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Mullen et al.

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(54) **INTERACTIVE ELECTRONIC CARD WITH
BUTTONS**

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(*) Notice: This patent is subject to a terminal disclaimer.

(**) Term: **14 Years**

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(52) **U.S. Cl.**
USPC **D19/10**

(58) **Field of Classification Search**
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40/672, 661, 726, 776; 283/72, 74-75, 103,
283/105-107, 82, 70, 904; 206/449; D21/385;
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360/2; 235/380, 382

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,353,064 A	10/1982	Stamm
4,394,654 A	7/1983	Hofmann-Cerfontaine
4,614,861 A	9/1986	Pavlov et al.
4,667,087 A	5/1987	Quintana
4,701,601 A	10/1987	Francini et al.
4,720,860 A	1/1988	Weiss
4,786,791 A	11/1988	Hodama
4,791,283 A	12/1988	Burkhardt
4,797,542 A	1/1989	Hara
5,038,251 A	8/1991	Sugiyama et al.
5,168,520 A	12/1992	Weiss
5,237,614 A	8/1993	Weiss

5,276,311 A	1/1994	Hennige
5,347,580 A	9/1994	Molva et al.
5,361,062 A	11/1994	Weiss et al.
5,412,199 A	5/1995	Finkelstein et al.
5,434,398 A	7/1995	Goldberg
5,434,405 A	7/1995	Finkelstein et al.

(Continued)

FOREIGN PATENT DOCUMENTS

JP	05210770 A	8/1993
WO	WO9852735	11/1998

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 60/594,300, Poidomani et al.

(Continued)

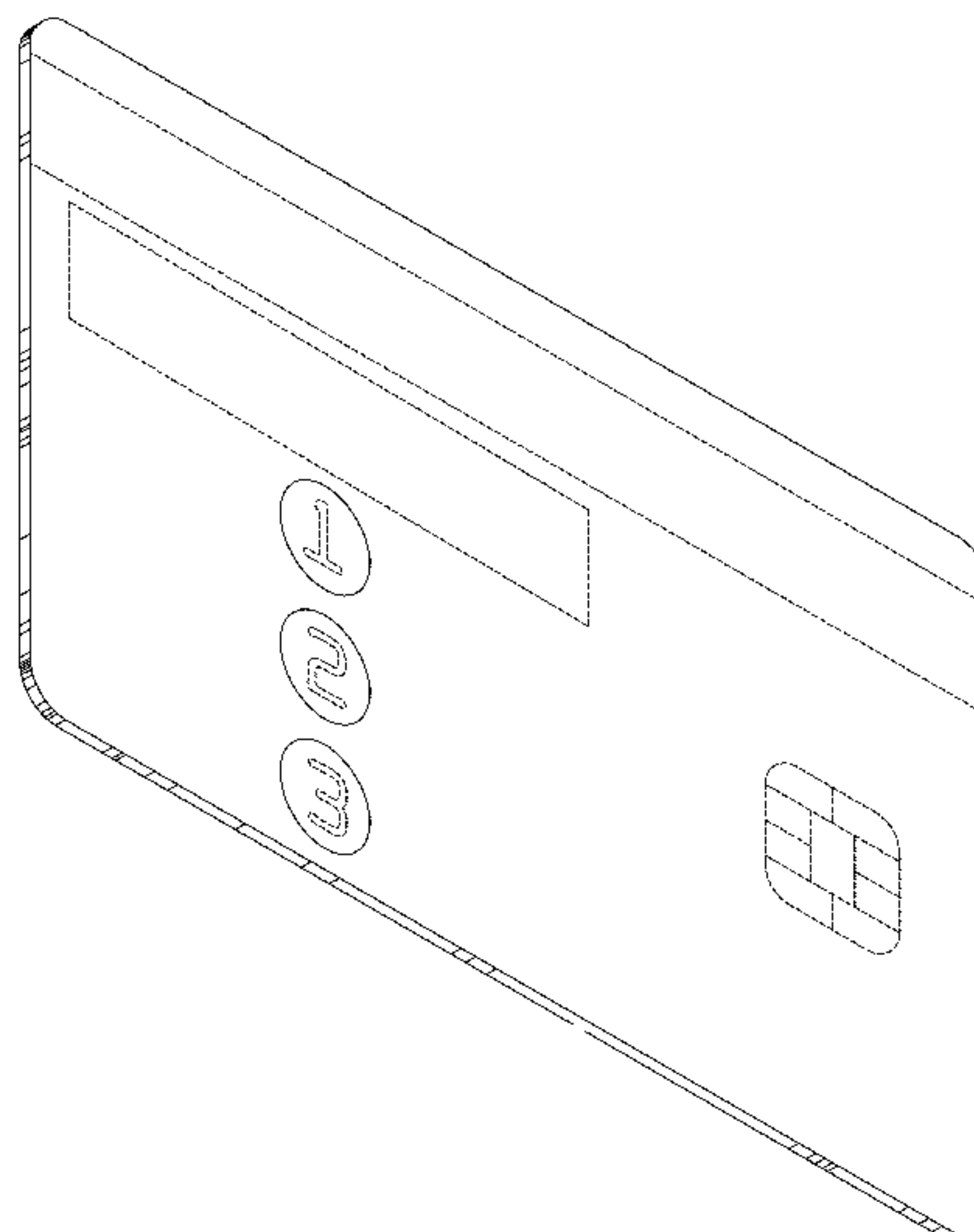
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(57) **CLAIM**
The ornamental design for an interactive electronic card with buttons, as shown and described.

