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(12) **United States Design Patent**  
**Mullen et al.**

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(54) **INTERACTIVE ELECTRONIC CARD WITH DISPLAY AND BUTTON**

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

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(Continued)

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FOREIGN PATENT DOCUMENTS

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

JP 05210770 A 8/1993  
WO WO9852735 11/1998

(Continued)

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

OTHER PUBLICATIONS

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(51) **LOC (9) Cl.** ..... **19-08**

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

(58) **Field of Classification Search**  
USPC ..... D19/1-12, 20-34; 40/124.01-124.15,  
40/661, 672, 726, 776; 283/72, 74-75,  
283/103, 105-107, 82, 70, 904; D21/385;  
D20/10-1, 22, 27, 40, 42;  
D14/435-437; 360/2; 235/380, 382  
See application file for complete search history.

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

**DESCRIPTION**

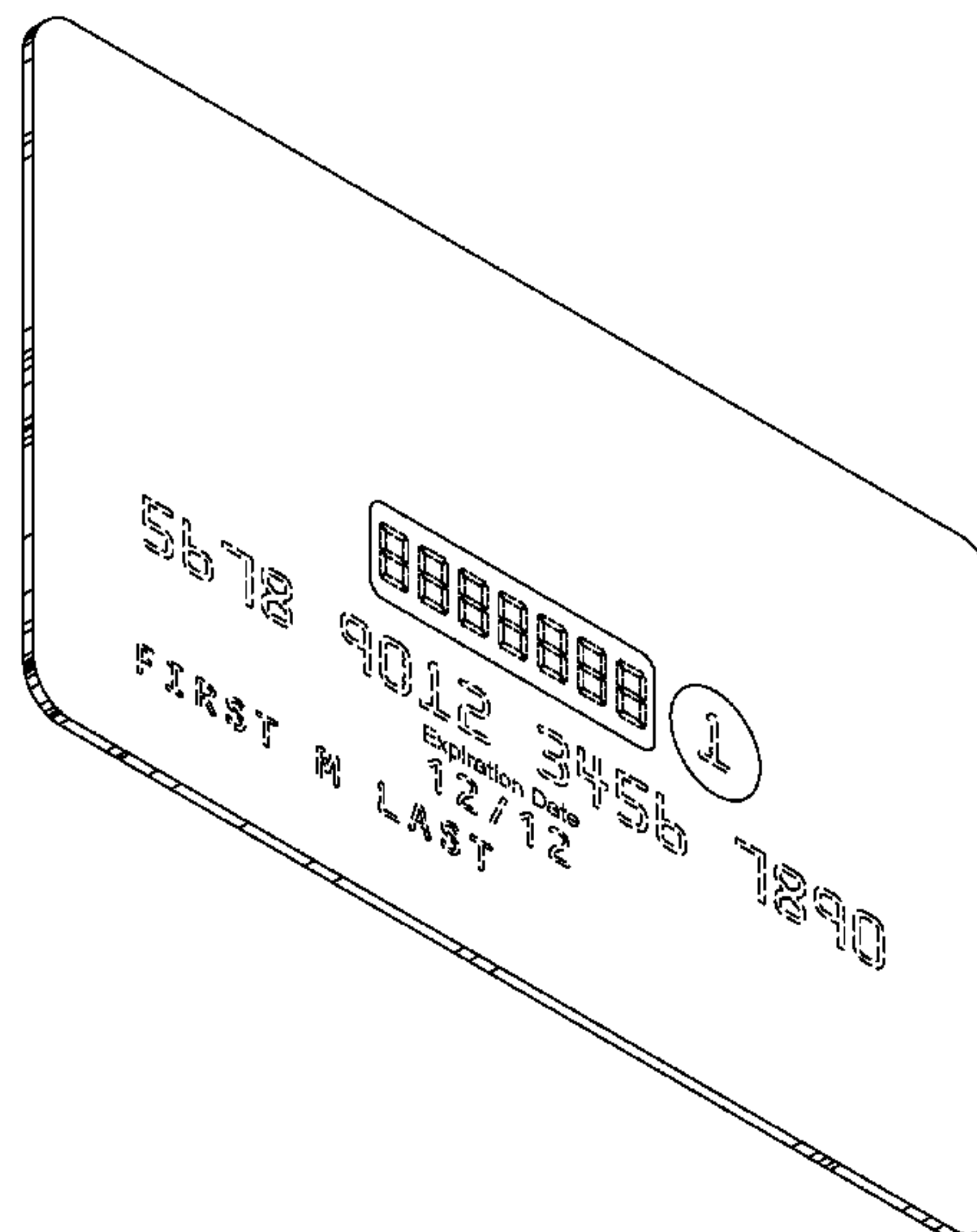
FIG. 1 is a front, bottom, and left side perspective view of our new design for an interactive electronic card with display and button;  
FIG. 2 is a front, top, and left side perspective view thereof;  
FIG. 3 is a front side view thereof;  
FIG. 4 is a back side view thereof;  
FIG. 5 is a top side 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.

