

Search history

Search PN=(WO2016073473) (Results 1)

1:

Search [SP]: [0001] this application claims priority based on a provisional application titled transaction and id cards with controlled coloring bearing ser. no. 62/001,706 filed may 22, 2014 whose teachings are incorporated herein by reference. this application also claims priority based on a provisional application titled ceramic transactional and identification cards with controlled coloring bearing ser. no. 62/074,305 filed nov. 3, 2014 whose teachings are incorporated herein by reference. background of the invention [0002] this invention relates to the manufacture of metal cards having varied coloring and texture. in particular, the present invention relates to apparatus and methods for producing transactional and id cards, or any like document, having a metal layer where the card can be made to have a variety of colors and textures. this invention also relates to cards having a core layer of ceramic material and to metal cards with decorative ceramic layers. [0003] it has become desirable to provide metal or ceramic cards for the high end market to impart a sense of wealth and distinction to the card holder. it is also desirable to provide metal cards with different colors and textures to further enhance eye and touch appeal and/or provide a degree of personalization. [0004] it is known to use physical vapor deposition (pvd) to color metal transaction cards, but pvd is limited in its color range and is also relatively expensive. pvd is also highly dependent upon the substrate upon which it is being deposited. pvd is a vacuum process with high heat and batch operation that is expensive requiring individual racking and turning of parts for even distribution of color. it also subjects the metal to high temperature which can shrink and warp the metal. [0005] in some metal cards, printed pvc layers or other polymers are used to decorate the outside of cards. the use of these polymeric layers has undesirable traits such as minimum print thickness, loss of weight in the metal card due to polymeric thickness, and challenges of lamination of dissimilar materials. use of different thicknesses and compounds can also cause the parts to warp or bow due to uneven shrinkage during platen lamination. [0006] it is an object of this invention to overcome these and other problems and to enable the manufacture of metal cards and/or ceramic cards having a wide range of colors and textures. summary of the invention [0007] cards made in accordance with the invention include a specially treated thin decorative layer attached to either side, or both sides, of a thick core layer of metal, ceramic coated metal or polymer, or solid ceramic material, where the thin decorative layer is designed to provide selected color(s) and/or selected texture(s) to a surface of the cards. decorative layers for use in practicing the invention include: (a) an anodized metal layer or (b) a layer of material derived from plant or animal matter (e.g., wood, leather) or (c) an assortment of aggregate binder material (e.g., cement, mortar, epoxies) mixed with laser reactive materials (e.g., finely divided carbon) or (d) a ceramic layer and (e) a layer of crystal fabric material. the cards may be dual interface smart cards which can be read in a contactless manner and/or via contacts. [0008] the manufacture of metal cards in accordance with the invention includes the preparation and treatment of a generally thin decorative layer and attaching the decorative layer to a thick metal substrate where the thin decorative layer is designed to provide selected color(s) and/or selected texture(s) primarily to the front surface of the metal cards but also to the back of the cards. [0009] where the thin decorative layer is an anodized metal layer, the metal layer is prepared and treated to have a selected color for imparting the coloring to the card. adding color (colorizing) to metal layers by anodizing is preferable to the pvd process for several reasons. anodizing is an electrochemical process that converts the metal surface into a decorative, durable, corrosion-resistant, anodic oxide finish. thus, coloring a metal by anodizing is highly desirable. aluminum is ideally suited to anodizing. however, other nonferrous metals, such as magnesium, titanium, zinc, niobium, tantalum, or any other metal which can be anodized, can be used to practice the invention. [0010] as for aluminum films, for example, the anodic oxide structure originates from the aluminum substrate and is composed entirely of aluminum oxide. this aluminum oxide is not applied to the surface like paint or plating, but is fully integrated with the underlying aluminum substrate, so it cannot chip or peel. it has a highly ordered, porous structure that allows for secondary processes such as coloring and sealing. [0011] anodizing may be accomplished by immersing the aluminum into an acid electrolyte bath (tank) and passing an electric current through the medium. a cathode is mounted to the inside of the anodizing tank the aluminum acts as an anode, so that oxygen ions are released from the electrolyte to combine with the aluminum atoms at the surface of the part being anodized. anodizing is, therefore, a matter of highly controlled oxidation-the enhancement of a naturally occurring phenomenon. color may be introduced by running the anodized foil through a dye bath of the appropriate (desired) color and then a sealer bath. [0012] using a colorized anodic layer upon a metal layer provides more flexibility and cost savings. use of printed anodic material to replace polymeric materials overcomes these challenges since the metal is denser than the polymer and does not have the minimum print thickness limitations. this composition and method may be used on all transaction and id card types including contactless, contact, and dual interface smart cards. [0013] in accordance with the invention, the color and/or texture of an anodized layer may be further modified by: (a) dyeing the anodized layer a single color or multiple colors, or (b) by printed graphics through techniques such as screen printing, sublimation printing, or any digital print system. the anodized metal layer may be further modified through techniques such as laser engraving, mechanical engraving, die cutting, or embossing. the anodized metal layer may be used on the card as a full faced material (i.e., extending the full length and width of the card), as a patch, a stripe, or other decorative design. the anodized metal may be laser marked, or otherwise engraved or marked such that base or noble metals may be electroplated to the anodized surface in a selective pattern or flood coat. [0014] in accordance with one aspect of the invention, the imparting of color to multilayered metal cards is achieved using at least one anodized colored metal layer and selectively modifying the other layers, which may or may not be colored, to provide a desired artistic and/or functional effect. [0015] where the decorative layer is a layer of material derived from plant matter (e.g., wood) special care must be taken to treat the decorative layer to preserve the original (unique) pattern and texture before and during the attachment of the decorative layer to a metal substrate. texture as used herein refers to the visual and especially tactile quality of a surface. this includes the feel, touch, appearance and graininess of the surface. [0016] likewise, where the decorative layer is a layer of material derived from animal matter (e.g., leather) special processes were developed to treat the decorative layer to preserve the original (unique) pattern and texture before and during the attachment of the decorative layer to a metal substrate. [0017] also, where the decorative layer is a layer of material derived from an assortment of aggregate binder material (e.g., cement, mortar, epoxies) mixed with laser reactive materials (e.g., finely divided carbon) special arrangements are made to produce cards with top surfaces having desired color and texture. [0018] also, various ceramic materials having selected texture and color may be used to form decorative layers attached to a metal substrate. [0019] thus, the thin decorative layer may be a veneer layer of textured materials which may be natural and/or of a non-metallic nature which are prepared and treated to provide unique and/or selected texture to the card surface. [0020] cards embodying the invention include a thin decorative layer and a thick core layer of metal, ceramic coated metal, ceramic coated polymer, or solid ceramic material. in addition, the cards may include a number of different polymeric layers. still further, metal cards embodying the invention may include an integrated circuit chip and antennas for enabling rf transmission of signals between the cards and a card reader. these cards are "smart" cards capable of also functioning as contact cards, and/or dual interface (contact and/or contactless). [0021] still further, cards embodying the invention may include a pocket formed in the top surface of the card to enable the placement therein of one or more of the decorative layers. brief description of the drawings [0022] in the accompanying drawings, which are not drawn to scale, like reference characters denote like components and [0023] fig. 1 is a cross sectional diagram of colored layers combined to form a metal card with controlled coloring in accordance with the invention [0024] fig. 1a is a cross sectional diagram illustrating the removal of portions of the top layer of the card shown in fig. 1 displaying different colors [0025] fig. 1b is a cross sectional diagram illustrating the removal of portions of the two top layers of the card shown in fig. 1 display (Results 0)

Search [SP]: transaction and id cards having selected texture and coloring cards made in accordance with the invention include a decorative layer attached to a core layer, where the decorative layer is designed to provide selected color(s) and/or selected texture(s) to a surface of the metal cards. at least one of the decorative layers is a layer derived from animal matter (e.g. leather). the cards may be dual interface smart cards configured to be read in a contactless manner and/or via contacts. (Results 0)

Search transaction and card and (cavity or hole or pocket) and (ceramic or (oxide and metal) or carbide) (Results 1315)

4:

Search 4 and layer (Results 1067)

5:

Search 5 and (base or substrate) (Results 1002)

6:

Search 6 and tac=(transaction w3 card) (Results 57)

7:

Search 7 and tac=(oxide or ceramic or nitride or carbide or silicon) (Results 17)

8:

Title: **METAL**-CONTAINING **TRANSACTION CARD** AND METHOD OF MAKING THE SAME

Abstract: **Metal**-containing **transaction cards**, useful for the purchase of goods and/or services, and methods of making the same are provided. The **metal**-containing **transaction cards** may be standard-sized (i.e., about 33/8 inches by about 2 1/4 inches) or any other size yet still usable as a **transaction card**. Moreover, the **metal**-containing **transaction card** may have a magnetic stripe, an embedded microchip, a signature panel, a holographic image, or any other feature typically contained on or within a **transaction card**. The **transaction cards** have at least one **layer** of **metal** with, optionally, other **layers** of **substrates**, such as thermoplastic polymers, other **metals** or adhesives. In addition, the **metal**-containing **transaction card** may be anodized, coated, or laser-engraved. Preferably, the **metal** is titanium or stainless steel.

