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**Byrne et al.**

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(54) **PORTABLE ELECTRICAL POWER UNIT**

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H01M 2/02; H01M 2/022; H01M 2/0202;  
H01M 2/0207; H01M 2/0212; H01M

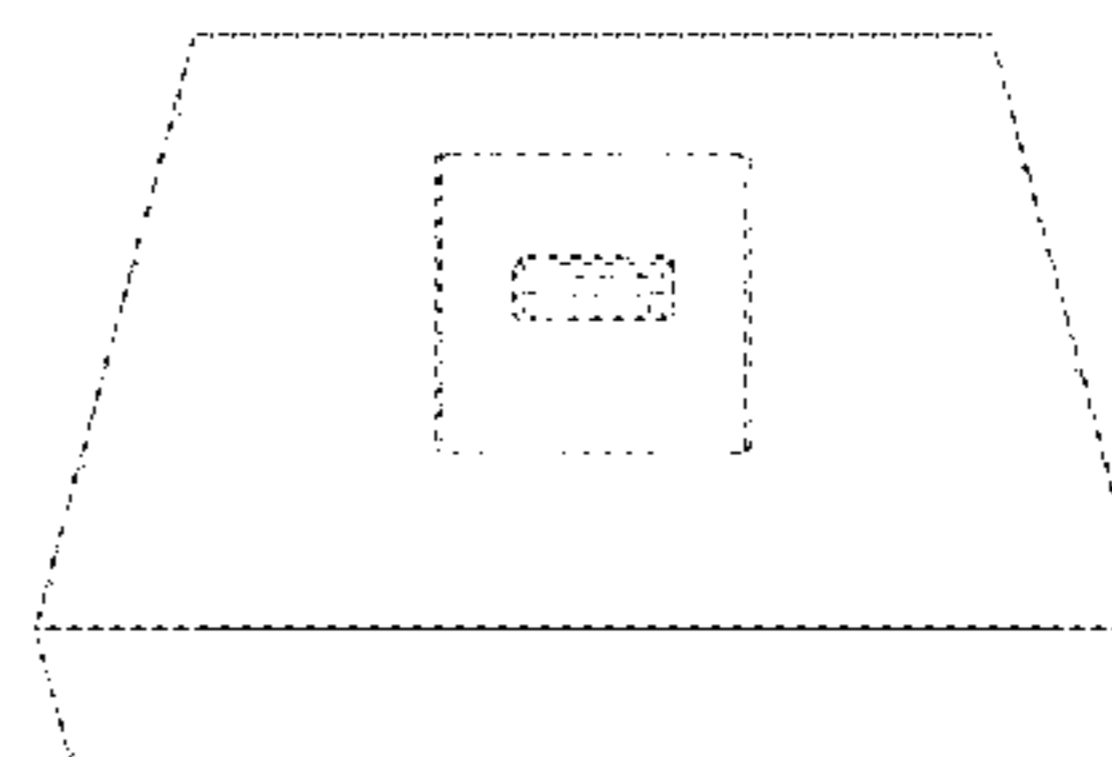
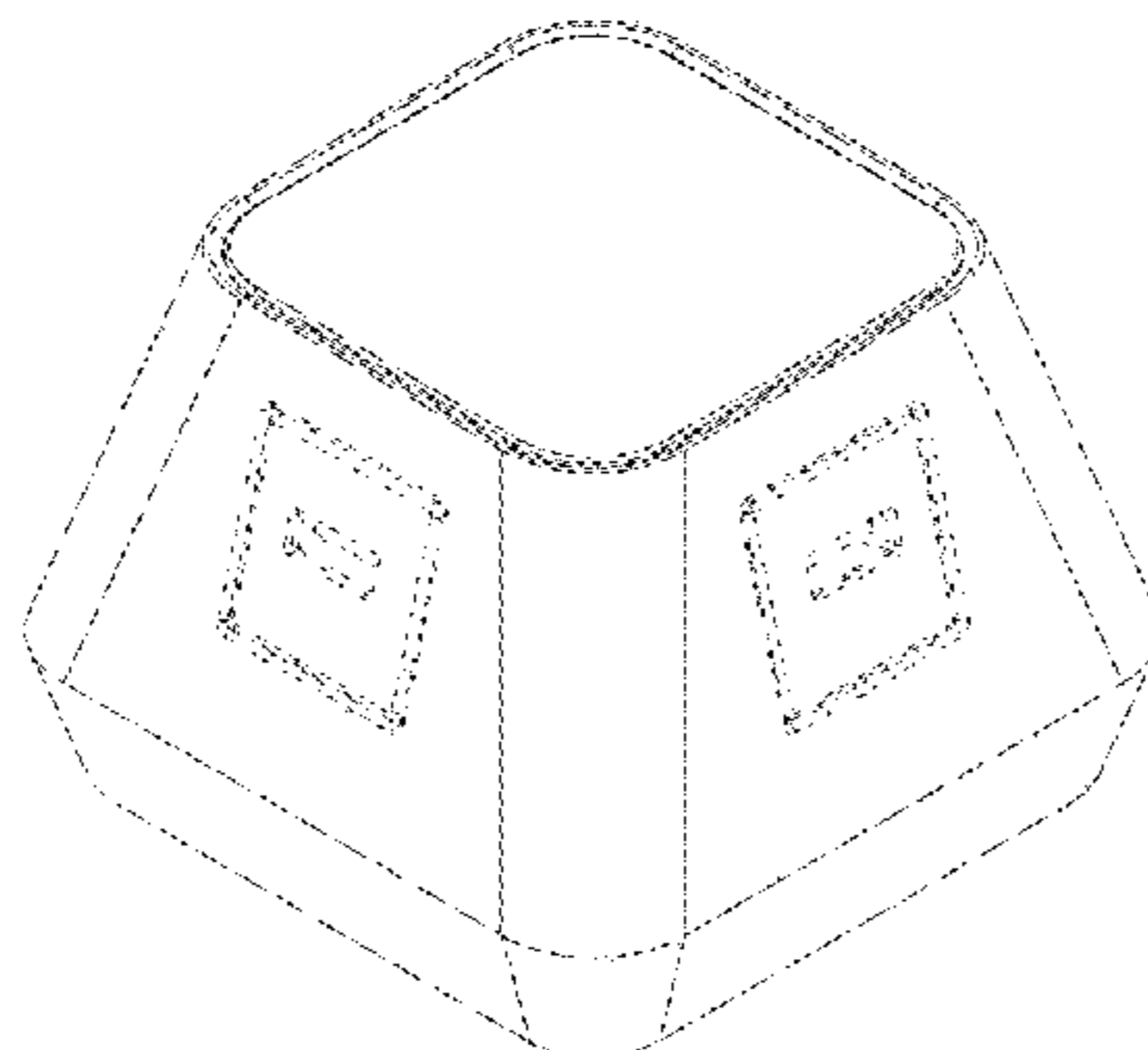
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H01M 2/202; H01M 2/204; H01M 2/206;  
H01M 10/44; H01M 10/46; H01M  
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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D78,966 S	7/1929	Conner	
D162,509 S	3/1951	Austin	
D195,463 S	6/1963	Tamarin	
4,240,688 A	12/1980	Sotolongo	
4,300,087 A	11/1981	Meisner	
4,463,998 A *	8/1984	Reavis	H01R 12/77 439/137
D288,298 S *	2/1987	Yang	D10/40
D291,300 S	8/1987	Chaney	