(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

**1 Claim, 5 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

5,434,405	A	7/1995	Finkelstein et al.	7,136,514	B1	11/2006	Wong
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	Lin 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.	D651,237	S *	12/2011	Mullen et al. .... D19/10
6,705,520	B1	3/2004	Pitroda et al.	D652,075	S *	1/2012	Mullen et al. .... D19/10
6,755,341	B1	6/2004	Wong et al.	D652,076	S *	1/2012	Mullen et al. .... D19/10
6,764,005	B2	7/2004	Cooper	D652,448	S *	1/2012	Mullen et al. .... D19/10
6,769,618	B1	8/2004	Finkelstein	D653,288	S *	1/2012	Mullen et al. .... D19/10
6,805,288	B2	10/2004	Routhenstein et al.	D670,331	S *	11/2012	Mullen et al. .... D19/9
6,811,082	B2	11/2004	Wong	D670,759	S *	11/2012	Mullen et al. .... D19/9
6,813,354	B1	11/2004	Jakobsson et al.	2001/0034702	A1	10/2001	Mockett et al.
6,817,532	B2	11/2004	Finkelstein	2001/0047335	A1	11/2001	Arndt et al.
6,873,974	B1	3/2005	Schutzer	2002/0059114	A1	5/2002	Cockrill et al.
6,902,116	B2	6/2005	Finkelstein	2002/0082989	A1	6/2002	Fife et al.
6,970,070	B2	11/2005	Juels et al.	2002/0096570	A1	7/2002	Wong et al.
6,980,969	B1	12/2005	Tuchler et al.	2002/0120583	A1	8/2002	Keresman, III et al.
6,985,583	B1	1/2006	Brainard et al.	2003/0034388	A1	2/2003	Routhenstein et al.
6,991,155	B2	1/2006	Burchette, Jr.	2003/0052168	A1	3/2003	Wong
7,013,030	B2	3/2006	Wong et al.	2003/0057278	A1	3/2003	Wong
7,035,443	B2	4/2006	Wong	2003/0116635	A1	6/2003	Taban
7,039,223	B2	5/2006	Wong	2003/0152253	A1	8/2003	Wong
7,044,394	B2	5/2006	Brown	2003/0163287	A1	8/2003	Vock et al.
7,051,929	B2	5/2006	Li	2003/0173409	A1	9/2003	Vogt et al.
7,083,094	B2	8/2006	Cooper	2003/0179909	A1	9/2003	Wong et al.
7,100,049	B2	8/2006	Gasparini et al.	2003/0179910	A1	9/2003	Wong
7,100,821	B2	9/2006	Rasti	2003/0226899	A1	12/2003	Finkelstein
7,111,172	B1	9/2006	Duane et al.	2004/0035942	A1	2/2004	Silverman
7,114,652	B2	10/2006	Moulllette et al.	2004/0133787	A1	7/2004	Doughty
				2004/0162732	A1	8/2004	Rahim et al.
				2004/0172535	A1	9/2004	Jakobsson
				2004/0177045	A1	9/2004	Brown
				2005/0043997	A1	2/2005	Sohata et al.



(56)

**References Cited**

U.S. PATENT DOCUMENTS

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  
 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 WO2006066322 6/2006  
 WO WO2006080929 8/2006  
 WO WO2006105092 10/2006  
 WO WO2006116772 11/2006  
 WO WO2008064403 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/~jtli/paper/fc07.pdf>. As viewed on Apr. 12, 2010.  
 English translation of JP 05210770 A.