Classifications:

International (IPC 8-9): B23P11/00 B23P13/04 B23P17/00 B23P25/00 B31F1/07 B32B15/06 B42D15/10 B44B5/00 G06K G06K19/00 G06K19/02 G06K19/06 G06K19/067 G06K19/07 G06K19/077 G06K5/00 H05K3/30 (Advanced/Invention); B23P13/00 B23P17/00 G06K19/00 G06K19/02 G06K19/06 G06K19/077 (Core/Invention); G06K (Subclass/Invention)

International (IPC 1-7): G06K19/00 G06K19/02 G06K19/06

CPC: G06K19/06046 G06K19/06187 G06K19/067 G06K19/06196 G06K19/07745 H01L2924/0002 B42D25/00 B32B2425/00 Y10T156/1039 Y10T29/49002 Y10T29/4998 Y10T29/49996

Y10T442/124 B42D25/373 B42D25/369 B42D25/425 B42D25/435 B42D25/47 B42D25/475 G06K19/07728 B42D2033/10 G06K19/02

European: B42D15/10 G06K19/02 G06K19/067 G06K19/06C5

G06K19/06M G06K19/077E5 L32B425/00 L42D33/10

US: 101/3.1 101/3.100S 101/32 101/32S 235/380 235/451 235/487 235/487P 235/487S 235/488 235/488P 235/490 235/490P 235/492 235/492P 235/492S 235/493 235/493P 235/493S 29/428 29/428S 29/527.1 29/527.100S 29/527.2 29/527.200S 29/530 29/530S 29/558 29/558S 29/592.1 29/592.100S 29/832 29/832P 442/15

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Family:

Publication number	Publication date	Application number	Application date
AU2003300451 AA	20040810	AU20030300451	20031230
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Priority:

US20030437938P 20030103	US20030749006 20031230	WO2003US41641 20031230
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Probable Assignee: AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC

Assignee(s): (std): AMERICAN EXPRESS MARKETING AND D ; AMERICAN EXPRESS TRAVEL RELATE ; LASCH ELLEN ; GANDEL PRISCILLA ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY I ; MORRILL WEBB LISA ANN ; VARGA STEVEN ; VARGA STEVAN ; AMERICAN EXPRESS TRAVEL RELETED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELETED SERVICES COMPANY INC ; WEBB LISA ANN MORRILL ; WEBB LISA A M

Assignee(s): AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INCWORLD FINANCIAL CENTERAMERICAN EXPRESS TOWERNEW YORKNY10285-4900US ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO ; AMERICAN EXPRESS MARKETING AND DEVELOPMENT CORP ; AMERICAN EXPRESS MARKETING AND DEVELOPMENT CORPORA ; AMERICAN EXPRES S TRAVEL RELATED SERVICES CO INC

Inventor(s): (std): GANDEL PRISCILLA ; LASCH ELLEN ; WEBB LISA ANN MORRILL ; WEBB LISA A M ; VARGA STEVAN ; MORRIL WEBB LISA ANN ; VARGA STEVEN ; VARGA STEBAN ; PRISCILLA GANDEL ; LISA ANN MORRILL WEBB ; ELLEN LASCH ; STEVEN VARGA ; ANN MORRILL WEBB LISA ; MORRILL WEBB LISA ANN

Inventor(s): MORRILL WEBB LISA ; MORRILL WEBB LISA ANGB ; STEBAN VARGA ; WEBB LISA ; VARGA STEVENGB ; VARGA STEVEN MORRILL WEBB LISA ANN ; WEBB LISA AM

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; FB RICE; FB RICE PTY LTD; OGILVY RENAULT LLP SENCRL SRL; MARKS AND CLERK; CLARO Y CIA; HILL JUSTIN JOHN; HARGREAVES TIMOTHY EDWARD; DR YITZHAK HESS AND PARTNERS; CHIBA AKIO; TOMITA HIROYUKI; SHAMOTO ICHIO; NISHIYAMA FUMITOSHI; KOBAYASHI YASUSHI; MASUI CHUJI; MCDERMOTT WILL AND EMERY LLP; SNELL AND WILMER LLP AMEX; SNELL AND WILMER LLP; SNELL AND WILMER LPP; SOBELMAN HOWARD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: THREE-LEGACY MODE PAYMENT **CARD** WITH PARAMETRIC AUTHENTICATION AND DATA INPUT ELEMENTS

Abstract: A payment **card** comprises a plastic **card** and operates with three different legacy payment systems. A magnetic stripe with user account data allows **card** use in traditional point-of-sale magnetic **card** readers. A dual-input crypto-processor embedded in the **card** provides for contact/contactless smart **card** operation. A user input provides for user authentication by the crypto-processor. Internal to the plastic **card**, and behind the magnetic stripe, a magnetic array includes a number of fixed-position magnetic write heads that allow the user account data to be automatically modified by the crypto-processor.

Classifications:

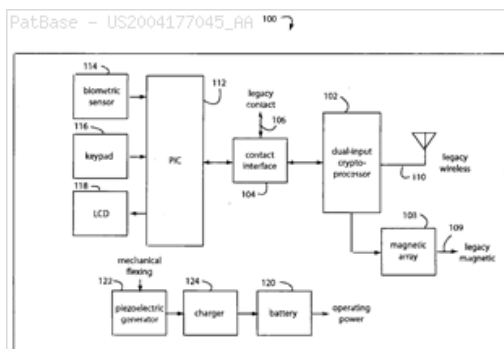
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International (IPC 1-7): G06F17/60 G06K19/06

CPC: G06K19/06187 G06K19/06196 G06K19/07 G06K19/0723 G06K19/12 G06Q20/343 G06Q20/354 G06Q20/3674 G07F7/082 G06Q30/02 G06Q20/40 G06Q20/367 G06Q20/3672 G06Q20/4093 G07F7/12 G07F7/122 G06K19/077 G06K19/083 G07F7/10 G06Q20/105 G06Q20/3415 G06Q20/4018 G07F7/1083 G06Q20/401 G06K19/06206 G06Q20/351 G06Q20/4037 G07F7/0833 G06K19/07354 G06K19/07769 G06K19/08 G06K19/145 G06Q20/3572 G07C9/00087 G07C2009/00095 H04L9/12 H04L2209/043 H04L2209/56 G06Q20/20 G06Q20/12 G06Q20/24 G06Q20/341 G06Q20/342 G06Q20/382 G06Q20/4016 G06Q20/403 G06Q20/40975 G06Q40/00 G07F7/025 G07F7/1008 H04L9/32 G06Q10/063112 G11B5/00808 G06Q30/00 G06Q20/26 G06Q20/385 G07F7/08 G07F7/1016

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Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: FITBIT INC

Assignee(s): (std): QSECURE INC ; PARISEAU DAVID K ; WILLIAMS EDGAR M ; LI WEIDONG ; THOMPSON JOYCE ; MARSHALL CHARLES T ; TSAO PAUL ; PARISEAU DAVID ; BROWN KERRY D ; BROWN KERRY DENNIS ; CHATELAIN DANIEL

Assignee(s): COIN INC ; FITBIT INC ; QUECARD INC ; QUEUECARD INC ; QSECURE

Inventor(s): (std): BROWN KERRY D ; BROWN KERRY DENNIS ; BROWN KERRY DENIS ; CHATELAIN DANIEL ; LI WEIDONG ; PARISEAU DAVID K ; WILLIAMS EDGAR M ; THOMPSON JOYCE ; MARSHALL CHARLES T ; TSAO PAUL ; PARISEAU DAVID ; PARISEAU DAVID KEVIN

Inventor(s): BROWN KERRY

Agent(s): RICHARD BREWSTER MAIN, PATENT ATTORNEY; RICHARD BREWSTER MAIN PATENT ATTORNEY; RICHARD B MAIN; CARR AND FERRELL LLP; PATENTS PENDING; RICHARD B MAIN ESQ PATENTS PENDING; RICHARD BREWSTER MAIN ESQ; RICHARD B; MAIN RICHARD B

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: FACILITATING MOBILE DEVICE PAYMENTS USING PRODUCT CODE SCANNING

Abstract: Provided are computer implemented methods and systems for facilitating mobile device payments using barcodes displayed on mobile devices and scanned by merchants at checkout counters. When a customer is ready to tender a payment to a merchant, instead of using a credit card, cash, or check, the customer activates an application on his mobile device. The mobile device includes or obtains information about the payment system of this merchant. Furthermore, the mobile device includes or obtains information about the customer/mobile device user and then uses these two pieces of information to generate and display a barcode that encodes customer payment information specific to this merchant. The barcode is scanned at the checkout counter and processed to retrieve customer records from a database of the payment processing system. These records are then used to transfer funds between the merchant and customer, obtain discounts, and/or perform other retail transactions.

Classifications:

International (IPC 8-9): A61B10/00 A61B5/00 A61B5/02

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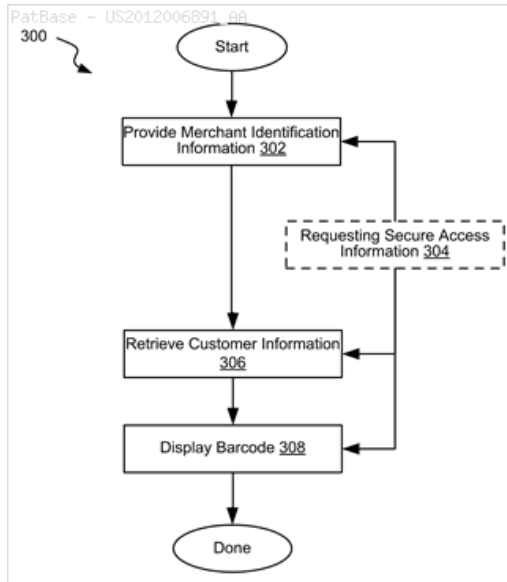
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Locarno class: 12/07 14/02



Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: AMOBILEPAY INC

Assignee(s): (std): WORLD AWARD ACAD ; ZHOU DYLAN T X ; ZHOU ANDREW H B ; ZHOU DYLAN ; ZHOU ANDREW ; ZHOU DYLAN TX ; XING ZHOU TIAN ; WORLD AWARD ACADEMY WORLD AWARD FOUND AMOBILEPAY INC ; XING ZHOU ; ZHOU TIGER T G ; ZHOU TIGER ; ZHOU TIANXING ; ZHOU HAIBIN ; ZHOU TIANGE ; AMOBILEPAY INC ; CHENG WESLEY ; DYLAN ZHOU ; GRONBERG MARTIN ; WORLD AWARD ACAD WORLD AWARD FOUND AMOBILEPAY INC ; WORLD AWARD FOUND