4,685,753 A *	8/1987	Isshiki	H01R 23/68 439/62
D306,012 S	2/1990	Oesterheld et al.	
4,954,940 A *	9/1990	Chandler	H01F 27/02 363/146
5,171,159 A	12/1992	Byrne	
D336,843 S *	6/1993	Hurst	D8/374
D350,939 S	9/1994	Rossmann et al.	
D368,893 S	4/1996	Harwood et al.	
5,566,053 A	10/1996	Chou	
5,575,668 A	11/1996	Timmerman	
D379,796 S *	6/1997	Bagga	D13/139.4
D382,855 S	8/1997	Salmond et al.	
5,672,074 A *	9/1997	Block	H01R 13/518 439/540.1
D389,459 S	1/1998	Byrne	
5,738,548 A	4/1998	Rutulante	
5,748,424 A	5/1998	Hung	
D405,416 S *	2/1999	Byrne	D13/139.4
D408,352 S	4/1999	Tashiro	
D409,980 S	5/1999	Byrne	
5,959,433 A	9/1999	Rohde	
5,984,728 A	11/1999	Chen et al.	
D418,815 S	1/2000	Byrne	
6,028,267 A	2/2000	Byrne	
6,028,413 A	2/2000	Brockmann	
6,036,516 A	3/2000	Byrne	
6,081,356 A	6/2000	Branc et al.	
D431,230 S *	9/2000	Began	D13/184