DESCRIPTION

FIG. 1 is a back, bottom, and left side perspective view of our new design for an interactive electronic card with buttons; FIG. 2 is a back, top, and left side perspective view thereof; FIG. 3 is a front side view thereof; FIG. 4 is a back side view thereof; FIG. 5 is a top side view thereof; FIG. 6 is a bottom side view thereof; FIG. 7 is a left side view thereof; and, FIG. 8 is a right side view thereof. The broken lines showing environment in the drawings are for illustrative purposes only and form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,478,994 A	12/1995	Rahman	7,140,550 B2	11/2006	Ramachandran
5,479,512 A	12/1995	Weiss	7,163,153 B2	1/2007	Blossom
5,484,997 A	1/1996	Haynes	7,195,154 B2	3/2007	Routhenstein
5,485,519 A	1/1996	Weiss	7,197,639 B1	3/2007	Juels et al.
5,585,787 A	12/1996	Wallerstein	7,219,368 B2	5/2007	Juels et al.
5,591,949 A	1/1997	Bernstein	7,225,537 B2	6/2007	Reed
5,608,203 A	3/1997	Finkelstein et al.	7,225,994 B2	6/2007	Finkelstein
5,623,552 A	4/1997	Lane	7,246,752 B2	7/2007	Brown
5,657,388 A	8/1997	Weiss	7,298,243 B2	11/2007	Juels et al.
5,834,747 A	11/1998	Cooper	7,334,732 B2	2/2008	Cooper
5,834,756 A	11/1998	Gutman et al.	7,337,326 B2	2/2008	Palmer et al.
5,856,661 A	1/1999	Finkelstein et al.	7,346,775 B2	3/2008	Gasparini et al.
5,864,623 A	1/1999	Messina et al.	7,356,696 B1	4/2008	Jakobsson et al.
5,907,142 A	5/1999	Kelsey	7,357,319 B1	4/2008	Liu et al.
5,913,203 A	6/1999	Wong et al.	7,359,507 B2	4/2008	Kaliski
5,937,394 A	8/1999	Wong et al.	7,360,688 B1	4/2008	Harris
5,955,021 A	9/1999	Tiffany, III	7,363,494 B2	4/2008	Brainard et al.
5,956,699 A	9/1999	Wong et al.	7,380,710 B2	6/2008	Brown
6,025,054 A	2/2000	Tiffany, III	7,398,253 B1	7/2008	Pinnell
6,045,043 A	4/2000	Bashan et al.	7,404,087 B2	7/2008	Teunen
6,076,163 A	6/2000	Hoffstein et al.	7,424,570 B2	9/2008	D'Albore et al.
6,085,320 A	7/2000	Kaliski	7,427,033 B1	9/2008	Roskind
6,095,416 A	8/2000	Grant et al.	7,454,349 B2	11/2008	Teunen et al.
6,130,621 A	10/2000	Weiss	7,461,250 B1	12/2008	Duane et al.
6,145,079 A	11/2000	Mitty et al.	7,461,399 B2	12/2008	Juels et al.
6,157,920 A	12/2000	Jakobsson et al.	7,472,093 B2	12/2008	Juels
6,161,181 A	12/2000	Haynes, III et al.	7,472,829 B2	1/2009	Brown
6,176,430 B1	1/2001	Finkelstein et al.	7,494,055 B2	2/2009	Fernandes et al.
6,182,894 B1	2/2001	Hackett et al.	7,502,467 B2	3/2009	Brainard et al.
6,189,098 B1	2/2001	Kaliski	7,502,933 B2	3/2009	Jakobsson et al.
6,199,052 B1	3/2001	Mitty et al.	7,503,485 B1	3/2009	Routhenstein
6,206,293 B1	3/2001	Gutman et al.	7,516,492 B1	4/2009	Nisbet et al.
6,240,184 B1	5/2001	Huynh et al.	7,523,301 B2	4/2009	Nisbet et al.
6,241,153 B1	6/2001	Tiffany, III	7,530,495 B2	5/2009	Cooper
6,256,873 B1	7/2001	Tiffany, III	7,532,104 B2	5/2009	Juels