\* cited by examiner



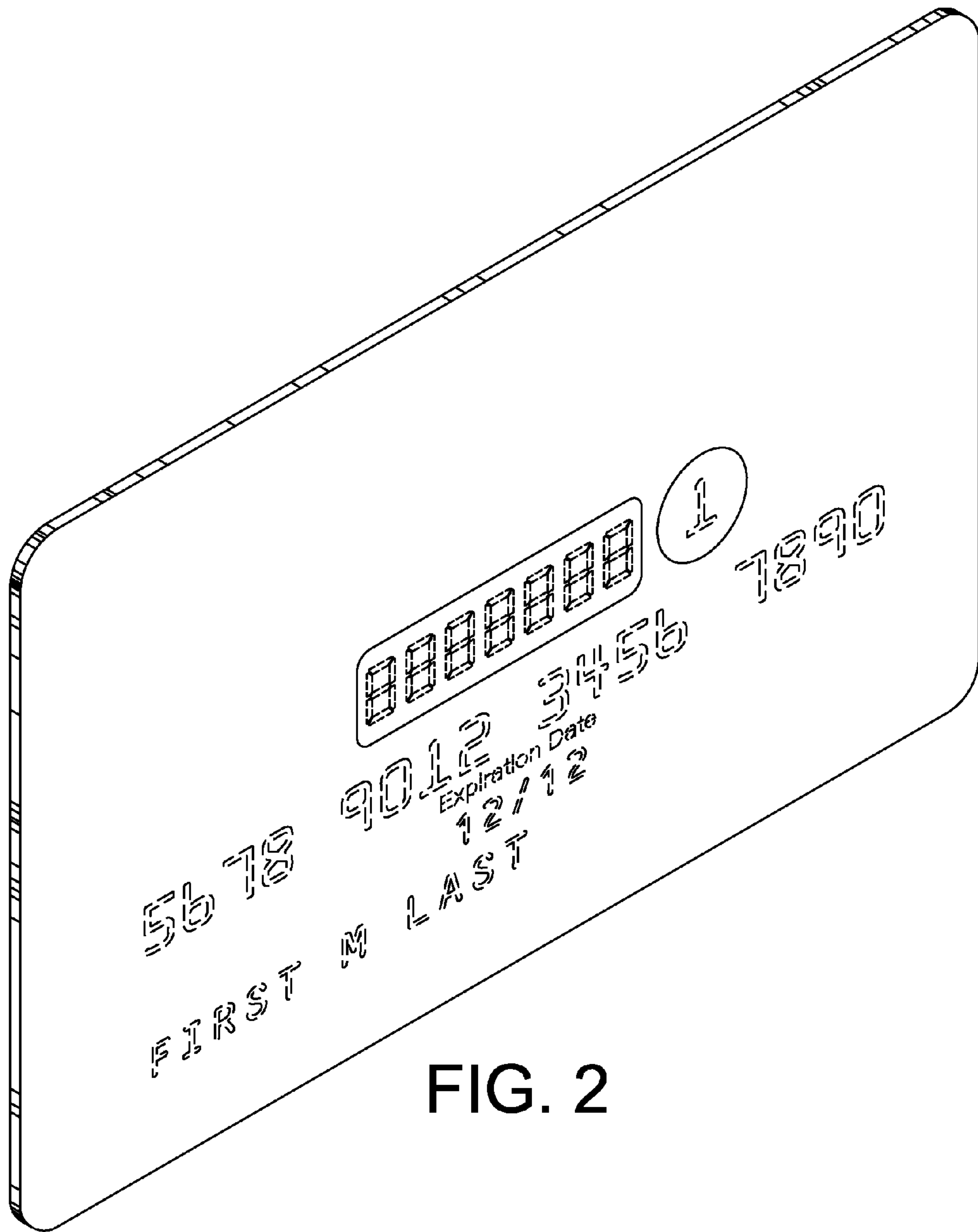


FIG. 2

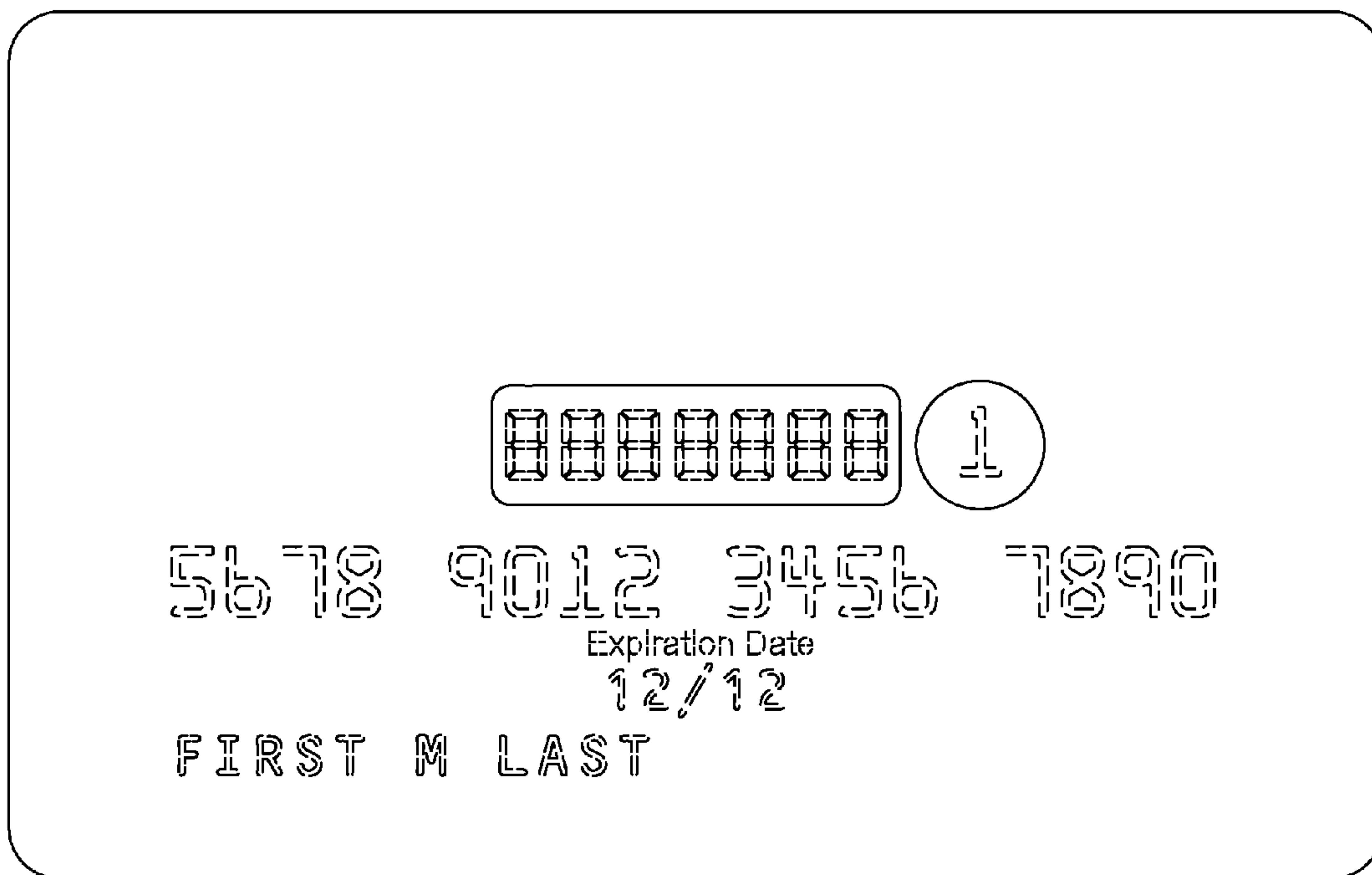