Assignee(s): ZHOU ANDREW HB ; TRAN BAO ; VENTURE LENDING AND LEASING IV INC ; ZHOU TIGER TG ; WORLD AWARD ACADEMY ; WORLD AWARD ACADEMY WORLD AWARD FOUNDATION AMOBILEPAY INC ; WORLD AWARD FOUNDATION

Inventor(s): (std): ZHOU TIGER T G ; ZHOU TIANXING ; ZHOU TIANGE ; ZHOU HAIBIN ; ZHOU DYLAN T X ; ZHOU ANDREW H B ; XING ZHOU TIAN ; DYLAN ZHOU ; ZHOU TIGER ; ZHOU DYLAN TX ; ZHOU DYLAN ; ZHOU ANDREW ; XI MARY M Z ; CHENG WESLEY ; GRONBERG MARTIN ; XING ZHOU

Inventor(s): ZHOU ANDREW HB ; ZHOU TIGER TG

Agent(s): TEALL CHARLOTTE; TRAN AND ASSOCIATES; PATENT JURIST; GEORGIY L; WWWNIELSENPATENTSCOM; STEVEN A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: NONVOLATILE MEMORY AND SEMICONDUCTOR DEVICE

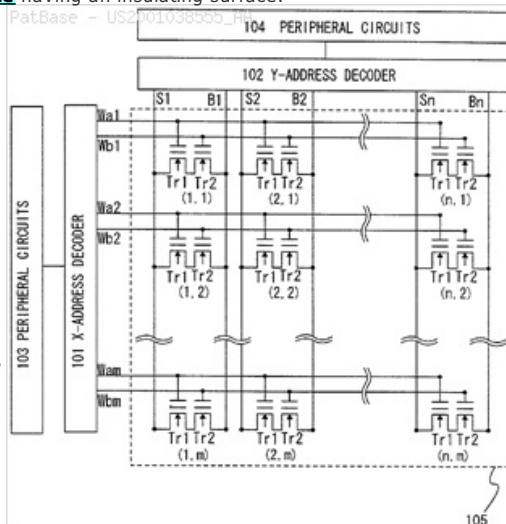
Abstract: A nonvolatile memory capable of acting at each 1 bit and having a high integration density. A small-sized semiconductor device of multiple high functions having such nonvolatile memory. The nonvolatile memory is constructed to have a memory cell composed of two memory transistors so that it can realize a memory capacity of two times as large for a memory area as that of the full-function EEPROM of the prior art, in which the memory cell is composed of one memory transistor and one selection transistor, while retaining functions similar to those of the EEPROM. On the other hand, the small-sized semiconductor device of high functions or multiple functions is realized by forming the nonvolatile memory of the invention integrally with another semiconductor part over a **substrate** having an insulating surface.

Classifications:**International (IPC 8-9):** B63B21/00 F16B2/12 F16G11/00 F16G11/10

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G06Q20/14 G06Q20/16 G06Q20/20 G06Q20/28 G06Q20/32
G06Q20/34 G06Q20/40 G06Q30/00 G06Q30/02 G06Q30/04
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G06Q99/00 G07F19/00 G07F7/10 G09G3/20 G09G3/30 G09G3/36
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H01L27/10 H01L27/115 H01L27/12 H01L29/788 H01L29/792
H04K1/00 H04L12/16 H04L12/54 H04L12/56 H04M11/00 H04M15/00
H04M15/06 H04M17/00 H04M3/42 H04Q7/22 H04Q7/32 H04W4/00
H04W4/12 H04W4/14 H04W4/24 H04W8/26
H04W88/18 (Advanced/Invention);
G01V15/00 G02F1/1362 G06Q20/00 G06Q40/00
H04M1/725 (Advanced/Non-invention);
F16B2/02 F16G11/00 G06F17/00 G06K17/00 G06K19/067 G06K19/07
G06K19/08 G06K5/00 G06Q10/00 G06Q20/00 G06Q30/00
G06Q40/00 G06Q50/00 G06Q99/00 G07F19/00 G07F7/10 G09G3/20
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H01L29/66 H04L12/16 H04L12/54 H04M11/00 H04M15/00 H04M17/00
H04M3/42 H04Q7/22 H04Q7/32 H04W4/00 (Core/Invention);
G01V15/00 G07F19/00 (Core/Non-invention)

International (IPC 1-7): G06F17/00 G06F17/30 G06F17/60 G06K5/00
G07F19/00 G09G3/20 G09G3/30 G09G3/36 G11C11/34 G11C16/04
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257/E21.682S 257/E21.703 257/E27.103 257/E27.103S 257/E27.111 257/E27.111S 365/185.01 365/185.03 365/185.03P
365/185.05 365/185.11 365/185.17 365/185.17P 365/185.18 365/185.28 365/185.28P 455/407 455/407P 455/414.1
455/414.100P 455/466 455/466S 705/1 705/1.1 705/1.100S 705/13 705/13S 705/14 705/14.39 705/14.39S 705/16 705/16S
705/19 705/19P 705/39 705/39S 705/40 705/40P 705/41 705/41P 705/44 705/44S**JP F-Term:** 5B025 5B025/AA02 5B025/AB01 5B025/AC02 5B025/AE00 5B125 5B125/BA03 5B125/BA08 5B125/BA09
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Publication number	Publication date	Application number	Application date
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Priority:

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WO2011US43525	20110711	US20130053372	20131014	US20160990774	20160107

Probable Assignee: E2INTERACTIVE INC D B A E2INTERACTIVE INC

Assignee(s): (std): CHAKIRIS PHIL M ; DENZER KARL ; E2INTERACTIVE INC ; E2INTERACTIVE INC D ; E2INTERACTIVE INC D B A E2INTERACTIVE INC ; GRAVES PHILLIP C ; E2INTERACTIVE INC DBA E2INTERA ; E2INTERATIVE INC ; E2INTERACTIVE INC D B S E2INTERACTIVE INC ; E2INTERACTIVE INC D B S E2INTE ; E2INTERACTIVE INC DBA E2INTERACTIVE INC ; GUEST JOHN D ; TAGG BRIAN ROGER ; LOWIN LESLIE GEORGE ; TAGG BRIAN R ; LOWIN LESLIE G ; SMITH MERRILL B ; SMITH MERRILL BROOKS ; GRAVES PHILIP CRAIG ; E2INTERACTIVE INC QUIEN GIRA COMO E2INTERACTIVE INC ; SEMICONDUCTOR ENERGY LAB ; YOUNG DUSTIN ; KATO KIYOSHI ; GRAVES PHILLIP CRAIG ; I2INTEREHKTIV INK D B A I2INTEREHKTIV INK ; GUEST JOHN DAVID ; HILLIER CLYDE

Assignee(s): SEMICONDUCTOR ENERGY LAB CO LTD ; SEMICONDUCTOR ENERGY LABORATORY CO LTD ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; JPMORGAN CHASE BANK NA ; SEMICONDUCTOR ENERGY L ORATORY CO LTDAB ; E2INTERACTIVE INC D ; SEMICONDUCTOR ENERGY LABORATORY CO ; E2INTERAVTIVE INC D B A E2INTERACTIVE INC ; E2INTERAVTIVE INC ; E2INTERACTIVE INC D B A E2INTE ; E2INTERACTIVE INC D B A E2INTERACTIVE ; E2INTERACTIVE INC D B A E2INTERACTIVE INC

Inventor(s): (std): BRIAN R TAGG ; CHAKIRIS PHIL M SMITH MERRILL ; GRAVES PHILLIP C ; GUEST JOHN D ; GUEST JOHN D TAGG BRIAN R LOWI ; JOHN D GUEST ; LESLIE G LOWIN ; LOWIN LESLIE G ; LOWIN LESLIE GEORGE ; SMIT MERRILL BRUKS ; SMITH MERRILL B ; SMITH MERRILL BROOKS ; TAGG BRIAN R ; TAGG BRIAN ROGER ; YOUNG DUSTIN ; SMITH MERRILL ; LOWIN LESLEY ; GREJVS FILIP KREJG ; GRAVES PHILLIP CRAIG ; DENZER KARL ; CHAKIRIS PHIL M ; CHAKIRIS PHIL ; CHAKIRIS FIL M ; PHILIPS GRAVES ; PHIL CHAKIRIS ; KATO KIYOSHI ; KARL DENZER ; HILLIER CLYDE ; GUEST JOHN DAVID ; GRAVES PHILIPS ; GRAVES PHILIP CRAIG ; DUSTIN YOUNG

Inventor(s): PHILIP CRAIG GRAVES ; PHIL M CHAKIRIS ; TAGG BRIAN ; MERRILL BROOKS SMITH ; PHILLIP CRAIG GRAVES ; LESLIE GEORGE LOWIN ; LOWIN LESLIE ; GUEST JOHN D TAGG BRIAN R LOWIN LESLIE G ; GUEST JOHN ; GRAVES PHILLIP ; BRIAN ROGER TAGG

Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; BERESKIN AND PARR LLP; BERESKIN AND PARR LLP SENCRL SRL; BERESKIN AND PARR; ANISSIMOFF AND ASSOCIATES; MURGATROYD SUSAN ELIZABETH ET AL; BANKES STEPHEN CHARLES DIGBY; BANKES STEPHEN CHARLES DIGBY ET AL; ASHTON GARETH MARK; DR SHLOMO COHEN AND CO; J MICHAEL MARTINEZ DE ANDINO ESQ HUNTON AND WILLIAMS LLP; FISH AND RICHARDSON PC; J MICHAEL MARTINEZ DE ANDINO HUNTON AND WILLIAMS LLP; STANDLEY LAW GROUP LLP; HUNTON AND WILLIAMS LLP,INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP; FISH AND RICHARDSON P C; LANDMARK INTELLECTUAL PROPERTY LAW PC; LANDMARK INTELLECTUAL PROPERTY LAW PLLC; MARTINEZ DE ANDINO J MICHAEL ET AL; MURPHY GREGORY M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: USER MONITORING SYSTEM

Abstract: A user monitoring device system includes a user monitoring device with one or more microphones, a transmitter and sensors to determine light, sound temperature and humidity near the user, the transmitter serving as a communication system. A motion detection apparatus detects a user's movement information. The motion detection apparatus and the monitoring system assist to determine at least one of: user sleep information and sleep behavior information, or user respiration information. A cloud **based** system is in communication with the monitoring device and the motion detection apparatus. The cloud **based** system includes a user database.