6,269,163 B1	7/2001	Rivest et al.	7,543,739 B2	6/2009	Brown et al.
6,286,022 B1	9/2001	Kaliski et al.	7,559,464 B2	7/2009	Routhenstein
6,308,890 B1	10/2001	Cooper	7,562,221 B2	7/2009	Nystrom et al.
6,313,724 B1	11/2001	Osterweil	7,562,222 B2	7/2009	Gasparini et al.
6,389,442 B1	5/2002	Yin et al.	7,580,898 B2	8/2009	Brown et al.
6,393,447 B1	5/2002	Jakobsson et al.	7,584,153 B2	9/2009	Brown et al.
6,411,715 B1	6/2002	Liskov et al.	7,591,426 B2	9/2009	Osterweil et al.
6,446,052 B1	9/2002	Juels	7,591,427 B2	9/2009	Osterweil
6,460,141 B1	10/2002	Olden	7,602,904 B2	10/2009	Juels et al.
6,592,044 B1	7/2003	Wong et al.	7,631,804 B2	12/2009	Brown
6,607,127 B2	8/2003	Wong	7,639,537 B2	12/2009	Sepe et al.
6,609,654 B1	8/2003	Anderson et al.	7,641,124 B2	1/2010	Brown et al.
6,631,849 B2	10/2003	Blossom	7,660,902 B2	2/2010	Graham et al.
6,655,585 B2	12/2003	Shinn	7,828,207 B2	11/2010	Cooper
6,681,988 B2	1/2004	Stack et al.	D651,238 S *	12/2011	Mullen et al. D19/10
6,705,520 B1	3/2004	Pitroda et al.	D652,867 S *	1/2012	Mullen et al. D19/10
6,755,341 B1	6/2004	Wong et al.	D653,288 S *	1/2012	Mullen et al. D19/10
6,764,005 B2	7/2004	Cooper	D666,241 S *	8/2012	Mullen et al. D19/10
6,769,618 B1	8/2004	Finkelstein	D667,495 S *	9/2012	Bender D19/10
6,805,288 B2	10/2004	Routhenstein et al.	2001/0034702 A1	10/2001	Mockett et al.
6,811,082 B2	11/2004	Wong	2001/0047335 A1	11/2001	Arndt et al.
6,813,354 B1	11/2004	Jakobsson et al.	2002/0059114 A1	5/2002	Cockrill et al.
6,817,532 B2	11/2004	Finkelstein	2002/0082989 A1	6/2002	Fife et al.
6,873,974 B1	3/2005	Schutzer	2002/0096570 A1	7/2002	Wong et al.
6,902,116 B2	6/2005	Finkelstein	2002/0120583 A1	8/2002	Keresman, III et al.
6,970,070 B2	11/2005	Juels et al.	2003/0034388 A1	2/2003	Routhenstein et al.
6,980,969 B1	12/2005	Tuchler et al.	2003/0052168 A1	3/2003	Wong
6,985,583 B1	1/2006	Brainard et al.	2003/0057278 A1	3/2003	Wong
6,991,155 B2	1/2006	Burchette, Jr.	2003/0116635 A1	6/2003	Taban
7,013,030 B2	3/2006	Wong et al.	2003/0152253 A1	8/2003	Wong
7,035,443 B2	4/2006	Wong	2003/0163287 A1	8/2003	Vock et al.
7,039,223 B2	5/2006	Wong	2003/0173409 A1	9/2003	Vogt et al.
7,044,394 B2	5/2006	Brown	2003/0179909 A1	9/2003	Wong et al.
7,051,929 B2	5/2006	Li	2003/0179910 A1	9/2003	Wong
7,083,094 B2	8/2006	Cooper	2003/0226899 A1	12/2003	Finkelstein
7,100,049 B2	8/2006	Gasparini et al.	2004/0035942 A1	2/2004	Silverman
7,100,821 B2	9/2006	Rasti	2004/0133787 A1	7/2004	Doughty
7,111,172 B1	9/2006	Duane et al.	2004/0162732 A1	8/2004	Rahim et al.
7,114,652 B2	10/2006	Moullette et al.	2004/0172535 A1	9/2004	Jakobsson
7,136,514 B1	11/2006	Wong	2004/0177045 A1	9/2004	Brown
			2005/0043997 A1	2/2005	Sahota et al.
			2005/0080747 A1	4/2005	Anderson et al.
			2005/0086160 A1	4/2005	Wong et al.
			2005/0086177 A1	4/2005	Anderson et al.

