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(54) **MULTIPLE BUTTON INTERACTIVE ELECTRONIC CARD WITH LIGHT SOURCE**

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D19/20-34; 40/124.01-124.15, 661, 672,
40/726, 776; 283/72, 74-75, 103, 105-107,
283/82, 70, 904; 206/449; D21/385; D20/10-11,
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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.
5,478,994 A	12/1995	Rahman
5,479,512 A	12/1995	Weiss
5,484,997 A	1/1996	Haynes
5,485,519 A	1/1996	Weiss
5,585,787 A	12/1996	Wallerstein
5,591,949 A	1/1997	Bernstein
5,608,203 A	3/1997	Finkelstein et al.

(Continued)

FOREIGN PATENT DOCUMENTS

JP 05210770 A 8/1993

(Continued)

OTHER PUBLICATIONS

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

(Continued)

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(57)

CLAIM

The ornamental design for a multiple button interactive electronic card with light source, as shown and described.

DESCRIPTION

FIG. 1 is a front, bottom, and left side perspective view of our new design for a multiple button interactive electronic card with light source;

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;

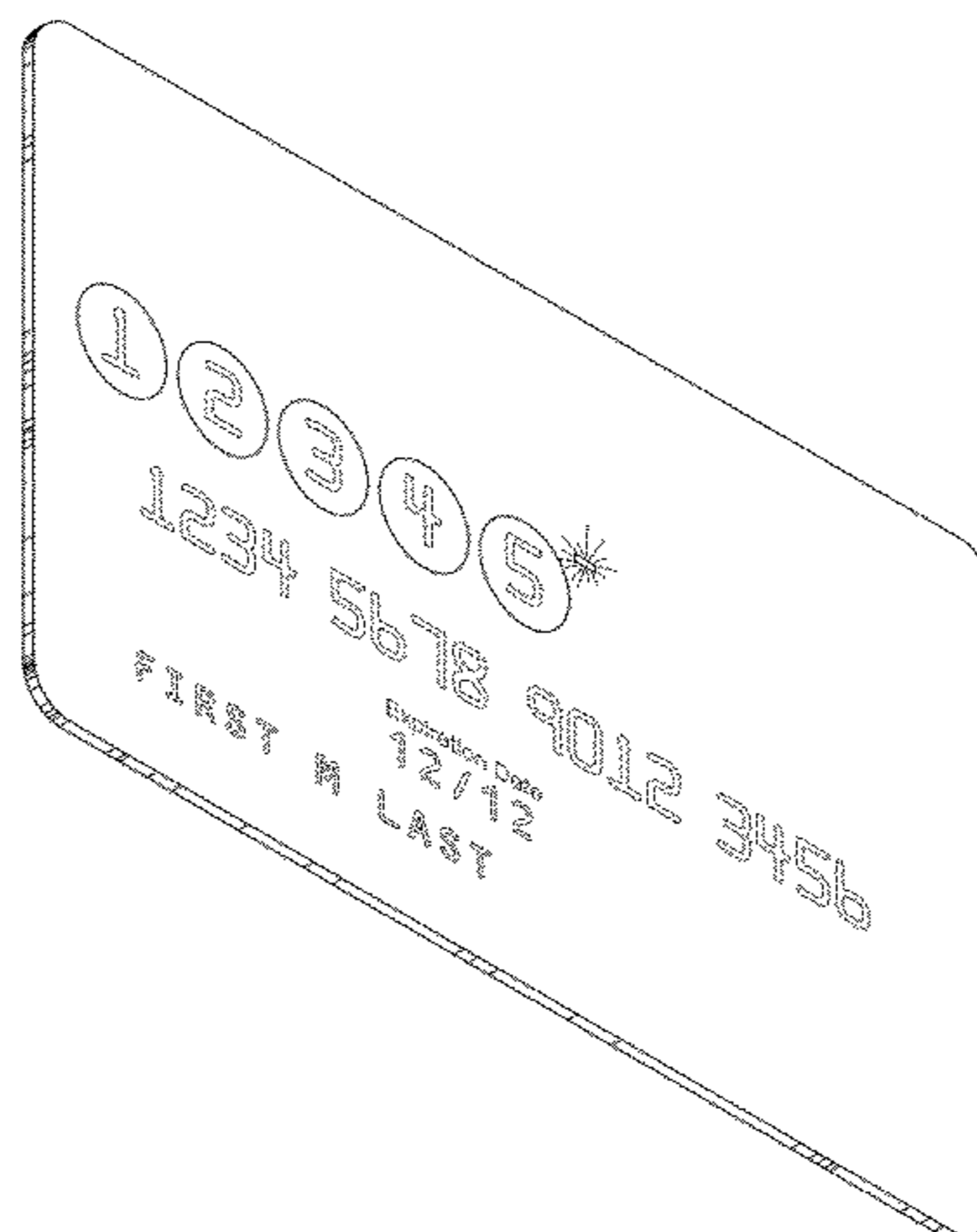
FIG. 6 is a bottom side view thereof;