# US D846,498 S

Page 2

6,219,981 B1 *	4/2001	Bergelt .....	E02D 27/01	9,513,682 B2	12/2016	Fleisig
			248/352	D775,627 S *	1/2017	Yang .....
D442,143 S *	5/2001	Gershfeld .....	D13/139.4	D777,674 S *	1/2017	Mininger .....
6,290,518 B1	9/2001	Byrne		9,543,692 B2	1/2017	Shomali
6,379,182 B1	4/2002	Byrne		9,565,782 B2 *	2/2017	Alexander .....
6,436,299 B1	8/2002	Baarman et al.		D780,703 S *	3/2017	Bergum .....
6,580,388 B1 *	6/2003	Stoyanov .....	G01S 7/411	9,608,455 B2	3/2017	Byrne et al.
			342/192	D783,542 S *	4/2017	Marsden .....
6,717,053 B2	4/2004	Rupert				H01R 13/447
6,756,697 B2	6/2004	Mizutani et al.		D784,120 S *	4/2017	Abdi .....
6,803,744 B1	10/2004	Sabo		D812,617 S *	3/2018	Bai .....
6,875,051 B2 *	4/2005	Pizak .....	H01R 25/003	D814,420 S *	4/2018	Chen .....
			439/501	D826,163 S *	8/2018	Xu .....
6,967,462 B1	11/2005	Landis		2002/0171335 A1	11/2002	Held
D528,508 S	9/2006	Tan et al.		2003/0048254 A1	3/2003	Huang
7,112,097 B1 *	9/2006	Lam .....	H01R 25/003	2003/0202317 A1	10/2003	Jans
			439/654	2004/0026998 A1	2/2004	Henriott et al.
7,149,099 B2	12/2006	Asbery		2004/0150934 A1	8/2004	Baarman
7,183,504 B2	2/2007	Byrne		2004/0189246 A1	9/2004	Bulai et al.
7,212,414 B2	5/2007	Baarman		2005/0225292 A1	10/2005	Damlamian et al.
7,222,031 B2	5/2007	Heatley		2006/0258195 A1	11/2006	Schwartz et al.
7,233,222 B2	6/2007	Baarman et al.		2007/0182367 A1	8/2007	Partovi
7,262,700 B2	8/2007	Hsu		2007/0275594 A1	11/2007	Greenberg
D553,120 S *	10/2007	Yano .....	D13/110	2007/0279002 A1	12/2007	Partovi
7,355,150 B2	4/2008	Baarman et al.		2008/0001572 A9	1/2008	Baarman et al.
7,392,068 B2	6/2008	Dayan et al.		2008/0079392 A1	4/2008	Baarman et al.
7,399,202 B2	7/2008	Dayan et al.		2008/0166965 A1	7/2008	Greene et al.
7,443,057 B2	10/2008	Nunally		2008/0169910 A1	7/2008	Greene et al.
7,465,178 B2	12/2008	Byrne		2008/0200050 A1	8/2008	Byrne
D591,233 S *	4/2009	Kagami .....	D13/108	2009/0045772 A1	2/2009	Cook et al.
7,633,263 B2	12/2009	Toya		2009/0156061 A1	6/2009	Bernstein
7,736,178 B2	6/2010	Byrne		2009/0212636 A1	8/2009	Cook et al.
D626,071 S *	10/2010	Su .....	D13/139.8	2009/0212638 A1	8/2009	Johnson
7,863,861 B2	1/2011	Cheng et al.		2009/0230777 A1	9/2009	Baarman et al.
7,878,845 B2	2/2011	Byrne		2009/0271048 A1	10/2009	Wakamatsu
7,887,113 B2	2/2011	Lambarth et al.		2009/0278494 A1	11/2009	Randall
D636,728 S	4/2011	Terleski et al.		2009/0294147 A1	12/2009	Stockton
8,061,864 B2	11/2011	Metcalf et al.		2010/0007307 A1	1/2010	Baarman et al.
8,076,900 B1	12/2011	Brown		2010/0038970 A1	2/2010	Cook et al.
D651,974 S	1/2012	Benedetti		2010/0052431 A1	3/2010	Mita
D653,215 S	1/2012	Lam		2010/0127660 A1	5/2010	Cook et al.