Classifications:

International (IPC 8-9): A44C5/00 A44C5/20 A61B10/00 A61B5/00 A61B5/01 A61B5/02 A61B5/0205 A61B5/024 A61B5/04 A61B5/0404 A61B5/0456 A61B5/08 A61B5/103 A61B5/11 A61B5/113 A61B5/117 A61B5/145 A61B5/1455 A61B5/16 A61B5/22 A61B7/00 A61B7/02 A61B7/04 A61B90/90 A61B90/98 A61M21/02 A63B24/00 G01D4/00 G01K13/00 G05B19/00 G06F1/16 G06F15/16 G06F19/00 G06F21/00 G06F3/01 G06F9/44 G06F9/445 G06K19/04 G06K19/077 G06K7/10 G06Q10/00 G06Q10/10 G06Q20/02 G06Q20/08 G06Q20/32 G06Q20/40 G06Q40/00 G06Q40/04 G06Q50/24 G08B1/08 G08B19/00 G08B21/00 G08B21/02 G08B21/24 G08B23/00 G08B29/00 G08B5/36 G08C15/06 G08C15/08 G08C17/00 G08C17/02 G08C19/06 G08C19/16 G08C19/20 G08C19/22 G09F3/00 G10L21/00 G11B20/10 H01F27/42 H01F37/00 H01F38/00 H01F38/14 H02J17/00 H02J5/00 H02J50/10 H02J50/40 H02J50/80 H02J7/00 H02J7/02 H04B5/00 H04B5/02 H04L12/26 H04L29/00 H04L29/06 H04L29/08 H04L7/00 H04M11/00 H04M11/04 H04N7/14 H04N7/18 H04Q9/00 H04W4/00 H04W4/02 H04W4/08 H04W4/20 (Advanced/Invention);

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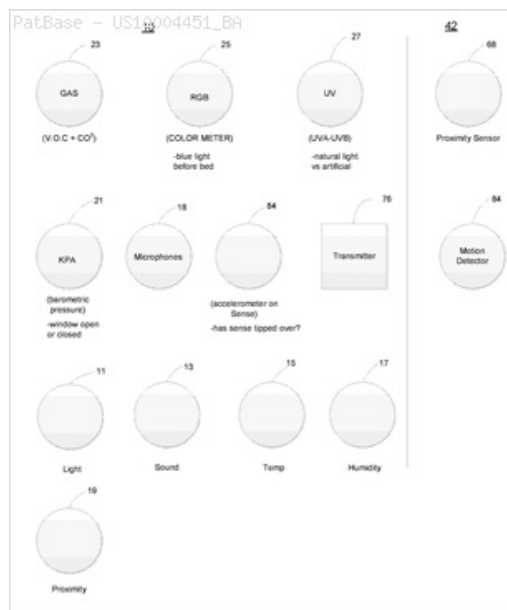
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Locarno class: 11/01

Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: FITBIT INC

Assignee(s): (std): FITBIT INC ; HELLO INC ; PROUD JAMES ; SHOOK ROBERT

Assignee(s): HELLO ASSIGNMENT FOR BENEFIT OF CREDITORS LLC

Inventor(s): (std): ASGARIAN HAMID ; FAN BRYAN ; FERNANDEZ JOAQUIN ; FUSI DANIELE ; FULTON JOHN ; HELLO INC ;

PROUD JAMES ; SHOOK ROBERT ; KELLEY JOHN ; JOHNSON CHRIS ; JOSEPH BENJAMIN ; MORSHIGE
KEVIN

Agent(s): HOGAN LOVELLS US LLP; PAUL; MINTZ; MINTZ LEVIN; MINTZ LEVIN COHN FERRIS GLOVSKY AND
POPEO PC; BEYER LAW GROUP LLP; DAVIS PAUL ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
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SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: **TRANSACTION** AND ID **CARDS** HAVING SELECTED TEXTURE AND COLORING

Abstract: **Cards** made in accordance with the invention include a specially treated thin decorative **layer** attached to a thick core **layer** of **metal** or **ceramic** material, where the thin decorative **layer** is designed to provide selected color(s) and/or selected texture(s) to a surface of the **metal cards**. Decorative **layers** for use in practicing the invention include: (a) an anodized **metal layer**; or (b) a **layer** of material derived from plant or animal matter (e.g., wood, leather); or (c) an assortment of aggregate binder material (e.g., cement, mortar, epoxies) mixed with laser reactive materials (e.g., finely divided carbon); or (d) a **ceramic layer**; and (e) a **layer** of crystal fabric material. The **cards** may be dual interface smart **cards** which can be read in a contactless manner and/or via contacts.

Classifications:

International (IPC 8-9): B23K26/00 B32B13/04 B32B13/06 B32B13/12 B32B15/04 B32B15/08 B32B15/10 B32B15/14 B32B15/20 B32B21/08 B32B21/14 B32B27/08 B32B27/12 B32B27/18 B32B27/36 B32B27/38 B32B3/04 B32B3/08 B32B3/14 B32B3/30 B32B33/00 B32B37/12 B32B37/18 B32B38/00 B32B38/06 B32B38/10 B32B38/14 B32B7/12 B32B9/00 B32B9/02 B32B9/04 B42D25/305 B42D25/318 B42D25/328 B42D25/346 B42D25/41 B42D25/435 B42D25/45 B42D25/47 B44C1/10 B44C1/22 B44C3/02 B44F1/02 C25D11/04 C25D11/18 C25D11/24 C25D11/26 C25D11/34 C25D3/46 C25D3/48 C25D3/50 C25D5/02 C25D7/00 G06K19/02 G06K19/07 G06K19/077 (Advanced/Invention); B32B27/18 B32B37/12 B32B37/18 B32B38/00 B32B38/06 B32B38/10 (Advanced/Non-invention)

International (IPC 1-7): G06K19/02

CPC: G06K19/07722 C25D7/00 C25D3/46 C25D3/48 C25D3/50 B32B9/025 B32B9/02 B32B9/005 B32B15/20 B32B3/30 B32B3/14 B32B27/38 B32B38/14 G06K19/022 B32B2038/0016 B32B2311/24 B32B2315/02 B32B2317/08 B32B2317/16 B32B2313/04 B32B2363/00 B32B2425/00 B32B38/0012 B32B38/105 B42D25/45 B42D25/00 B42D25/351 B42D25/41 B32B27/18 B32B21/14 B32B27/08 B32B27/36 B32B37/12 B32B37/18 B32B38/06 B32B38/10 B32B38/145 B32B2264/108 B32B2307/402 B32B2307/584 B32B9/00 B32B15/04 B32B21/00 B32B21/04 B32B2250/03 B32B2250/04 B32B2255/00 B32B2307/40 B32B2307/732 G06K19/0723 G06K19/02 G06K19/06187 G06K19/07 G06K19/077 B32B3/04 B32B3/08 B32B7/12 B32B9/04 B32B9/041 B32B9/042 B32B9/045 B32B9/047 B32B13/04 B32B13/06 B32B13/12 B32B15/043 B32B15/08 B32B15/10 B32B15/14 B32B21/08 B32B27/12 B32B33/00 B32B2255/06 B32B2255/08 B32B2255/10 B32B2255/20 B32B2255/205 C25D5/022 C25D11/04 C25D11/18 C25D11/243 C25D11/246 C25D11/26 C25D11/34 Y10T29/49004 Y10T29/49828 Y10T156/10 Y10T156/1039 Y10T156/1082

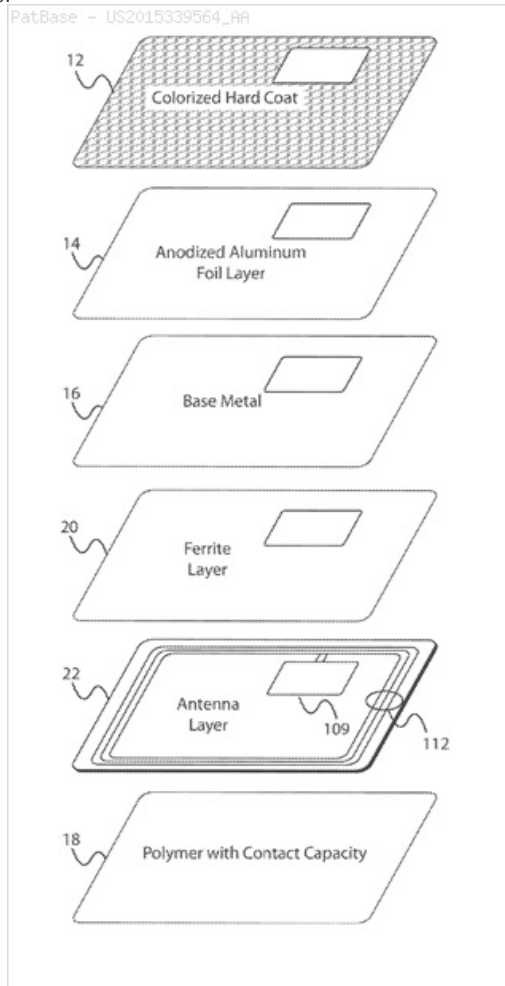
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JP F-Term: 2C005 2C005/HA06 2C005/HA08 2C005/HB20 2C005/JA02 2C005/JA10 2C005/JA18 2C005/JA26 2C005/KA02 2C005/KA09 2C005/KA10 2C005/KA11 2C005/KA15 2C005/KA37 2C005/KA40 2C005/KA51 2C005/KA59 2C005/LA23 2C005/MA12 2C005/MB10 2C005/NA03 2C005/NA09 2C005/NB03 2C005/NB13 2C005/PA14 2C005/PA21 2C005/PA22 2C005/PA26 2C005/QC15 2C005/RA03 3B221 4E168 4E168/AA01 4E168/AA02 4E168/FD01 4E168/FD03 4E168/JA11 4E168/JA17 4E168/JA21 4E168/JA27 4E168/JA28 4K006 5B035 2C005/HA02 2C005/HA03 2C005/HA10 2C005/HB10 2C005/JA15 2C005/JB07 2C005/JB08 2C005/JB18 2C005/JB27 2C005/KA03 2C005/KA27 2C005/KA48 2C005/LA26 2C005/LB07 2C005/MA03 2C005/MA04 2C005/MA07 2C005/MB02 2C005/NA02 2C005/PA01 2C005/PA03 2C005/RA14

