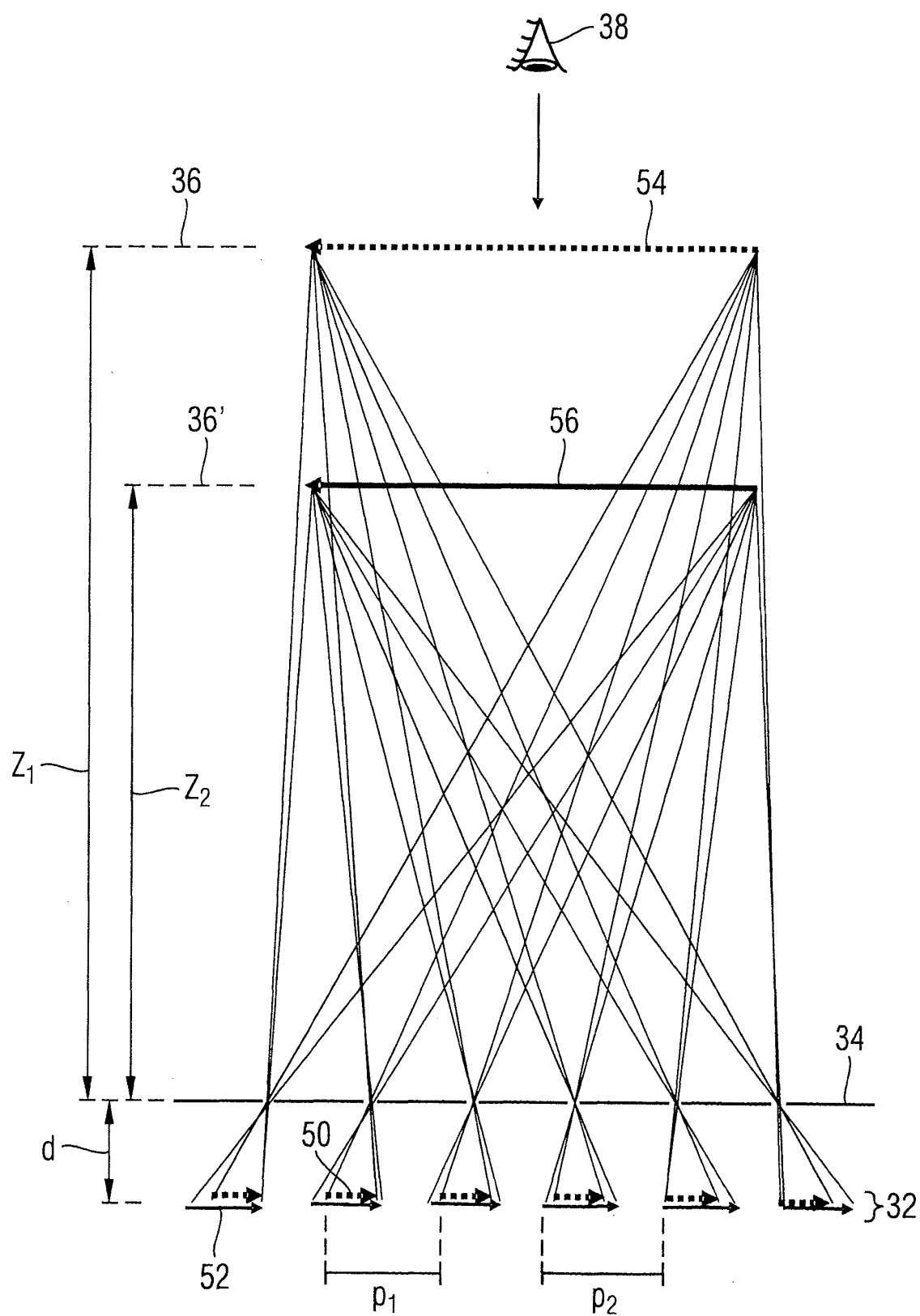
Family 9/16 - FAMPAT - ©Questel

Title

(EP2164713)