2005/0116026 A1 6/2005 Burger et al.
2005/0119940 A1 6/2005 Concilio et al.
2005/0154643 A1 7/2005 Doan et al.
2005/0228959 A1 10/2005 D’Albore et al.
2006/0000900 A1 1/2006 Fernandes et al.
2006/0037073 A1 2/2006 Juels et al.
2006/0041759 A1 2/2006 Kaliski et al.
2006/0085328 A1 4/2006 Cohen et al.
2006/0091223 A1 5/2006 Zellner et al.
2006/0161435 A1 7/2006 Atef et al.
2006/0163353 A1 7/2006 Moulette et al.
2006/0174104 A1 8/2006 Crichton et al.
2006/0196931 A1 9/2006 Holtmanns et al.
2006/0256961 A1 11/2006 Brainard et al.
2007/0034700 A1 2/2007 Poidomani et al.
2007/0114274 A1 5/2007 Gibbs et al.
2007/0124321 A1 5/2007 Szydlo
2007/0152070 A1 7/2007 D’Albore
2007/0152072 A1 7/2007 Frallicciardi et al.
2007/0153487 A1 7/2007 Frallicciardi et al.
2007/0174614 A1 7/2007 Duane et al.
2007/0192249 A1 8/2007 Biffle et al.
2007/0241183 A1 10/2007 Brown et al.
2007/0241201 A1 10/2007 Brown et al.
2007/0256123 A1 11/2007 Duane et al.
2007/0291753 A1 12/2007 Romano
2008/0005510 A1 1/2008 Sepe et al.
2008/0008315 A1 1/2008 Fontana et al.
2008/0008322 A1 1/2008 Fontana et al.
2008/0010675 A1 1/2008 Massascusa et al.
2008/0016351 A1 1/2008 Fontana et al.
2008/0019507 A1 1/2008 Fontana et al.
2008/0028447 A1 1/2008 O’Malley et al.
2008/0040271 A1 2/2008 Hammad et al.
2008/0040276 A1 2/2008 Hammad et al.
2008/0058016 A1 3/2008 Di Maggio et al.
2008/0059379 A1 3/2008 Ramaci et al.
2008/0096326 A1 4/2008 Reed
2008/0126398 A1 5/2008 Cimino
2008/0128515 A1 6/2008 Di Iorio

2008/0148394 A1 6/2008 Poidomani et al.
2008/0201264 A1 8/2008 Brown et al.
2008/0209550 A1 8/2008 Di Iorio
2008/0288699 A1 11/2008 Chichierchia
2008/0294930 A1 11/2008 Varone et al.
2008/0302877 A1 12/2008 Musella et al.
2009/0013122 A1 1/2009 Sepe et al.
2009/0036147 A1 2/2009 Romano
2009/0046522 A1 2/2009 Sepe et al.
2009/0108064 A1 4/2009 Fernandes et al.
2009/0150295 A1 6/2009 Hatch et al.
2009/0152365 A1 6/2009 Li et al.
2009/0242648 A1 10/2009 Di Sirio et al.
2009/0244858 A1 10/2009 Di Sirio et al.
2009/0253460 A1 10/2009 Varone et al.
2009/0255996 A1 10/2009 Brown et al.
2009/0290704 A1 11/2009 Cimino
2009/0303885 A1 12/2009 Longo
2011/0028184 A1 2/2011 Cooper