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.

1 Claim, 5 Drawing Sheets



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U.S. PATENT DOCUMENTS					
5,623,552	A	4/1997 Lane	7,225,994	B2	6/2007 Finkelstein
5,657,388	A	8/1997 Weiss	7,246,752	B2	7/2007 Brown
5,834,747	A	11/1998 Cooper	7,298,243	B2	11/2007 Juels et al.
5,834,756	A	11/1998 Gutman et al.	7,334,732	B2	2/2008 Cooper
5,856,661	A	1/1999 Finkelstein et al.	7,337,326	B2	2/2008 Palmer et al.
5,864,623	A	1/1999 Messina et al.	7,346,775	B2	3/2008 Gasparini et al.
5,907,142	A	5/1999 Kelsey	7,356,696	B1	4/2008 Jakobsson et al.
5,913,203	A	6/1999 Wong et al.	7,357,319	B1	4/2008 Liu et al.
5,937,394	A	8/1999 Wong et al.	7,359,507	B2	4/2008 Kaliski
5,955,021	A	9/1999 Tiffany, III	7,360,688	B1	4/2008 Harris
5,956,699	A	9/1999 Wong et al.	7,363,494	B2	4/2008 Brainard et al.
6,025,054	A	2/2000 Tiffany, III	7,380,710	B2	6/2008 Brown
6,045,043	A	4/2000 Bashan et al.	7,398,253	B1	7/2008 Pinnell
6,076,163	A	6/2000 Hoffstein et al.	7,404,087	B2	7/2008 Teunen
6,085,320	A	7/2000 Kaliski	7,424,570	B2	9/2008 D'Albore et al.
6,095,416	A	8/2000 Grant et al.	7,427,033	B1	9/2008 Roskind
6,130,621	A	10/2000 Weiss	7,454,349	B2	11/2008 Teunen et al.
6,145,079	A	11/2000 Mitty et al.	D582,977	S *	12/2008 Field et al. D19/10
6,157,920	A	12/2000 Jakobsson et al.	7,461,250	B1	12/2008 Duane et al.
6,161,181	A	12/2000 Haynes, III et al.	7,461,399	B2	12/2008 Juels et al.
D436,991	S *	1/2001 Morgante D19/9	7,472,093	B2	12/2008 Juels
6,176,430	B1	1/2001 Finkelstein et al.	7,472,829	B2	1/2009 Brown
6,182,894	B1	2/2001 Hackett et al.	7,494,055	B2	2/2009 Fernandes et al.
6,189,098	B1	2/2001 Kaliski	7,502,467	B2	3/2009 Brainard et al.
6,199,052	B1	3/2001 Mitty et al.	7,502,933	B2	3/2009 Jakobsson et al.
6,206,293	B1	3/2001 Gutman et al.	7,503,485	B1	3/2009 Routhenstein
6,240,184	B1	5/2001 Huynh et al.	7,516,492	B1	4/2009 Nisbet et al.
6,241,153	B1	6/2001 Tiffany, III	7,523,301	B2	4/2009 Nisbet et al.
6,256,873	B1	7/2001 Tiffany, III	7,530,495	B2	5/2009 Cooper
6,269,163	B1	7/2001 Rivest et al.	7,532,104	B2	5/2009 Juels
6,286,022	B1	9/2001 Kaliski et al.	7,543,739	B2	6/2009 Brown et al.
6,308,890	B1	10/2001 Cooper	7,559,464	B2	7/2009 Routhenstein
6,313,724	B1	11/2001 Osterweil	7,562,221	B2	7/2009 Nystrom et al.
6,389,442	B1	5/2002 Yin et al.	7,562,222	B2	7/2009 Gasparini et al.
6,393,447	B1	5/2002 Jakobsson et al.	7,580,898	B2	8/2009 Brown et al.
6,411,715	B1	6/2002 Liskov et al.	7,584,153	B2	9/2009 Brown et al.
D460,455	S *	7/2002 Pentz D14/436	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.