Security element having a magnified, three-dimensional moiré image

Images



Publication data including kind & date

WO2009000530	A2	2008-12-31	WO2009000530
WO2009000527	A1	2008-12-31	WO2009000527
AU2008267368	A1	2008-12-31	AU2008267368
AU2008267365	A1	2008-12-31	AU2008267365
DE102007029204	A1	2009-01-08	DE102007029204
WO2009000530	A3	2009-04-30	WO2009000530
EP2164713	A2	2010-03-24	EP2164713
EP2164711	A1	2010-03-24	EP2164711



CN101687427	A	2010-03-31	CN101687427				
CN101711203	A	2010-05-19	CN101711203				
US20100177094	A1	2010-07-15	US20100177094				
US20100208036	A1	2010-08-19	US20100208036				
RU2010101424	A	2011-07-27	RU2010101424				
RU2010101423	A	2011-07-27	RU2010101423				
CN101687427	B	2012-01-18	CN101687427B				
RU2466030	C2	2012-11-10	RU2466030				
RU2466875	C2	2012-11-20	RU2466875				
CN101711203	B	2013-03-13	CN101711203B				
US8400495	B2	2013-03-19	US8400495				
AU2008267365	B2	2013-04-04	AU2008267365				
AU2008267368	B2	2013-04-18	AU2008267368				
US8878844	B2	2014-11-04	US8878844				
EP2164713	B1	2016-04-06	EP2164713				
EP2164711	B1	2016-06-01	EP2164711				

Abstract

(EP2164713)

The invention relates to a security element for security papers and value documents, comprising a microoptical magnification system (30) of the moiré type for representing a three-dimensional moiré image (40) containing image components (42, 44) interspaced in one direction at a right angle to the moiré magnification system in at least two moiré image planes; a motif image that contains two or more periodic or at least locally periodic grid cell arrangements having different grid spacings and/or different grid orientations, that are associated with a respective moiré image plane and that contain micro-motif image components for representing the image component (42, 44) of the associated moiré image plane, a focusing element grid, interspaced from the motif image, for the moiré-magnified viewing of the motif image, comprising a periodic or at least locally periodic arrangement of a plurality of grid cells having respective microfocusing elements, the magnified, three-dimensional moiré image (40) moving, when the security element is tilted, in a moiré direction of movement (formula II) for almost any direction of tilting (formula I).

Inventors

KAULE WITTICH

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

Family 10/16 - FAMPAT - ©Questel

Title

(EP1827864)

Safety element provided with an optically-variable layer and method for the production thereof

Images

CN101687428	B	2013-04-17	CN101687428B				
CN101715396	B	2013-05-08	CN101715396B				
AU2008267366	B2	2013-06-27	AU2008267366				
US8632100	B2	2014-01-21	US8632100				
US20140175785	A1	2014-06-26	US20140175785				
US8786521	B2	2014-07-22	US8786521				
AU2008267366	C1	2015-03-12	AU2008267366				
AU2008267366	C1	2015-07-09	AU2008267366				
EP2164712	B1	2016-08-10	EP2164712				

Abstract

(EP2164712)

The invention relates to a representation system for security papers, value documents, electronic display elements or other data carriers, comprising a raster image system for representing a desired planar image that is defined by an image function $f(x,y)$. Said raster image system comprises a motif image which is subdivided into a plurality of cells (24) in which imaged areas of the desired image are arranged, a viewing raster (22) from a plurality of viewing elements for reconstructing the desired image when the motif image is viewed using the viewing raster (22), the motif image and its subdivision into a plurality of cells having an image function $m(x,y)$ that is defined by (I).

Inventors

KAULE WITTICH

RAHM MICHAEL

RAUSCHER WOLFGANG

Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

Family 12/16 - FAMPAT - ©Questel

Title

(EP2349736)