JP F-Index: B23K26/00/B B42D15/10/307 B42D15/10/435 B42D15/10/470 B42D25/305/100 B42D25/435 B42D25/47 B44C1/10 B44C1/22/B B44C3/02 B44F1/02 C25D11/18/305 C25D11/18/307 C25D11/18/311 C25D11/18/313 C25D11/18/314/A C25D11/26/301 C25D11/26/302 C25D11/26/303 C25D11/34/303 G06K19/077/244 G06K19/077/264 B42D15/10/305 B42D15/10/318 B42D15/10/328 B42D15/10/346 B42D15/10/410 B42D25/305 B42D25/318 B42D25/328 B42D25/346 B42D25/41 G06K19/02 G06K19/077/144 G06K19/077/148 G06K19/077/156

Family:

Publication number	Publication date	Application number	Application date
AU2015264126 AA	20151126	AU20150264126	20150521
AU2015343255 AA	20160512	AU20150343255	20151103
BR112016027213 A2	20170815	BR20161127213	20150521
BR112017009365 A2	20171219	BR20171109365	20151103
CN106462782 A	20170222	CN201580026503	20150521
CN107111766 A	20170829	CN201580059209	20151103
CO20170004295 A2	20170711	CO20170004295	20170427
EP3146476 A1	20170329	EP20150796355	20150521
EP3146476 A4	20171213	EP20150796355	20150521
EP3215982 A1	20170913	EP20150856207	20151103
EP3215982 A4	20180620	EP20150856207	20151103
ID201708441 A	20170804	ID2016P0008815	20150521
ID201803121 A	20180329	ID2017AID02718	20151103
IN201617043102 A	20170331	IN201617043102	20161216
IN201717017958 A	20171110	IN201717017958	20170522
JP2017525601 T2	20170907	JP20170513610T	20150521
JP2017537417 T2	20171214	JP20170543283T	20151103
MX2017005426 A1	20171004	MX20170005426	20151103
PE16592017 A1	20171115	PE20170000776	20151103
SG10201801283S A1	20180427	SG20181001283	20150521
SG11201609690Y A1	20161229	SG20161109690	20150521
SG11201703216R A1	20170530	SG20171103216	20151103



US2015339564 AA	20151126	US20150718596	20150521
US2017098151 AA	20170406	US20160379569	20161215
US2017316300 AA	20171102	US20150521519	20151103
US2018129927 AA	20180510	US20180860286	20180102
WO15179639 A1	20151126	WO2015US31971	20150521
WO16073473 A1	20160512	WO2015US58820	20151103

Priority:

US20140001706P 20140522 US20140074305P 20141103 US20150718596 20150521
WO2015US31971 20150521 US20150521519 20151103 WO2015US58820 20151103
US20160379569 20161215 US20180860286 20180102

Probable Assignee: COMPOSECURE LLC

Assignee(s): (std): COMPOSECURE LLC ; DASILVA LUIS ; HERSLOW JOHN ; LOWE ADAM

Inventor(s): (std): ADAM LOWE ; DASILVA LUIS ; HERSLOW JOHN ; JOHN HERSLOW ; LOWE ADAM ; LOWE ADAM J

Inventor(s): LUIS DASILVA

Agent(s): HOULIHAN²; HOULIHAN² PTY LTD; FERNANDO TRIANA SOTO; RATNERPRESTIA; GEORGE WIDJOJO SH;
AOKI ATSUSHI; KOGA TETSUJI; ISHIDA TAKASHI; NANYANG LAW LLC; SCHANZER HENRY I;
DONNELLY REX A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID
IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN
MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG
SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: TRANSACTION CARD HAVING AN ELECTRICALLY APPLIED COATING

Abstract: A transaction card may comprise a first card component having an electrically conductive surface configured to receive an electrically applied coating. An electrically applied coating may be formed on the electrically conductive surface. The transaction card may be manufactured by forming a first card component having an electrically conductive surface configured to receive an electrically applied coating. The method may also include applying an electrically applied coating to the electrically conductive surface.

Classifications:

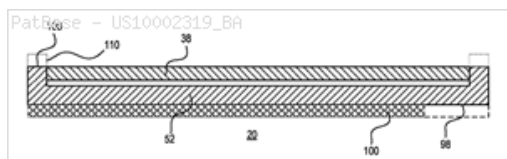
International (IPC 8-9): B05D1/00 B42D25/20 B42D25/373

B42D25/40 G06K19/02 G06K19/06 G06K19/067 G06K19/07

G06K19/077 (Advanced/Invention)

CPC: G06K19/0723 G06K19/06187 G06K19/07718 B05D1/007

G06K19/077 G06K19/067 G06K19/02 G06K19/07749 G06K19/07722



Family:

Publication number	Publication date	Application number	Application date
CA2986990 AA	20180530	CA20172986990	20171129
EP3330897 A1	20180606	EP20170204468	20171129
IN201714042865 A	20180601	IN201714042865	20171129
US10002319 BA	20180619	US20170716777	20170927
US2018150732 AA	20180531	US20170713222	20170922
US2018150733 AA	20180531	US20170716739	20170927
US2018150734 AA	20180531	US20170716777	20170927
US9996784 BA	20180612	US20170713222	20170922
US9996785 BA	20180612	US20170716739	20170927

Priority:

US20160428455P 20161130

US20170713222 20170922

US20170716739 20170927

US20170716777 20170927

Probable Assignee: CAPITAL ONE SERVICES LLC

Assignee(s): (std): CAPITAL ONE SERVICES LLC

Assignee(s): SUTHAR OM J

Inventor(s): (std): SUTHAR OM J

Inventor(s): OM J SUTHAR

Agent(s): SMART AND BIGGAR; FINNEGAN EUROPE LLP; FINNEGAN HENDERSON FARABOW GARRETT AND DUNNER LLP

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Title: DISPLAY PANEL

Abstract: A liquid crystal display panel includes an active matrix **substrate**, a counter **substrate**, a liquid crystal **layer**, and a sealant. The counter electrode is opposed to the active matrix **substrate**. The liquid crystal **layer** is provided between the active matrix **substrate** and the counter **substrate**. The sealant, which surrounds the liquid crystal **layer** between the active matrix **substrate** and the counter **substrate**, joins the active matrix **substrate** and the counter **substrate** and seals the liquid crystal **layer**. A portion of the surface on the liquid crystal **layer** side of the active matrix **substrate** which is located at the periphery of the liquid crystal display panel is flat.

Classifications:

International (IPC 8-9): B32B15/06 B32B37/02 B32B37/12 B32B37/14 B32B38/06 B42D15/10 G02F1/13 G02F1/133 G02F1/1339 G02F1/1343 G02F1/1368 G06K19/02 G06K19/06 G06K5/00 G09F9/00 G09F9/30 H01L51/50 H05B33/02 H05B33/04 H05B33/10 H05B33/14 H05B33/22 H05B33/26 H05B33/28 H05K5/00 (Advanced/Invention);

G02F1/13 G09F9/30 H01L51/50 H05B33/02 H05B33/10 H05B33/14 H05B33/22 H05B33/26 H05K5/00 (Core/Invention)

CPC: G02F1/133345 G02F1/133351 G02F1/1362 G02F2001/133354 B32B2425/00 B42D25/00 G06K19/02 Y10T156/1039 Y10T442/124 B42D25/373 B42D25/369 B42D25/425 B42D25/435 B42D25/47 B42D25/475 G06K19/07728 B42D2033/10

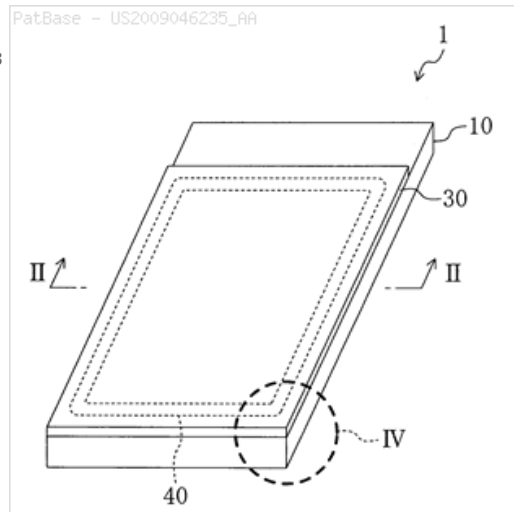
European: B42D15/10 G02F1/1333K G06K19/02 G06K19/077E5 L32B425/00 L42D33/10 S02F1/1333I S02F1/1333L S02F1/1362

US: 156/219 156/219S 235/380 235/487 235/487S 235/488 235/488P 235/492 235/493 313/498 313/498S 313/504 313/504P 349/138 349/139 349/153 349/153P 349/43 361/679.01 361/679.010S 442/15