D467,247	S *	12/2002 Pentz D14/436	D604,359	S *	11/2009 Santos D19/9
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.	2001/0034702	A1	10/2001 Mockett et al.
6,705,520	B1	3/2004 Pitroda et al.	2001/0047335	A1	11/2001 Arndt et al.
6,755,341	B1	6/2004 Wong et al.	2002/0059114	A1	5/2002 Cockrill et al.
6,764,005	B2	7/2004 Cooper	2002/0082989	A1	6/2002 Fife et al.
6,769,618	B1	8/2004 Finkelstein	2002/0096570	A1	7/2002 Wong et al.
6,805,288	B2	10/2004 Routhenstein et al.	2002/0120583	A1	8/2002 Keresman, III et al.
6,811,082	B2	11/2004 Wong	2003/0034388	A1	2/2003 Routhenstein et al.
6,813,354	B1	11/2004 Jakobsson et al.	2003/0052168	A1	3/2003 Wong
6,817,532	B2	11/2004 Finkelstein	2003/0057278	A1	3/2003 Wong
6,873,974	B1	3/2005 Schutzer	2003/0116635	A1	6/2003 Taban
6,902,116	B2	6/2005 Finkelstein	2003/0152253	A1	8/2003 Wong
D509,243	S *	9/2005 Hunter et al. D19/10	2003/0163287	A1	8/2003 Vock et al.
6,970,070	B2	11/2005 Juels et al.	2003/0173409	A1	9/2003 Vogt et al.
6,980,969	B1	12/2005 Tuchler et al.	2003/0179909	A1	9/2003 Wong et al.
6,985,583	B1	1/2006 Brainard et al.	2003/0179910	A1	9/2003 Wong
6,991,155	B2	1/2006 Burchette, Jr.	2003/0226899	A1	12/2003 Finkelstein
7,013,030	B2	3/2006 Wong et al.	2004/0035942	A1	2/2004 Silverman
7,035,443	B2	4/2006 Wong	2004/0133787	A1	7/2004 Doughty
7,039,223	B2	5/2006 Wong	2004/0162732	A1	8/2004 Rahim et al.
7,044,394	B2	5/2006 Brown	2004/0172535	A1	9/2004 Jakobsson
7,051,929	B2	5/2006 Li	2004/0177045	A1	9/2004 Brown
7,083,094	B2	8/2006 Cooper	2005/0043997	A1	2/2005 Sahota et al.
7,100,049	B2	8/2006 Gasparini et al.	2005/0080747	A1	4/2005 Anderson et al.
7,100,821	B2	9/2006 Rasti	2005/0086160	A1	4/2005 Wong et al.
7,111,172	B1	9/2006 Duane et al.	2005/0086177	A1	4/2005 Anderson et al.
7,114,652	B2	10/2006 Moullette et al.	2005/0116026	A1	6/2005 Burger et al.
7,136,514	B1	11/2006 Wong	2005/0119940	A1	6/2005 Concilio et al.
7,140,550	B2	11/2006 Ramachandran	2005/0154643	A1	7/2005 Doan et al.
7,163,153	B2	1/2007 Blossom	2005/0228959	A1	10/2005 D'Albore et al.
7,195,154	B2	3/2007 Routhenstein	2006/0000900	A1	1/2006 Fernandes et al.
7,197,639	B1	3/2007 Juels et al.	2006/0037073	A1	2/2006 Juels et al.
7,219,368	B2	5/2007 Juels et al.	2006/0041759	A1	2/2006 Kaliski et al.
7,225,537	B2	6/2007 Reed	2006/0085328	A1	4/2006 Cohen et al.
			2006/0091223	A1	5/2006 Zellner

US D665,022 S

Page 3

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	WO9852735	11/1998
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