8,106,539 B2	1/2012	Schatz et al.		2010/0187913 A1	7/2010	Smith et al.
8,203,307 B2	6/2012	Zick et al.		2010/0201201 A1	8/2010	Mobarhan et al.
8,262,244 B2	9/2012	Metcalf et al.		2010/0244584 A1	9/2010	Azancot et al.
8,283,812 B2	10/2012	Azancot et al.		2010/0259401 A1	10/2010	Azancot et al.
8,295,036 B2	10/2012	Byrne		2010/0290215 A1	11/2010	Metcalf et al.
8,395,353 B2	3/2013	Wang et al.		2010/0308665 A1	12/2010	Itkonen
8,398,408 B1	3/2013	Hansen et al.		2010/0321939 A1	12/2010	Patel
8,421,407 B2	4/2013	Johnson		2011/0006611 A1	1/2011	Baarman et al.
8,444,432 B2	5/2013	Byrne et al.		2011/0062789 A1	3/2011	Johnson et al.
8,456,038 B2	6/2013	Azancot et al.		2011/0121660 A1	5/2011	Azancot et al.
8,480,429 B2	7/2013	Byrne		2011/0175544 A1	7/2011	Jong
8,482,160 B2	7/2013	Johnson et al.		2011/0193417 A1	8/2011	Hirasaka et al.
8,487,478 B2	7/2013	Kirby et al.		2011/0241607 A1	10/2011	Wiegers
8,497,601 B2	7/2013	Hall et al.		2011/0241614 A1	10/2011	Yeh
8,558,661 B2	10/2013	Zeine		2011/0248575 A1	10/2011	Kim et al.
8,559,172 B2	10/2013	Byrne		2011/0260548 A1	10/2011	Urano
8,581,444 B2	11/2013	Urano		2011/0305056 A1	12/2011	Chien
8,618,695 B2	12/2013	Azancot et al.		2012/0113576 A1	5/2012	Cooper et al.
8,624,750 B2	1/2014	Azancot		2012/0113645 A1	5/2012	Liao et al.
D701,830 S	4/2014	Edwards		2012/0117730 A1	5/2012	Lemire et al.
8,721,124 B2	5/2014	Byrne et al.		2012/0153731 A9	6/2012	Kirby et al.
D717,732 S *	11/2014	Byrne .....	D13/137.1	2012/0206097 A1	8/2012	Soar
8,937,407 B2	1/2015	Byrne et al.		2012/0228953 A1	9/2012	Kesler et al.
8,951,054 B2	2/2015	Byrne et al.		2012/0235474 A1	9/2012	Mannino et al.
9,000,298 B2 *	4/2015	Byrne .....	H02G 3/14	2012/0261998 A1	10/2012	Sato
			174/66	2012/0299539 A1	11/2012	Jones et al.
D735,138 S *	7/2015	Miniger .....	D13/139.7	2012/0312196 A1	12/2012	Newkirk
D736,159 S *	8/2015	Byrne .....	D13/139.4	2013/0049482 A1	2/2013	Rofe et al.
D736,709 S *	8/2015	Byrne .....	D13/137.1	2013/0057203 A1	3/2013	Jones et al.
D739,821 S *	9/2015	Byrne .....	D13/139.4	2013/0141038 A1	6/2013	Papa
9,148,006 B2 *	9/2015	Byrne .....	H02G 3/18	2013/0175986 A1	7/2013	Senatori
D744,953 S *	12/2015	Byrne .....	D13/139.4	2013/0200717 A1	8/2013	Bourilkov et al.
D751,079 S *	3/2016	Skjoldborg .....	D14/434	2013/0207478 A1	8/2013	Metcalf et al.
9,362,764 B2	6/2016	Farkas et al.		2013/0234481 A1	9/2013	Johnson
9,385,549 B2	7/2016	Miller et al.		2013/0285606 A1	10/2013	Ben-Shalom et al.
9,426,612 B2 *	8/2016	Williams .....	H04W 4/02	2014/0098525 A1	4/2014	Bennett
9,438,070 B2	9/2016	Byrne et al.		2014/0191568 A1	7/2014	Partovi
9,484,751 B2	11/2016	Byrne et al.				