JP F-Term: 2H088/FA06 2H088/FA26 2H088/HA01 2H088/HA02 2H088/HA08 2H088/MA20 2H092/2H092/GA61 2H092/JA26 2H092/JA46 2H092/KB14 2H092/NA25 2H092/NA29 2H092/PA01 2H192 2H192/AA24 2H192/BC31 2H192/CB05 2H192/EA22 2H192/EA32 2H192/EA43 2H192/EA67 2H192/EA68 2H192/GD25 2H192/GD75 2H192/HA93 2H192/JA02 5C094

5C094/AA31 5C094/AA42 5C094/BA03 5C094/BA43 5C094/CA19 5C094/DA13 5C094/EA04 5C094/EA10 5C094/FB12 5C094/GB10 2H090 2H090/JA11 2H090/JB02 2H090/JC12 2H090/JC13 2H090/LA01 2H190 2H190/JA11 2H190/JB02 2H190/JC12 2H190/JC13 2H190/LA01 3K107 3K107/AA01 3K107/AA05 3K107/BB01 3K107/BB06 3K107/BB07 3K107/CC43 3K107/CC45 3K107/DD12 3K107/DD39 3K107/DD90 3K107/FF15 3K107/GG52 5C094/BA27 5C094/EB02 5C094/FA01 5C094/FA10 5C094/JA08 2H088/FA01 2H088/FA07 2H088/FA16 2H088/FA28 2H088/HA04 2H088/HA12 2H088/HA14 2H189 2H189/CA10 2H189/CA18 2H189/CA21 2H189/CA23 2H189/CA25 2H189/CA27 2H189/DA83 2H189/DA88 2H189/EA03/Y 2H189/EA04/Y 2H189/FA52 2H189/FA56 2H189/FA79 2H189/HA12 2H189/LA01 2H189/LA03 2H189/LA06 2H189/LA10 2H189/LA14 2H189/LA15 5C094/AA36 5C094/BA75 5C094/HA08 2H189/DA82 2H189/FA25 5C094/AA43 5C094/AA46 5C094/AA49 5G435 5G435/AA17 5G435/BB05 5G435/BB12 5G435/CC09 5G435/KK05 5G435/KK10 2H189/CA26 5C094/DA07 2H088/FA03 2H092/GA29 2H092/JA28 2H092/JA34 2H092/JA37 2H092/JA41 2H092/JB57 2H092/JB58 2H092/PA04 2H092/PA08 2H092/PA09 5C094/DA15

JP F-Index: G02F1/13/101 G02F1/1368 G09F9/30/338 G02F1/1333/500 G09F9/30/310 G09F9/30/330/Z H05B33/02 H05B33/10 H05B33/14/A H05B33/14/Z H05B33/22/Z H05B33/26/Z G02F1/1339/505 G02F1/1333 G09F9/00/338 G09F9/30/349/Z G09F9/30/309

**Family:**

Publication number	Publication date	Application number	Application date
CN101233554 A	20080730	CN200680028024	20060913
CN101233554 B	20100818	CN200680028024	20060913
CN101620331 A	20100106	CN200910150580	20060913
CN101620331 B	20130123	CN200910150580	20060913
CN101620336 A	20100106	CN200910150581	20060913
CN101620336 B	20120523	CN200910150581	20060913
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US8079514 BB	20111220	US20110116922	20110526
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US8698987 BB	20140415	US20120454219	20120424
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Priority:

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Probable Assignee: SHARP KK

Assignee(s): (std): AMERICAN EXPRESS TRAVEL RELATE ; FUJIKAWA YOHISUKE ; GANDEL PRISCILLA ; ONISHI NORIAKI ; SHARP KK ; KOJIMA HIROAKI ; SHARP KK JP ; SHARP KABUSHIK KAISHA ; LASCH ELLEN ; MORRILL WEBB LISA ANN ; TAGUSA YASUNOBU ; TOMIOKA HIROAKI

Assignee(s): SHARP CORP ; SHARP KABUSHIKI KAISHA ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC

Inventor(s): (std): GANDEL PRISCILLA ; LASCH ELLEN ; MORRILL WEBB LISA ANN ; YOSUKE FUJIKAWA ; YOHISUKE FUJIKAWA ; YASUNOBU TAGUSA ; NORIAKI ONISHI ; HIROAKI TOMIOKA ; HIROAKI KOJIMA ; TOMIOKA HIROAKI ; TAGUSA YASUNOBU ; ONISHI NORIAKI ; KOJIMA HIROAKI ; FUJIKAWA YOHISUKE ; FUJIKAWA YOSUKE

Agent(s): TAKEUCHI YUJI ; MAEDA HIROSHI ; MAEDA AND PARTNERS ; SHARP C O KEATING AND BENNETT LLP ; KEATING AND BENNETT LLP ; SNELL AND WILMER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: TRANSPARENT **TRANSACTION CARD** WITH INFRARED BLOCKING **LAYER**

Abstract: The present invention relates to a process for producing an opaque, transparent or translucent **transaction card** having multiple features, such as a holographic foil, integrated circuit chip, silver magnetic stripe with text on the magnetic stripe, opacity gradient, an invisible optically recognizable compound, a translucent signature field such that the signature on back of the **card** is visible from the front of the **card** and an active thru date on the front of the **card**. The invisible optically recognizable compound is an infrared ink and/or film, which can be detected by a sensor found in an ATM or **card** assembly line.

Classifications:

International (IPC 8-9): B42D15/10 C09D11/02 G06K13/08
G06K19/02 G06K19/06 G06K19/07 G06K19/077 G06K19/08
G06K19/10 G06K19/16 G07D7/12 G07D9/00

G07G1/12 (Advanced/Invention);
C09D11/02 G06K19/06 G06K19/077 (Advanced/Non-invention);
B42D15/10 C09D11/02 G06K13/02 G06K19/02 G06K19/06
G06K19/07 G06K19/077 G06K19/08 G06K19/10 G06K19/14
G07D7/00 G07D9/00 G07G1/12 (Core/Invention);
G06K (Subclass/Invention)

International (IPC 1-7): B42D15/10 C09D11/02 G06K G06K19/02
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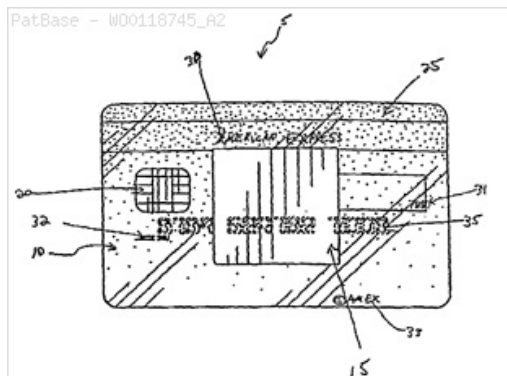
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European: B42D15/10 G06K13/08 G06K19/02 G06K19/07
G06K19/08 G06K19/16 L42D33/04 L42D33/06 L42D35/38

JP F-Term: 2C005/2C005/HA24 2C005/HB01 2C005/HB04

2C005/HB07 2C005/HB09 2C005/HB15 2C005/JA02 2C005/JA18
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G07G1/12/321/P



Family:

Publication number	Publication date	Application number	Application date
AT311634 E	20051215	AT20000961558T	20000905
AU200073498 A1	20010410	AU20000073498	20000905
AU200073498 A5	20010410	AU20000073498	20000905
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BRPI0014018 A	20020521	BR2000PI14018	20000905
CA2382882 AA	20020225	CA20002382882	20000905
CA2382882 C	20070424	CA20002382882	20000905
CN1235175 C	20060104	CN20008015251	20000905
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JP2003509231 T2	20030311	JP20010522486T	20000905
JP2009076057 A2	20090409	JP20080192047	20080725
MXPA02002446 A1	20040910	MX2002PA02446	20000905
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PL354415 A1	20040112	PL20000354415	20000905
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TW504647 B	20021001	TW20000118283	20001123
WO0118745 A2	20010315	WO2000US24371	20000905
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Priority:

US19990153112P 19990907 US19990160519P 19991020 US19990167405P 19991124
JP20010522486 20000905 JP20010522486T 20000905 WO2000US24371 20000905

Probable Assignee: AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY

Assignee(s): (std): AMERICAN EXPRESS TRAVEL RELATE ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COOMPANY ;
AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY I

Assignee(s): AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COOMPANY INC ; VIGILETTI JUDY ; WEBB LISA ; LASCH ELLEN ; FAENZA WILLIAM J JR ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY

Inventor(s): (std): FAENZA J ; FAENZA JR WILLIAM J ; FAENZA W J ; FAENZA WILLIAM J ; FAENZA WILLIAM J JR ; FAENZA WILLIAN J JR ; FAENZA JR ; L WEBB ET AL S ; LASCH ; LASCH E ; LASCH ELLEN ; LISA WEBB ; VIGILETTI ; VIGILETTI JUDY ; VILETTI JUDY ; WE LISA ; WEBB ; WEBB LISA ; WEBB W J FAENZA JR E LASCH L ; JR WILLIAM J FAENZA ; WILLIAM J FAENZA JR ; JUDY VIGILETTI ; ELLEN LASCH

Inventor(s): L WEBB ET AL ; WILLIAN J FAENZA JR ; WJ FAENZA ; E LASCH ; W J FAENZA ; W J FAENZA JR ; JR ; JR FAENZA ; FAENZA WILLIAM JJR

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; MCCARTHY TETRAULT LLP; REINHOLD COHN AND PARTNERS; AKIMOTO YOSHIO; MASUI CHUJI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; ONO SHINJIRO

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Title: TRANSACTION CARD

Abstract: The present invention relates to a process for producing a transparent or translucent transaction card having multiple features. An optically recognizable compound may be associated with a portion of the card for blocking infrared radiation and may comprise an infrared ink having nanocrystalline indium tin oxide particles. Moreover, a portion of the transaction card may include a second optically recognizable compound disposed thereon. The second optically recognizable compound may comprise an infrared phthalocyanine dye, an infrared phosphor, and a quantum dot energy transfer compound. The infrared ink may be detected by a sensor found in an ATM or card assembly line.