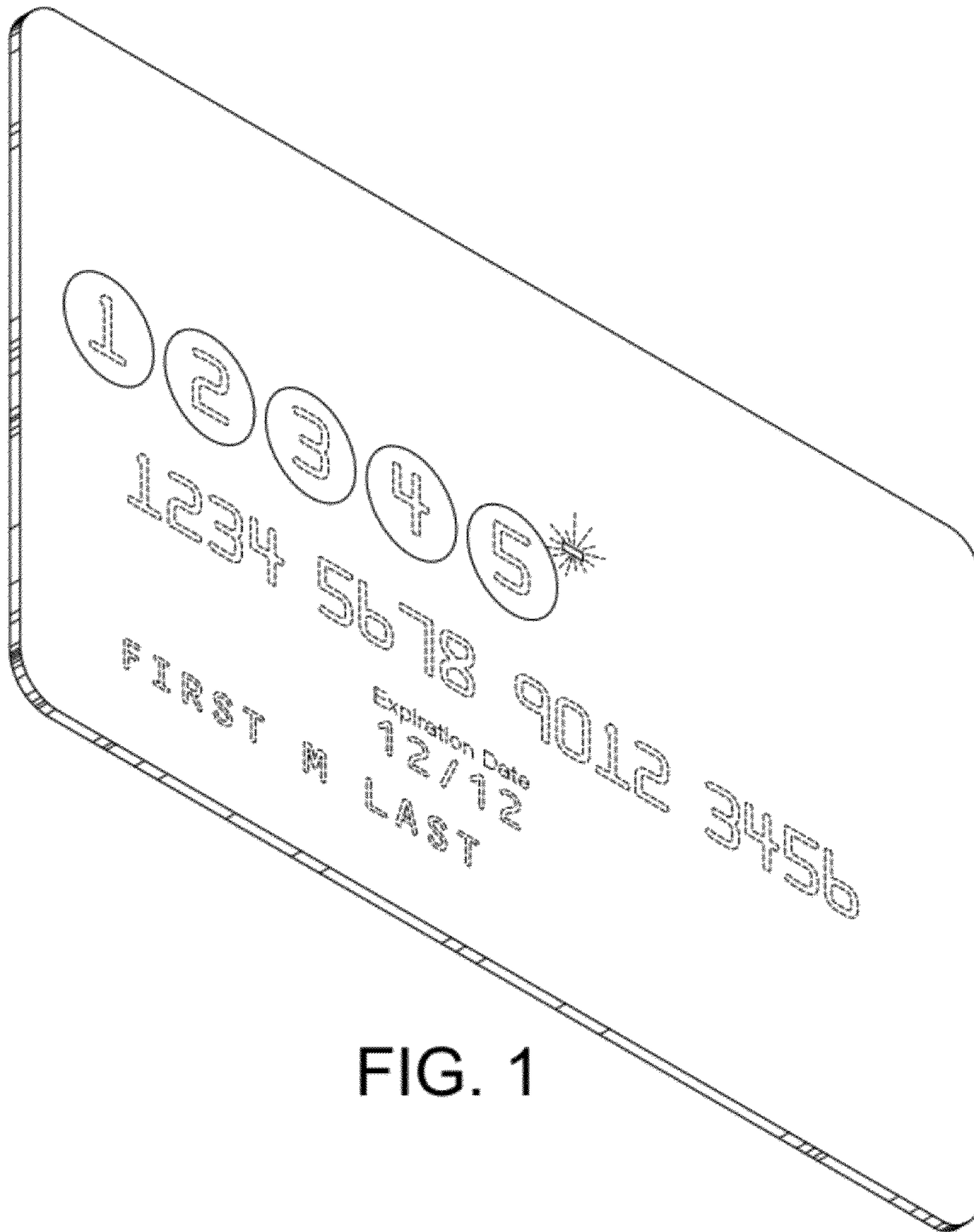


FIG. 1

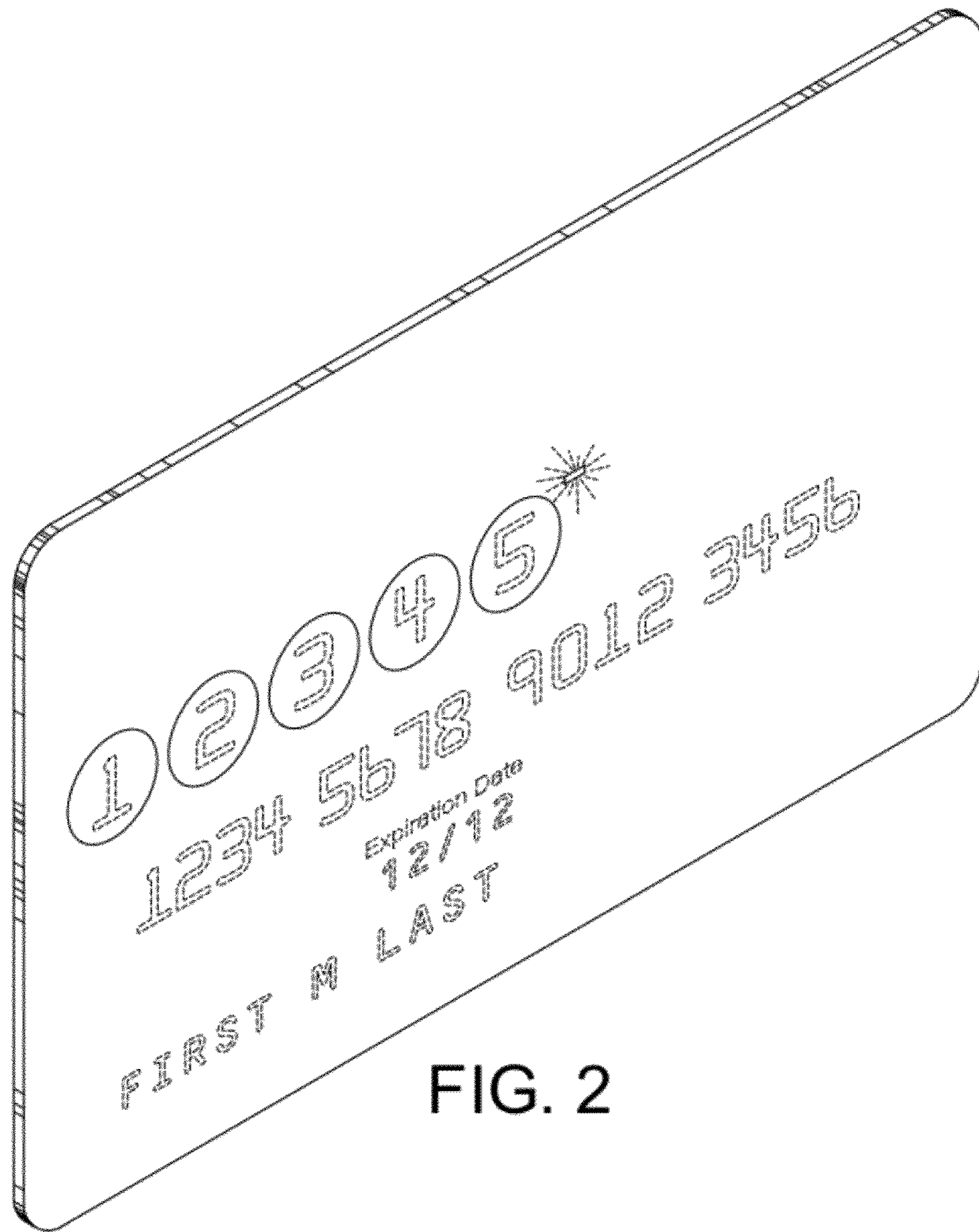


FIG. 2