2014/0326497 A1\* 11/2014 Byrne ..... H02G 3/18  
 174/541  
 2014/0326726 A1\* 11/2014 Byrne ..... H02G 3/081  
 220/241  
 2014/0335919 A1 11/2014 Stewart et al.  
 2014/0361633 A1 12/2014 Abe  
 2015/0008879 A1 1/2015 Schneider et al.  
 2016/0050375 A1 2/2016 Soffer et al.  
 2016/0268825 A1\* 9/2016 Byrne ..... H02J 7/0044

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(57) **CLAIM**

The ornamental design for a portable electrical power unit,  
 as shown and described.

**FOREIGN PATENT DOCUMENTS**

CN	202552802	11/2012
JP	2013258886 A	12/2013
WO	2013/112185	8/2013

**OTHER PUBLICATIONS**

Byrne.com: Moire. Published May 27, 2016. Retrieved from the  
 internet at <[https://www.byrne.com/desktop-power-center-charging-  
 station#](https://www.byrne.com/desktop-power-center-charging-station#)>, Sep. 1, 2018. 1 page. (Year: 2016).\*

Byrne.com: Hitch. Published Sep. 1, 2018. Retrieved from the  
 internet at <<https://www.byrne.com/portable-usb-charger>>, Sep. 1,  
 2018. 1 page. (Year: 2018).\*

\* cited by examiner

**DESCRIPTION**

FIG. 1 is a front perspective view of a portable electrical  
 power unit showing our new design;  
 FIG. 2 is a rear perspective view thereof;  
 FIG. 3 is a top plan view thereof;  
 FIG. 4 is a bottom plan view thereof;  
 FIG. 5 is a left side elevation thereof;  
 FIG. 6 is a right side elevation thereof;  
 FIG. 7 is a front elevation thereof; and,  
 FIG. 8 is a rear elevation thereof.

The broken lines in the drawings are for purpose of illus-  
 trating portions of the portable electrical power unit that  
 form no part of the claimed design.