Security element having pressure-sensitive appearance

Images

FIG 1

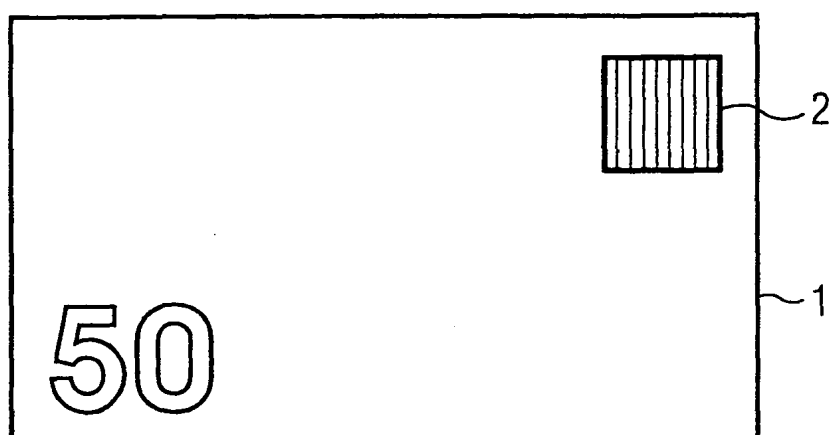


FIG 2a

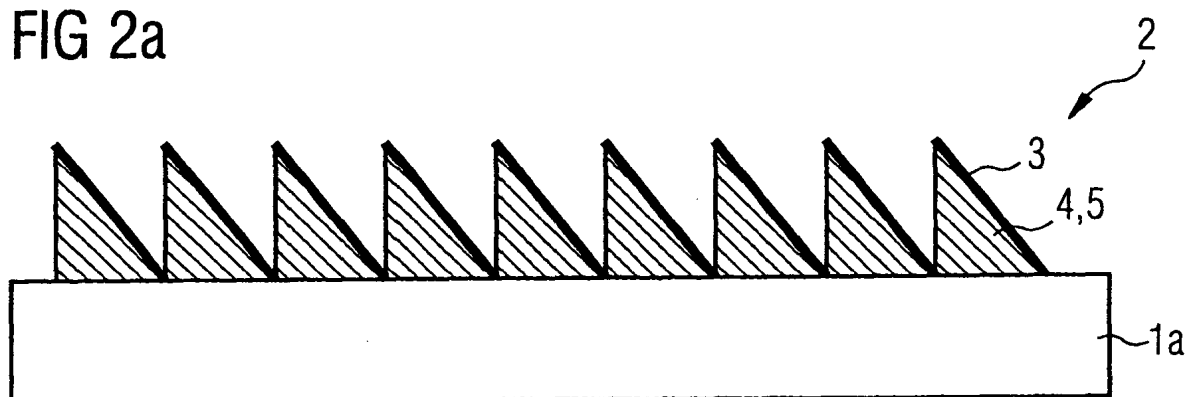
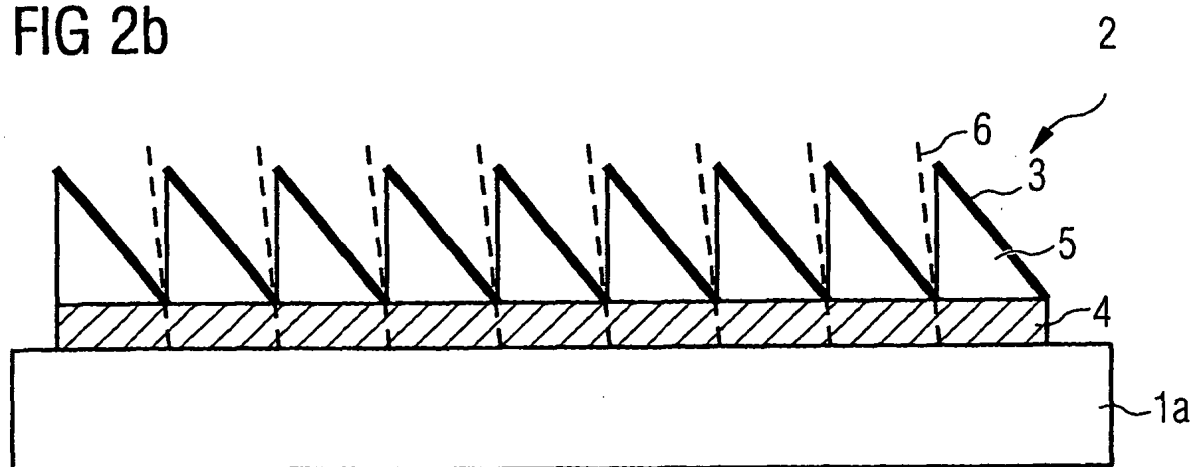