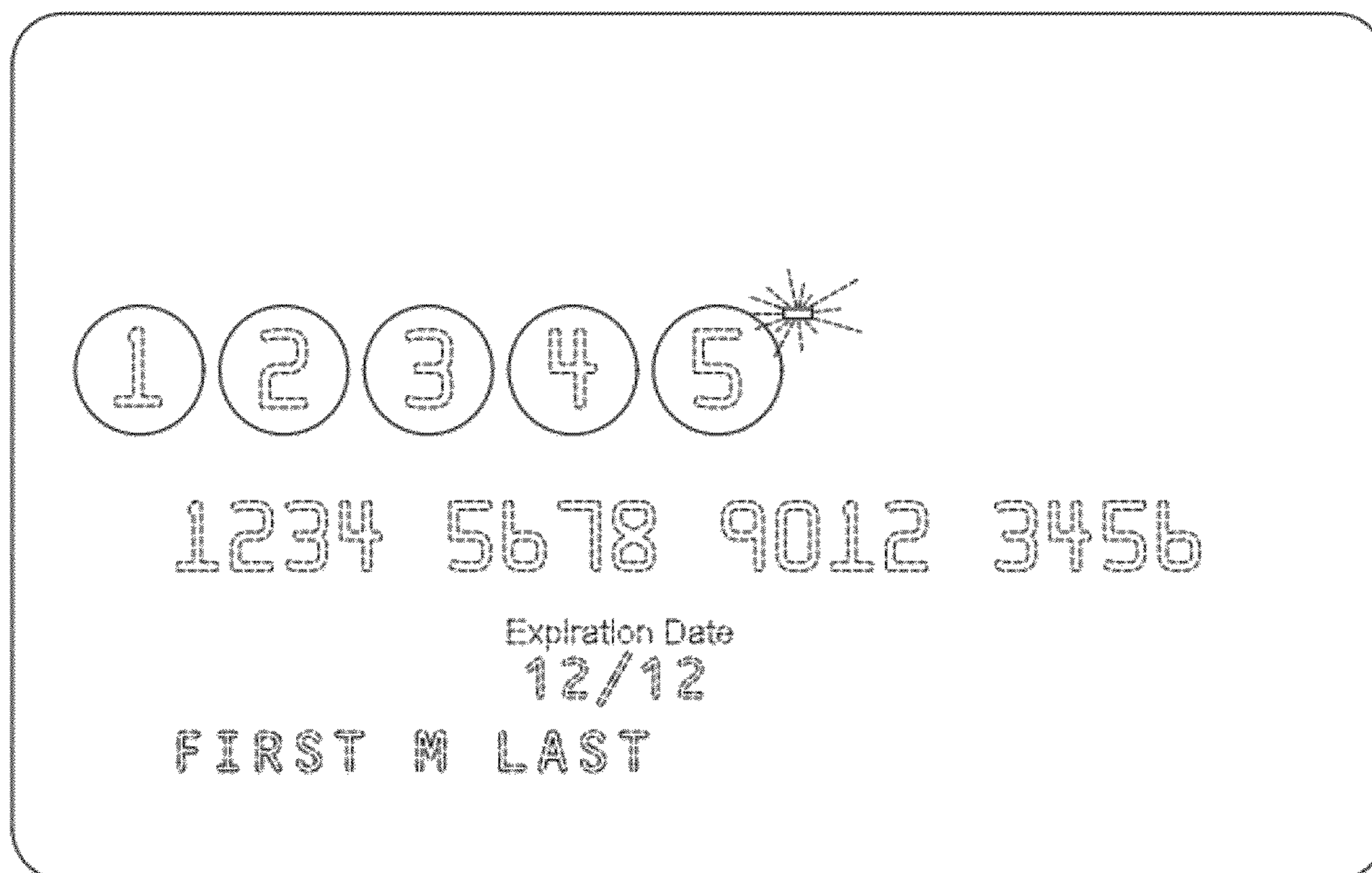


FIG. 3



FIG. 4

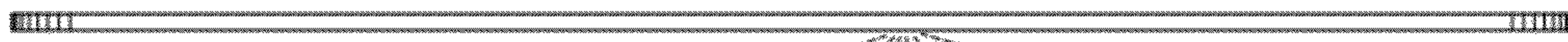


FIG. 5

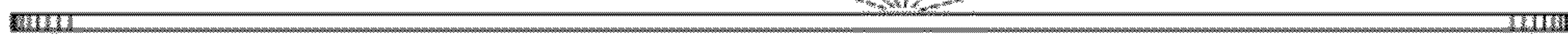


FIG. 6

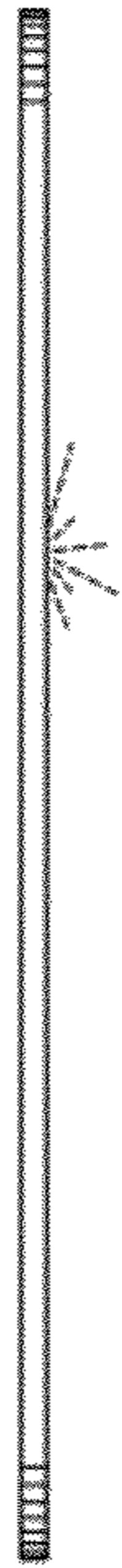


FIG. 7



FIG. 8