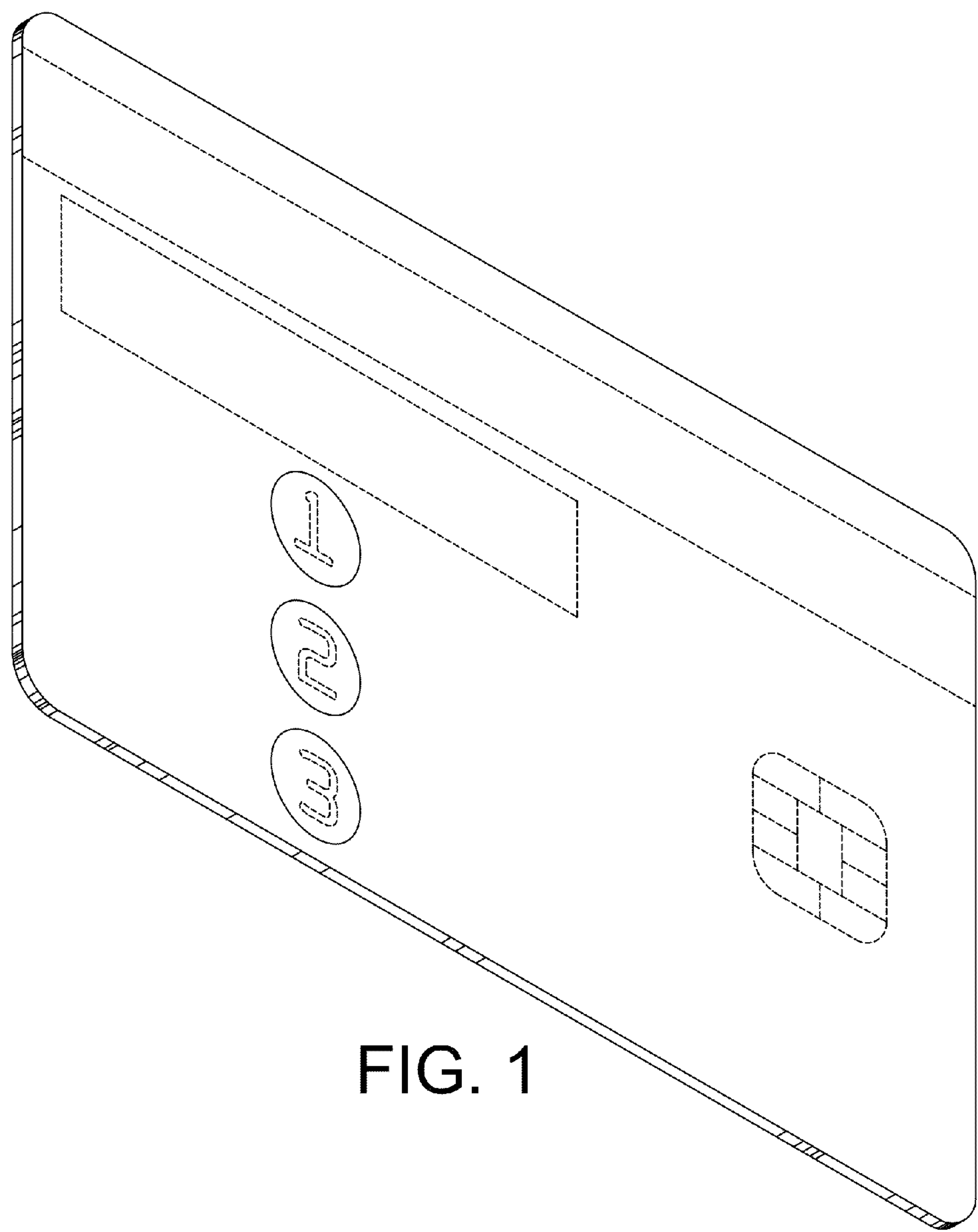
FOREIGN PATENT DOCUMENTS

WO	WO0247019	6/2002
WO	WO06066322	6/2006
WO	WO06080929	8/2006
WO	WO06105092	10/2006
WO	WO06116772	11/2006
WO	WO08064403	6/2008

OTHER PUBLICATIONS

U.S. Appl. No. 60/675,388, Poidomani et al.
The Bank Credit Card Business. Second Edition, American Bankers Association, Washington, D.C., 1996.
A Day in the Life of a Flux Reversal. <http://www.phrack.org/issues.html?issue=37&id=6#article>. As viewed on Apr. 12, 2010.
Dynamic Virtual Credit Card Numbers. <http://homes.cerias.purdue.edu/~jtl/paper/fc07.pdf>. As viewed on Apr. 12, 2010.
English translation of JP 05210770 A.