**1 Claim, 2 Drawing Sheets**

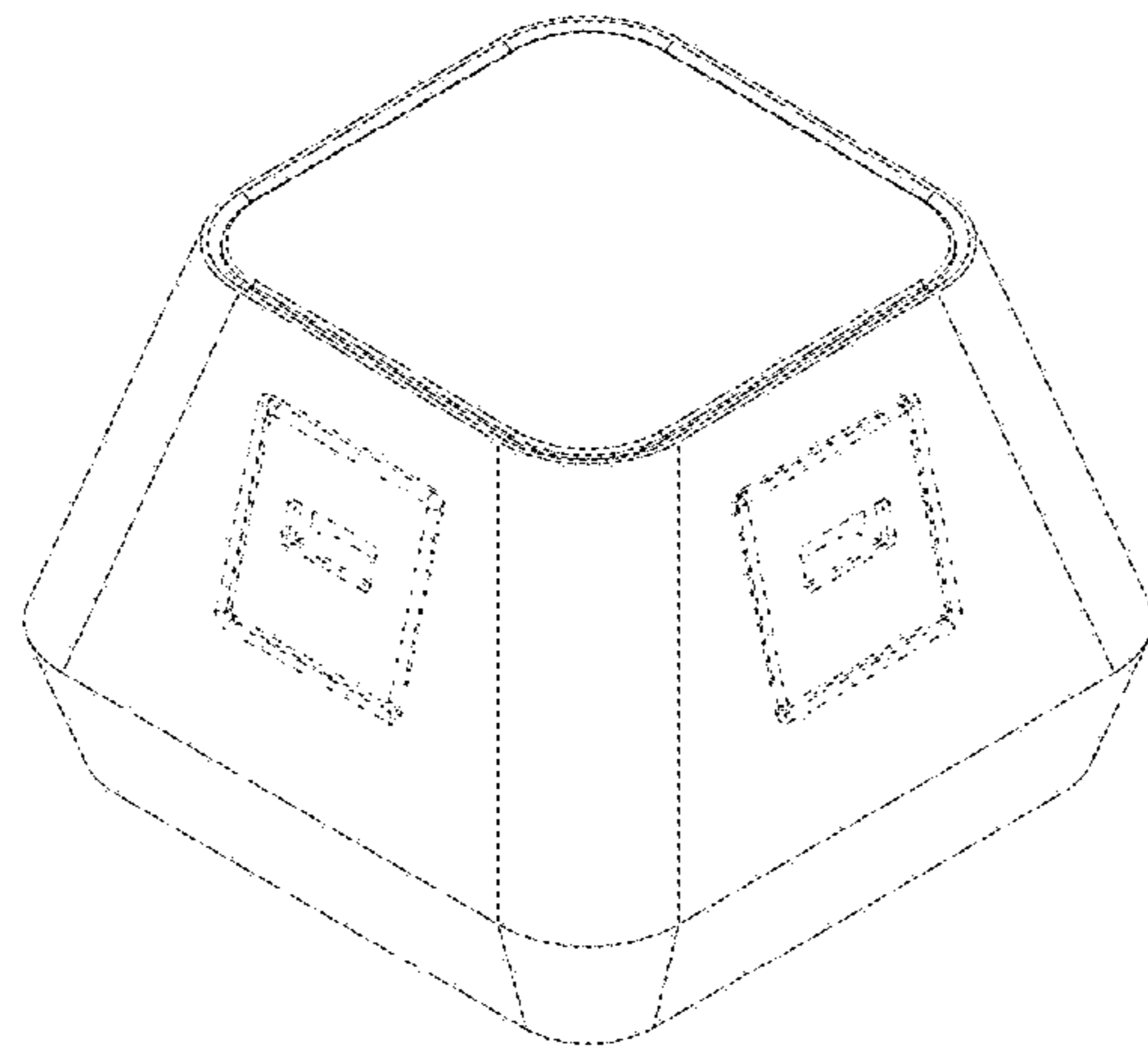