FIG. 3

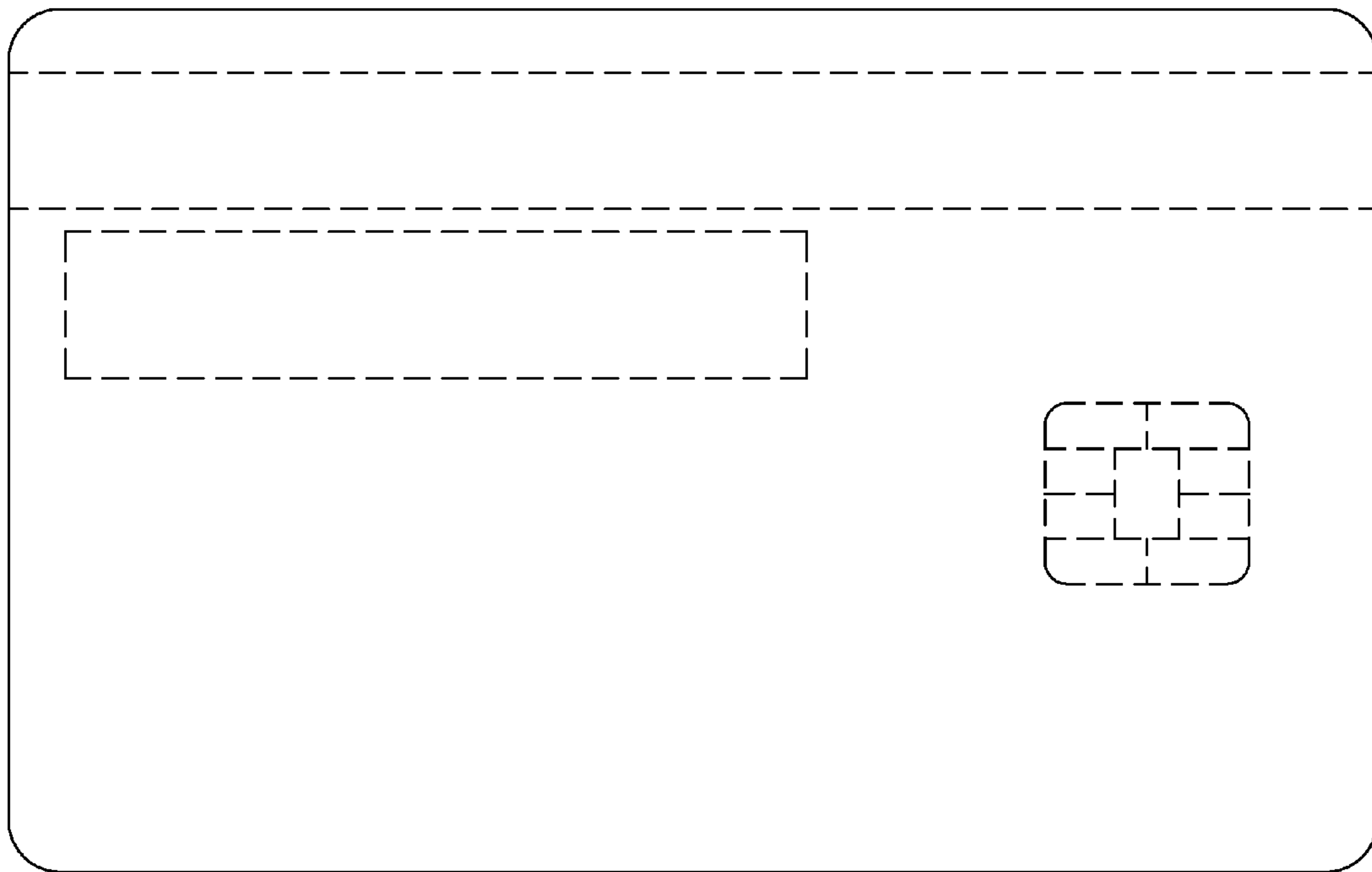


FIG. 4

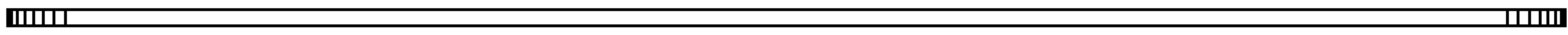


FIG. 5

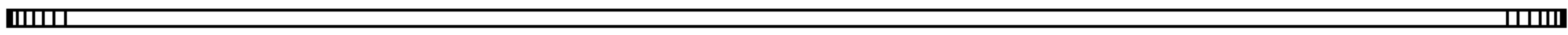


FIG. 6

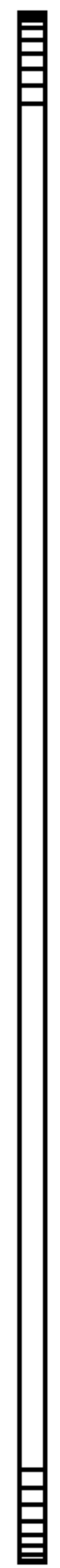


FIG. 7



FIG. 8