FIG 2b



Publication data including kind & date

WO2010046125	A2	2010-04-29	WO201046125
DE102008053099	A1	2010-04-29	DE102008053099
WO2010046125	A3	2010-08-05	WO201046125
EP2349736	A2	2011-08-03	EP2349736
EP2349736	B1	2018-07-11	EP2349736



Abstract

(EP2349736)

A security element (2) for a data carrier comprises an elastically deformable, preferably compressible region and a functional structure that creates a visual impression with a user, wherein the elastically deformable region and the functional structure interact with each other such that in a non-deformed state of the elastically deformable region, a visual impression of the functional structure is obtained that differs from the visual impression in a deformed state of the elastically deformable region.

Inventors

HOFFMÜLLER WINFRIED

HEIM MANFRED

RAHM MICHAEL

Latest standardized assignees - inventors removed

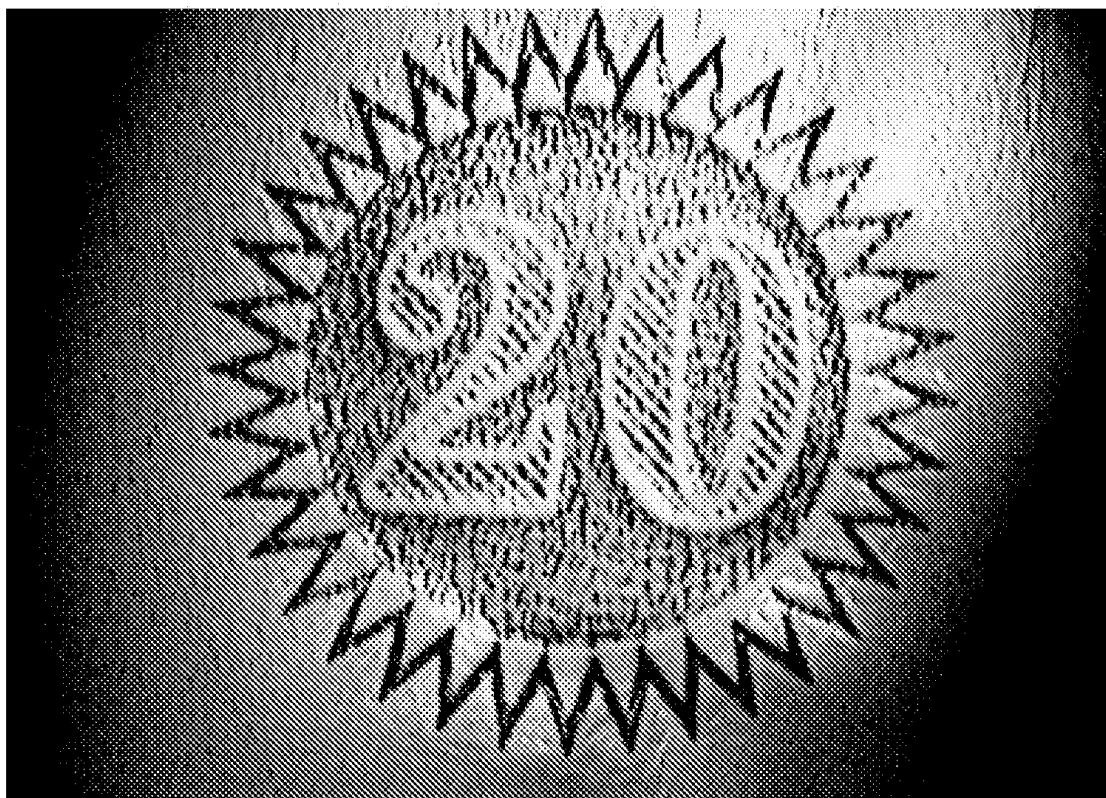
GIESECKE & DEVRIENT CURRENCY TECHNOLOGY

Family 13/16 - FAMPAT - ©Questel

Title

(US7820282)

Foam security substrate

Images**Publication data including kind & date**

US20070178295	A1	2007-08-02	US20070178295
US7820282	B2	2010-10-26	US7820282

**Abstract**

(US7820282)

The present invention is directed an oriented, foamed article having an integral security element, and a method of making the article. The oriented foam article is particularly useful in the preparation of printed security documents such as currency, stock and bond certificates, birth and death certificates, land titles and abstracts and the like.