FIG. 1

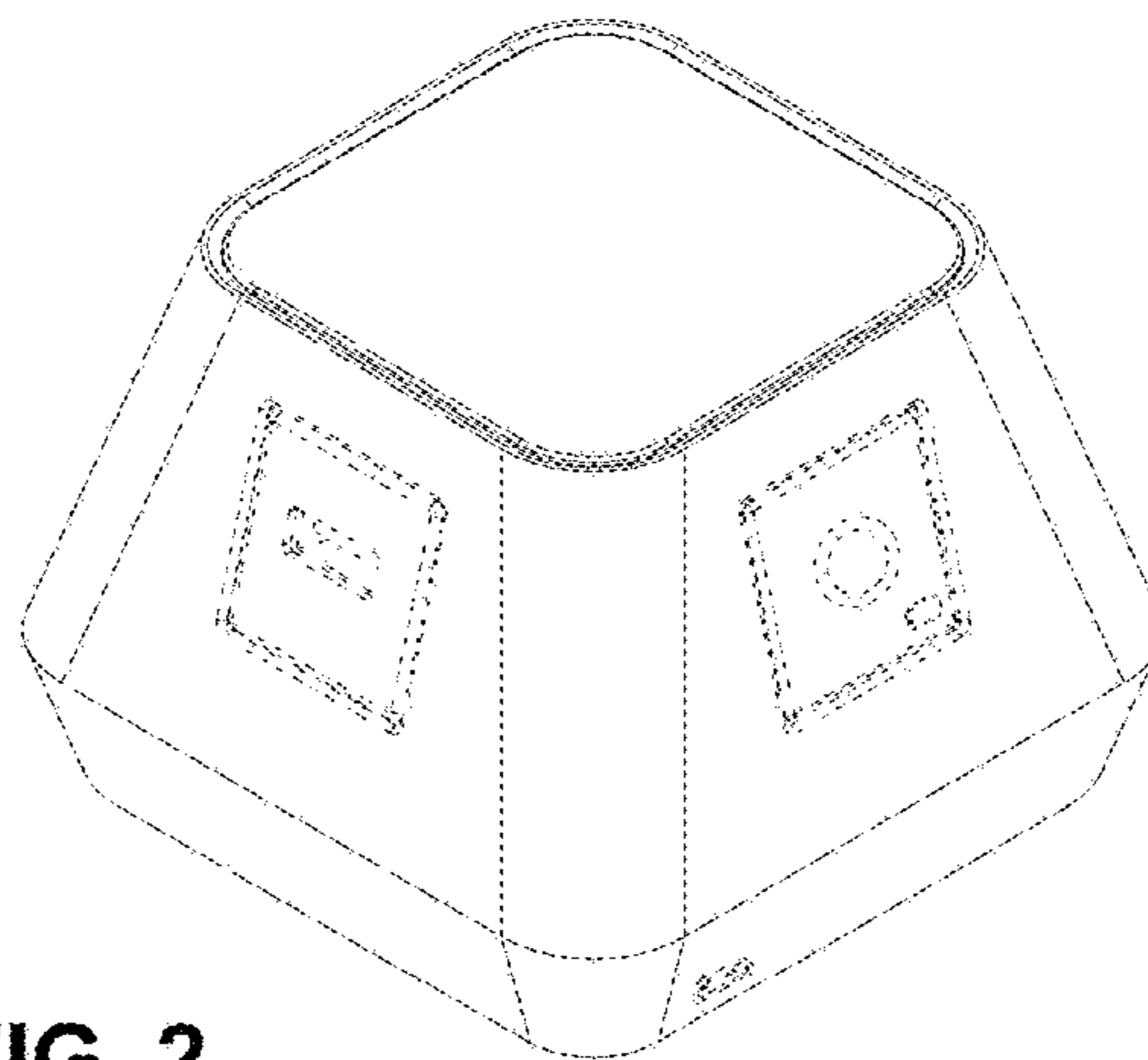