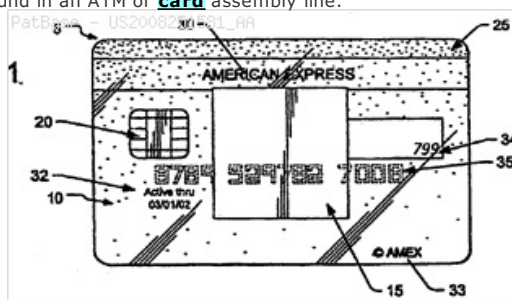
Classifications:

International (IPC 8-9): G06K19/00 G06K7/00 (Advanced/Invention); G06K19/00 G06K7/00 (Core/Invention)

CPC: B42D25/00 B42D25/351 B42D25/382 B41M3/14 B42D2033/04 B42D2033/20 B42D2033/30

European: B41M3/14 B42D15/10 L42D31/04 L42D33/20 L42D35/38

US: 235/435 235/435P 235/487 235/487S 235/488 235/491

**Family:**

Publication number	Publication date	Application number	Application date
US2008251581 AA	20081016	US20080124937	20080521
US8066190 BB	20111129	US20080124937	20080521

Priority:

US19990153112P 19990907	US19990160519P 19991020	US19990167405P 19991124
US19990171689P 19991221	US20000652899 20000831	US20000653837 20000901
US20020062106 20020131	US20020092681 20020307	US20030394914 20030321
US20070879468 20070717	US20080124937 20080521	

Probable Assignee: III HOLDINGS 1 LLC

Assignee(s): (std): AMERICAN EXPRESS TRAVEL RELATE ; FAENZA JR WILLIAM J

Assignee(s): III HOLDINGS 1 LLC ; LIBERTY PEAK VENTURES LLC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC A ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC A SUBSIDIARY OF AMERICAN EXPRESS CO ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC

Inventor(s): (std): FAENZA JR WILLIAM J ; FAENZA WILLIAM J

Agent(s): SNELL AND WILMER LLP AMEX; SNELL AND WILMER LLP

Title: TRANSACTION CARD

Abstract: The present invention relates to a process for producing a transparent or translucent transaction card having multiple features. An optically recognizable compound may be associated with a portion of the card for blocking infrared radiation and may comprise an infrared ink having nanocrystalline indium tin oxide particles. Moreover, a portion of the transaction card may include a second optically recognizable compound disposed thereon. The second optically recognizable compound may comprise an infrared phthalocyanine dye, an infrared phosphor, and a quantum dot energy transfer compound. The infrared ink may be detected by a sensor found in an ATM or card assembly line.

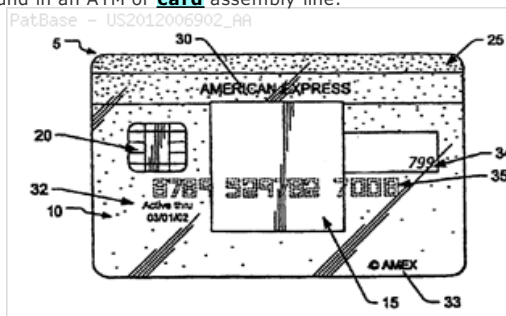
Classifications:

International (IPC 8-9): G06K19/00 G06K19/02 (Advanced/Invention); B82Y20/00 (Advanced/Non-invention)

CPC: B42D25/00 B42D25/351 B42D25/382 B41M3/14 B42D2033/04 B42D2033/20 B42D2033/30

European: B41M3/14 B42D15/10 L42D31/04 L42D33/20 L42D35/38

US: 235/487 235/487S 235/488 235/488P 235/491 977/774 977/774S

**Family:**

Publication number	Publication date	Application number	Application date
US2012006902 AA	20120112	US20110244193	20110923
US8186598 BB	20120529	US20110244193	20110923

Priority:

US20070879468 20070717 US20080124937 20080521 US20110244193 20110923

Probable Assignee: III HOLDINGS 1 LLC

Assignee(s): (std): AMERICAN EXPRESS TRAVEL RELATE ; FAENZA JR WILLIAM J

Assignee(s): III HOLDINGS 1 LLC ; LIBERTY PEAK VENTURES LLC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC

Inventor(s): (std): FAENZA JR WILLIAM J

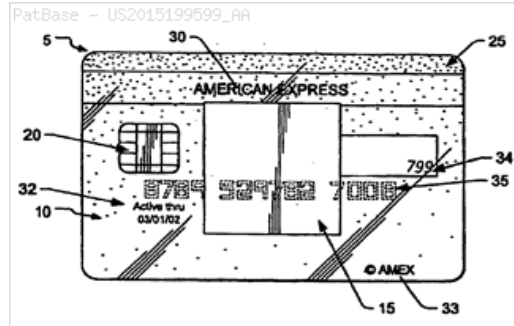
Agent(s): SNELL AND WILMER LLP

Title: TRANSACTION CARD

Abstract: The present invention relates to a process for producing an opaque, transparent or translucent transaction card having multiple features, such as a holographic foil, integrated circuit chip, silver magnetic stripe with text on the magnetic stripe, opacity gradient, an invisible optically recognizable compound, a translucent signature field such that the signature on back of the card is visible from the front of the card and an active thru date on the front of the card. The invisible optically recognizable compound is preferably an infrared ink comprising an infrared phthalocyanine dye, an infrared phosphor, and a quantum dot energy transfer compound. The infrared ink can be detected by a sensor found in an ATM or card assembly line.

Classifications:

International (IPC 8-9): B32B37/02 B32B38/00 B41M3/14 B42D25/00 B42D25/378 B42D25/382 B42D25/45 C09D11/037 C09D11/32 C09D11/50 G06K19/00 G06K19/02 (Advanced/Invention) G06K19/02 G06K19/022 B32B37/02 B32B2307/412 B32B2307/422 B32B2327/06 B32B2425/00 B42D2033/04 B42D2033/14 B42D2033/30 B42D2033/44 B41M3/14 B42D25/00 B42D2033/20 C09D11/037 C09D11/32 C09D11/50 B32B38/145 B42D25/378 B42D25/382 B42D25/45 B42D25/351 B42D2035/34
US: 156/67 235/488

**Family:**

Publication number	Publication date	Application number	Application date
US2015199599 AA	20150716	US20150595087	20150112
US9519851 BB	20161213	US20150595087	20150112

Priority:

US19990153112P 19990907	US19990160519P 19991020	US19990167405P 19991124
US19990171689P 19991221	US20000653837 20000901	US20020062106 20020131
US20020092681 20020307	US20030394914 20030321	US20070879468 20070717
US20100907358 20101019	US20120469752 20120511	US20150595087 20150112

Probable Assignee: III HOLDINGS 1 LLC

Assignee(s): (std): III HOLDINGS 1 LLC

Assignee(s): LIBERTY PEAK VENTURES LLC

Inventor(s): (std): FAENZA WILLIAM J ; MORRILL WEB LISA ANN

Agent(s): MEYERTONS HOOD KIVLIN KOWERT AND GOETZEL PC

Title: TRANSACTION CARD

Abstract: The present invention relates to a process for producing an opaque, transparent or translucent transaction card having multiple features, such as a holographic foil, integrated circuit chip, silver magnetic stripe with text on the magnetic stripe, opacity gradient, an invisible optically recognizable compound, a translucent signature field such that the signature on back of the card is visible from the front of the card and an active thru date on the front of the card. The invisible optically recognizable compound is an infrared ink and/or film, which can be detected by a sensor found in an ATM or card assembly line.

Classifications:

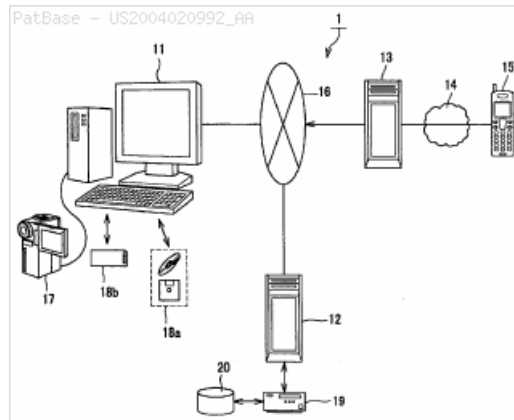
International (IPC 8-9): B42D15/10 G06K13/08 G06K19/00
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G06K7/00 G06K7/08 G06K7/10 G06Q20/00
G07F7/08 (Advanced/Invention)

International (IPC 1-7): G06K19/00

CPC: B42D25/00 B42D25/382 B32B2305/22 B32B2305/28
B32B2309/02 B32B2309/12 B32B2310/0831 G06K7/0008
G06K7/0013 G06K7/084 G06K7/10 G06K13/08 G06K19/02
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B42D25/328 B42D25/47 B32B37/10 B32B38/145 G03H2250/12
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European: B32B37/10 B42D15/10 G06K13/08 G06K19/02
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US: 235/487 235/487P 235/488 235/491 235/494 902/25

**Family:**

Publication number	Publication date	Application number	Application date
US2004020992 AA	20040205	US20030394914	20030321
US7377443 BB	20080527	US20030394914	20030321

Priority:

US19990153112P 19990907	US19990160519P 19991020	US19990167405P 19991124
US19990171689P 19991221	US20000653837 20000901	US20020062106 20020131
US20020092681 20020307	US20030394914 20030321	

Probable Assignee: III HOLDINGS 1 LLC

Assignee(s): (std): AMERICAN EXPRESS TRAVEL RELATE ; FAENZA WILLIAM J ; LASCH ELLEN ; VIGILETTI JUDY ; WEBB LISA

Assignee(s): LIBERTY PEAK VENTURES LLC ; III HOLDINGS 1 LLC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC

Inventor(s): (std): FAENZA JR WILLIAM J ; FAENZA WILLIAM J ; LASCH ELLEN ; VIGILETTI JUDY ; WEBB LISA

Agent(s): SNELL AND WILMER LLP

Title: TRANSACTION CARD

Abstract: The present invention relates to a process for producing an opaque, transparent or translucent transaction card having multiple features, such as a holographic foil, integrated circuit chip, silver magnetic stripe with text on the magnetic stripe, opacity gradient, an invisible optically recognizable compound, a translucent signature field such that the signature on back of the card is visible from the front of the card and an active thru date on the front of the card. The invisible optically recognizable compound is preferably an infrared ink comprising an infrared phthalocyanine dye, an infrared phosphor, and a quantum dot energy transfer compound. The infrared ink can be detected by a sensor found in an ATM or card assembly line.