Inventors

HAAS CHRISTOPHER K

TAYLOR ROBERT D

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JONZA JAMES M

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STUMO ROGER J

Latest standardized assignees - inventors removed

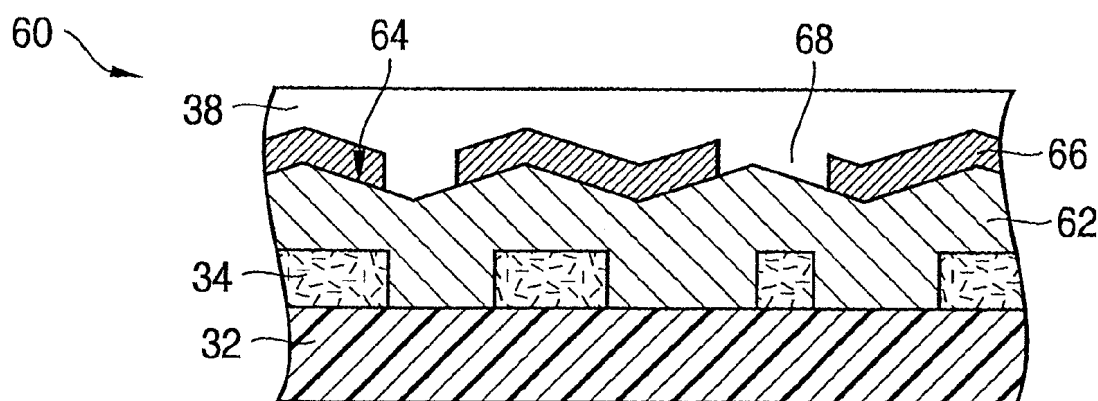
3M

Family 14/16 - FAMPAT - ©Questel

Title

(EP1744904)

Sheeting and methods for the production thereof

Images**Publication data including kind & date**

WO2005105475	A1	2005-11-10	WO2005105475
EP1744904	A1	2007-01-24	EP1744904
CN1950217	A	2007-04-18	CN1950217
IN2804/KOLNP/2006	A	2007-06-01	IN2006KN02804
US20070165182	A1	2007-07-19	US20070165182
RU2006141814	A	2008-06-10	RU2006141814
RU2377133	C2	2009-12-27	RU2377133
CN1950217	B	2010-05-12	CN1950217B
US7808605	B2	2010-10-05	US7808605
IN249916	B	2011-11-25	IN-249916
EP1744904	B1	2015-09-09	EP1744904

**Abstract**

(EP1744904)

The invention relates to a sheeting that is to be transferred to a target substrate as well as methods for producing such sheeting. According to the inventive method, a plastic support film (32) is provided that is suitable for orienting crystalline liquid material. A layer (34) of crystalline liquid material that is oriented is partially applied to the support film (32).