* cited by examiner



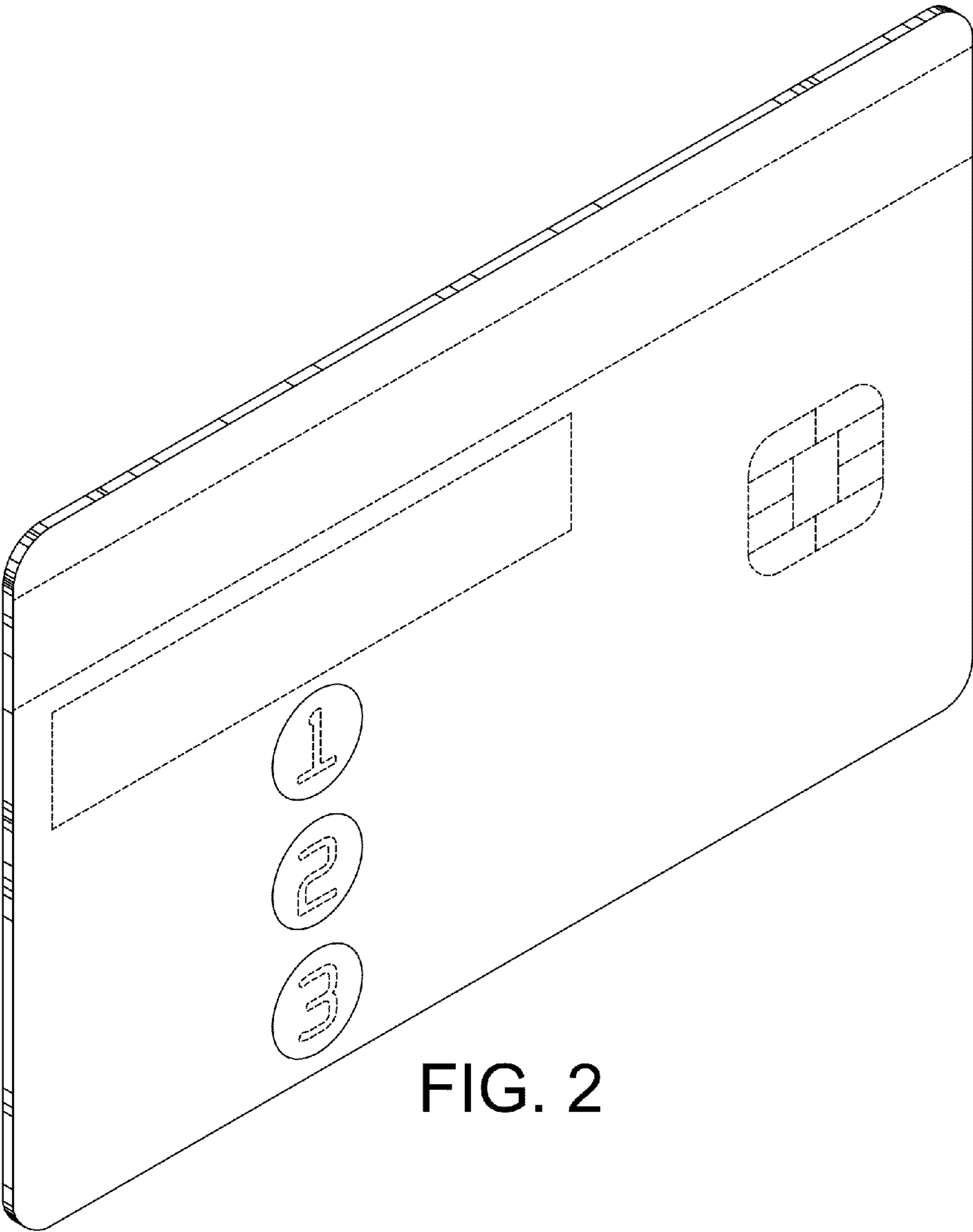


FIG. 2



FIG. 3

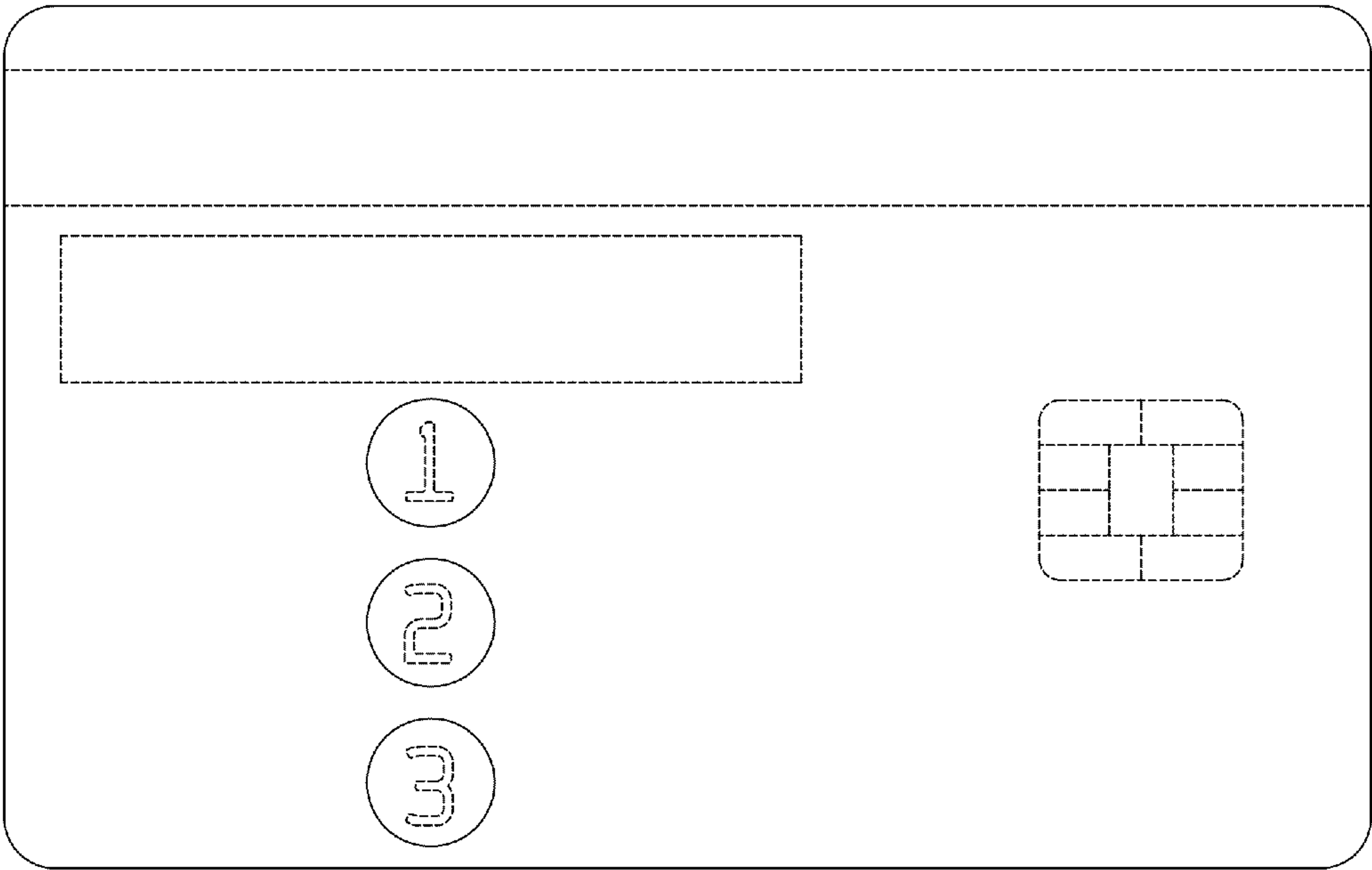


FIG. 4

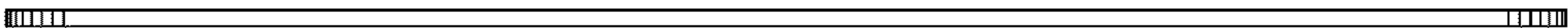


FIG. 5

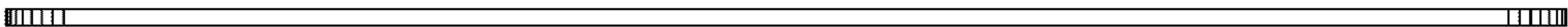


FIG. 6



FIG. 7



FIG. 8