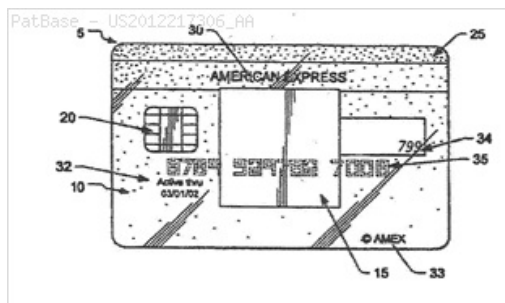
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International (IPC 8-9): B32B38/14 B41M3/14 B42D25/00 C09D11/037 C09D11/32 C09D11/50 G06K19/00 G06K19/02 G06K19/06 (Advanced/Invention); B32B38/00 B82Y10/00 B82Y20/00 B82Y30/00 (Advanced/Non-invention)

CPC: B42D15/10 B42D2035/38 B42D2031/20 B32B2425/00 B41M3/14 B42D25/00 B42D2033/04 B42D2033/20 C09D11/037 C09D11/32 C09D11/50 G06K19/02 B32B37/02 B32B38/145 B32B2307/412 B32B2307/422 B32B2327/06 B42D25/378 B42D25/382 B42D25/45 G06K19/022 B42D25/351 B42D2033/14 B42D2033/30 B42D2033/44 B42D2035/34

European: B41M3/14 B42D15/10 L42D31/04 L42D33/20 L42D35/38

US: 156/67 156/67S 235/487 235/487S 235/488 235/488P 235/491 235/491S 977/774 977/774S 977/902 977/902S

**Family:**

Publication number	Publication date	Application number	Application date
US2012217306 AA	20120830	US20120469752	20120511
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Priority:

US19990153112P 19990907	US19990160519P 19991020	US19990167405P 19991124
US19990171689P 19991221	US20000653837 20000901	US20020062106 20020131
US20020092681 20020307	US20030394914 20030321	US20070879468 20070717
US20100907358 20101019	US20120469752 20120511	

Probable Assignee: III HOLDINGS 1 LLC

Assignee(s): (std): FAENZA JR WILLIAM J ; III HOLDINGS 1 LLC ; MORRILL WEBB LISA ANN ; AMERICAN EXPRESS TRAVEL RELATE

Assignee(s): AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC ; LIBERTY PEAK VENTURES LLC

Inventor(s): (std): FAENZA JR WILLIAM J ; MORRILL WEBB LISA ANN

Agent(s): MEYERTONS HOOD KIVLIN KOWERT AND GOETZEL PC

Title: TRANSACTION CARD

Abstract: The present invention relates to a process for producing an opaque, transparent or translucent transaction card having multiple features, such as a holographic foil, integrated circuit chip, silver magnetic stripe with text on the magnetic stripe, opacity gradient, an invisible optically recognizable compound, a translucent signature field such that the signature on back of the card is visible from the front of the card and an active thru date on the front of the card. The invisible optically recognizable compound is an infrared ink and/or film, which can be detected by a sensor found in an ATM or card assembly line.

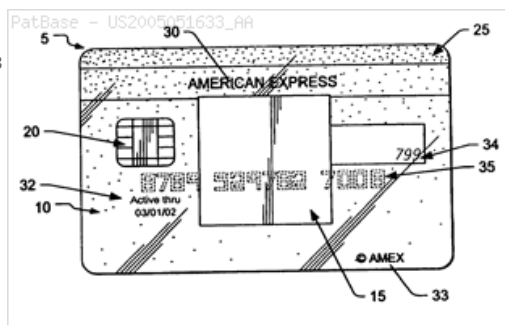
Classifications:

International (IPC 8-9): B42D15/10 G06K13/08 G06K19/02
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G06K7/10 G06Q20/00 G07F7/08 (Advanced/Invention)

International (IPC 1-7): G06K19/00

CPC: B32B2305/22 B32B2305/28 B32B2309/02 B32B2309/12
B32B2310/0831 B42D25/00 B42D25/382 G06K7/0008 G06K7/0013
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B42D2033/06 B32B2425/00

European: B32B37/10 B42D15/10 G06K13/08 G06K19/02
G06K19/07 G06K19/077 G06K19/07T G06K19/08 G06K19/16
G06K7/00E G06K7/00K G06K7/08C2D G06K7/10 G06Q20/00
G06Q20/14 G07F7/08 G07F7/08A4 L32B305/22 L32B305/28
L32B309/02 L32B309/12 L32B310/08B4 L32B38/14A L42D33/04 L42D33/06 L42D35/38 S03H250/12
US: 235/487 235/487P

**Family:**

Publication number	Publication date	Application number	Application date
US2005051633 AA	20050310	US20040898078	20040723

Priority:

US19990153112P 19990907	US19990160519P 19991020	US19990167405P 19991124
US19990171689P 19991221	US20000652899 20000831	US20000653837 20000901
US20020062106 20020131	US20020092681 20020307	US20030394914 20030321
US20040898078 20040723		

Probable Assignee: AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC

Assignee(s): (std): FAENZA WILLIAM J ; LASCH ELLEN ; VIGILETTI JUDY ; WEBB LISA

Assignee(s): LIBERTY PEAK VENTURES LLC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC

Inventor(s): (std): FAENZA WILLIAM J ; LASCH ELLEN ; VIGILETTI JUDY ; WEBB LISA

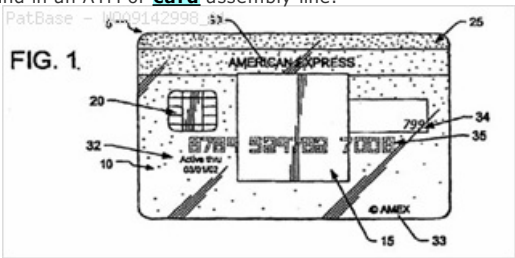
Inventor(s): FAENZA WILLIAM

Agent(s): MCDERMOTT WILL AND EMERY LLP

Title: TRANSACTION CARD

Abstract: The present invention relates to a process for producing a transparent or translucent transaction card having multiple features. An optically recognizable compound may be associated with a portion of the card for blocking infrared radiation and may comprise an infrared ink having nanocrystalline indium tin oxide particles. Moreover, a portion of the transaction card may include a second optically recognizable compound disposed thereon. The second optically recognizable compound may comprise an infrared phthalocyanine dye, an infrared phosphor, and a quantum dot energy transfer compound. The infrared ink may be detected by a sensor found in an ATM or card assembly line.

Classifications:
International (IPC 8-9): G06K7/00 (Advanced/Invention);
G06K7/00 (Core/Invention)
CPC: B42D25/00 B42D25/382 B41M3/14 B42D25/351 B42D2033/04
B42D2033/20 B42D2033/30
European: B41M3/14 B42D15/10 L42D31/04 L42D33/20 L42D35/38



Family:

Publication number	Publication date	Application number	Application date
WO09142998 A1	20091126	WO2009US44075	20090515

Priority:

US20080124937 20080521

Probable Assignee: AMERICAN EXPRESS TRAVEL RELATE

Assignee(s): (std): AMERICAN EXPRESS TRAVEL RELATE ; FAENZA WILLIAM J

Assignee(s): AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANYINC

Inventor(s): (std): FAENZA WILLIAM J

Agent(s): SOBELMAN HOWARD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: INFORMATION **CARD**

Abstract: An information **card** for credit and accounting system having a monolithic or solid state memory for storage of information responsive to computer controlled systems.

Classifications:

International (IPC 8-9): G06K19/00 G06K19/077 G07F7/08
G11C11/36 G11C17/00 H01L21/60 H01L23/498

H01L27/00 (Advanced/Invention);

G06K19/00 G06K19/077 G07F7/08 G11C11/36 G11C17/00

H01L21/02 H01L23/48 H01L27/00 (Core/Invention)

International (IPC 1-7): B42D15/02 G06K19/00 G06K7/00 G07D7/00
G11C11/36 G11C17/00

CPC: H01L2924/10253 H01L23/49855 G05B2219/36106

G06K19/07743 G06K19/07745 G07F7/0866 H01L24/81 H01L27/00

H01L2224/81801 H01L2924/01005 H01L2924/01006 H01L2924/01013

H01L2924/01019 H01L2924/01021 H01L2924/01029 H01L2924/01033

H01L2924/01056 H01L2924/01074 H01L2924/01075 H01L2924/01079

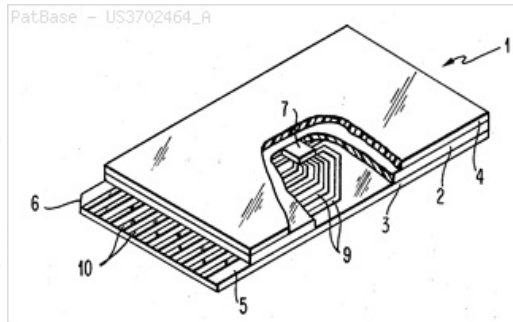
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Probable Assignee: IBM

Assignee(s): (std): IBM

Assignee(s): IBM CORP ; INT BUSINESS MACHINES CORP ; INTERN BUSINESS MACHINES CORP ; CASTRUCCI PAUL P

Inventor(s): (std): CASTRUCCI PAUL P ; PHILLIP CASTRUCCI PAUL

Inventor(s): PAUL P CASTRUCCI