Inventors

HOFFMÜLLER WINFRIED

BURCHARD THEODOR

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HEIM MANFRED

Latest standardized assignees - inventors removed

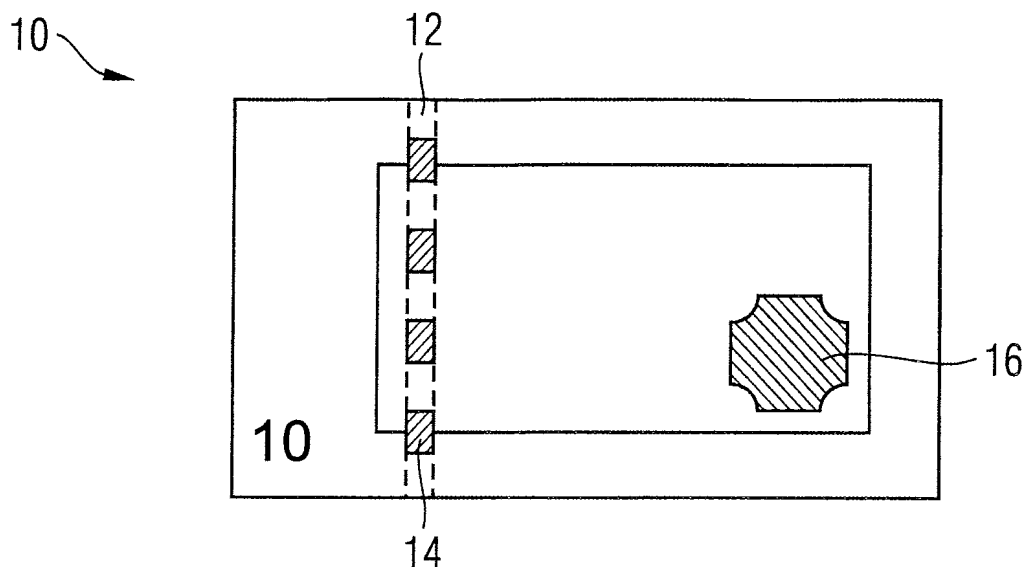
GIESECKE & DEVRIENT

Family 15/16 - FAMPAT - ©Questel

Title

(EP2331343)

Representation system

Images**Publication data including kind & date**

DE102008046511	A1	2010-03-11	DE102008046511
WO2010028739	A1	2010-03-18	WO201028739
EP2331343	A1	2011-06-15	EP2331343
US20110157183	A1	2011-06-30	US20110157183
EP2331343	B1	2012-10-10	EP2331343

**Abstract**

(EP2331343)

The invention relates to a representation system for security papers, value documents, electronic display elements or other data carriers, comprising a raster image system for representing a desired image (40) which is broken down into two or more partial desired images (42, 44), comprising a motive image that is divided into a plurality of periodically or at least locally periodically arranged cells (24) in which represented areas of one or more of the partially desired images (42, 44) are arranged; a viewing raster (22) composed of a plurality of viewing raster elements, reconstructed when viewing the motive image, the complete desired image (40) from the represented areas arranged in the cells (24). The motive image is divided, independently from the cell division, into at least one first and one second micro information area (60, 62), in which the cells contain respectively different combinations of represented images of the partially desired image (40, 42), and the micro information areas (60, 62) are arranged in the form of predetermined image motives comprising information-supporting image structures, the measurements thereof being lower than the resolution limits of the human eye.

Inventors

KAULE WITTICH

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Latest standardized assignees - inventors removed

GIESECKE & DEVRIENT

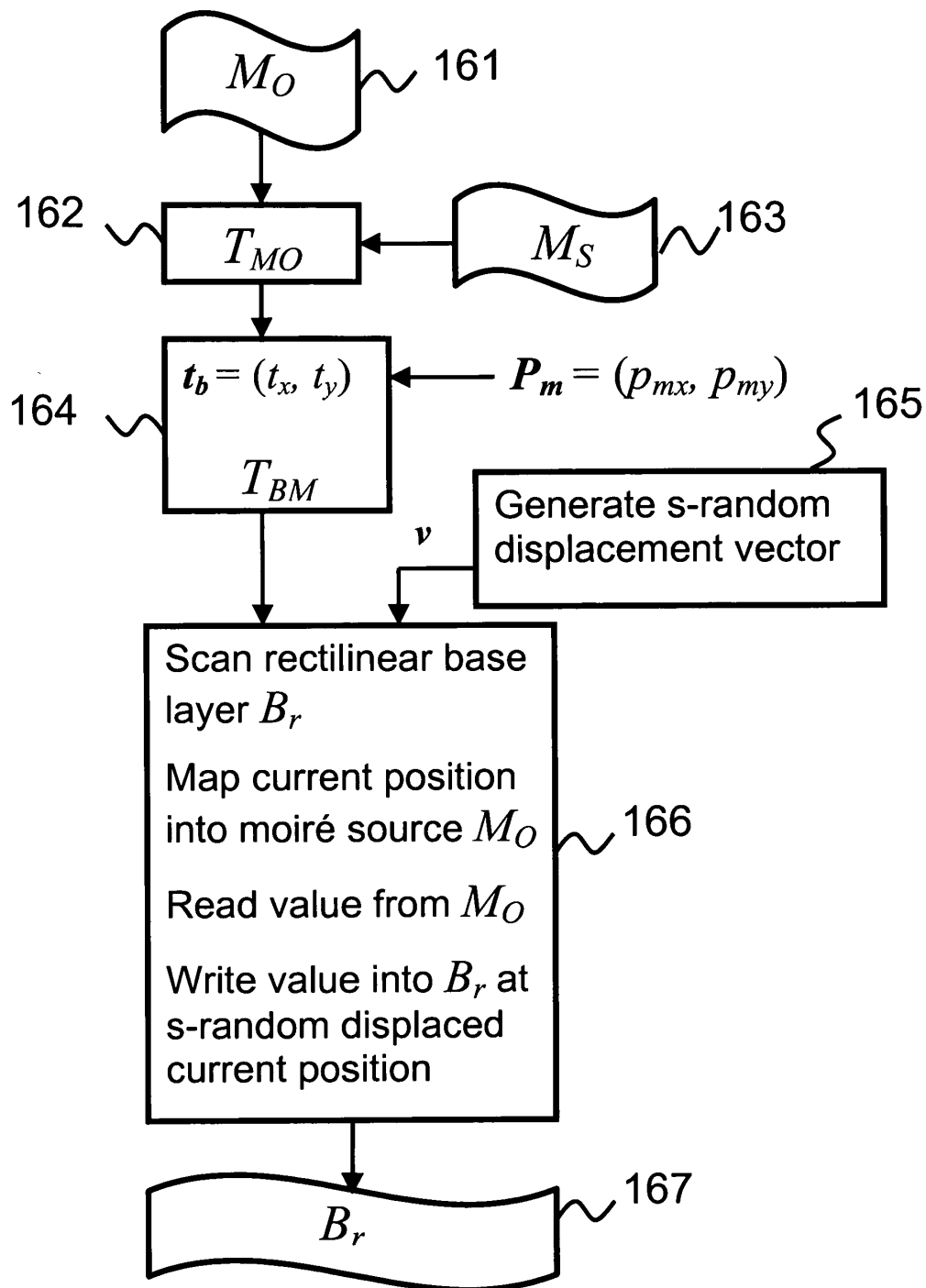
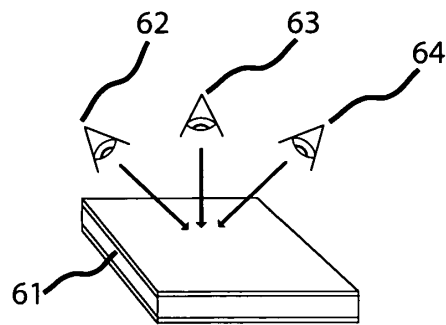
Family 16/16 - FAMPAT - ©Questel

Title

(US8351087)

Authentication with built-in encryption by using moire parallax effects between fixed correlated s-random layers

Images



Publication data including kind & date

US20100314861	A1	2010-12-16	US20100314861
US8351087	B2	2013-01-08	US8351087

**Abstract**

(US8351087)

This invention discloses new methods and security devices for authenticating documents and valuable products which may be applied to any support, including transparent synthetic materials and traditional opaque materials such as paper. The invention relates to parallax moire shapes which occur in a compound layer consisting of the superposition of specially designed and possibly geometrically transformed s-random base layer and s-random revealing layer with a small gap between them. The base and revealing layers are formed respectively by base layer element shapes and revealing layer sampling elements positioned at s-random locations, where the base layer locations and the revealing layer locations are strongly correlated. When tilting the compound layer or changing the viewing angle, a parallax moire intensity profile of a chosen shape is seen moving in the superposition, thereby allowing the authentication of the document. A major advantage of the present invention is in its intrinsically incorporated encryption system due to the arbitrary choice of the s-random number sequences used for defining the positions of the specially designed base layer element shapes and revealing layer sampling elements that are used in this invention.

Inventors

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Latest standardized assignees - inventors removed

ECOLE POLYTECHNIQUE FEDERATE DE LAUSANNE IC LSP