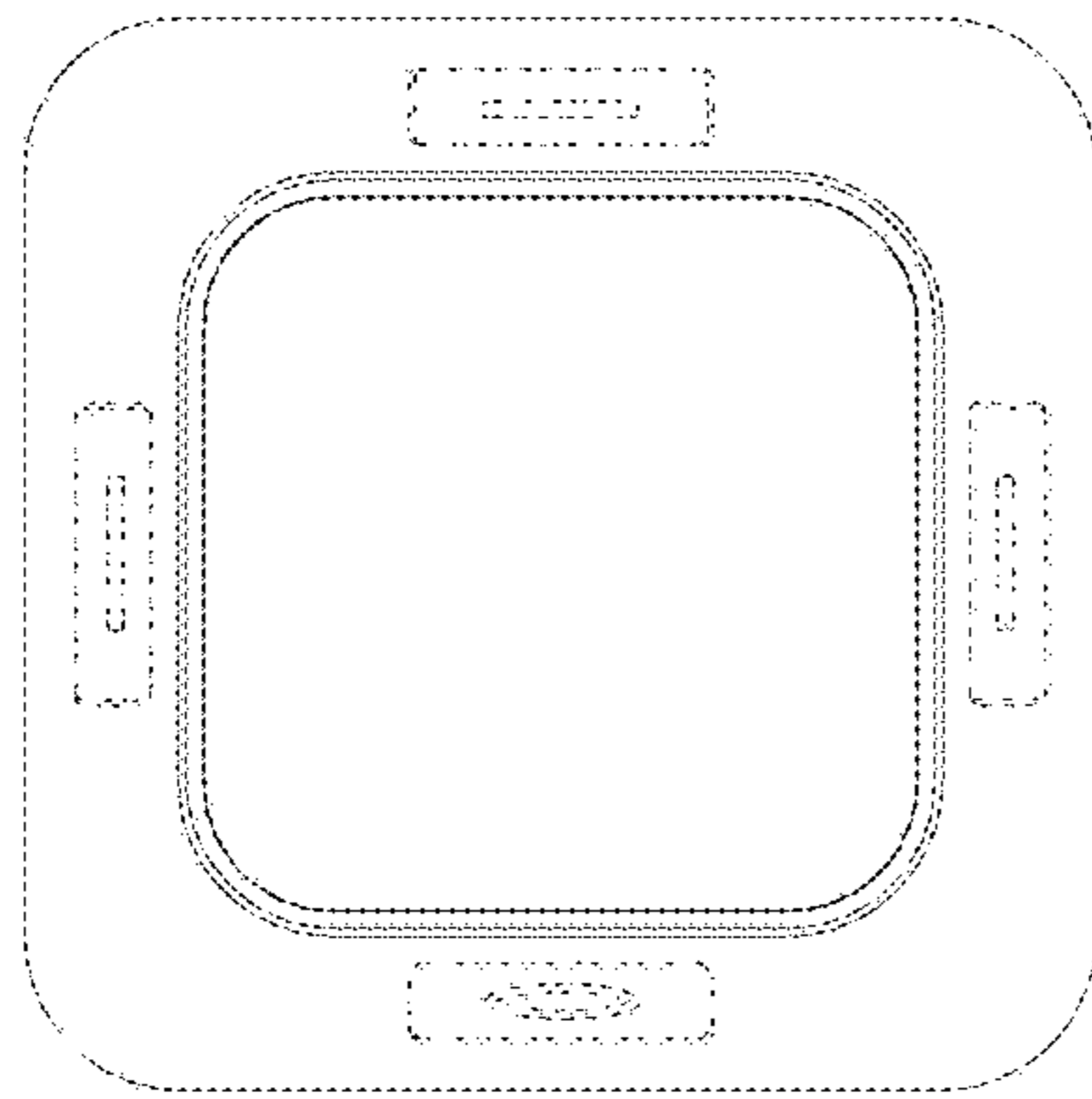
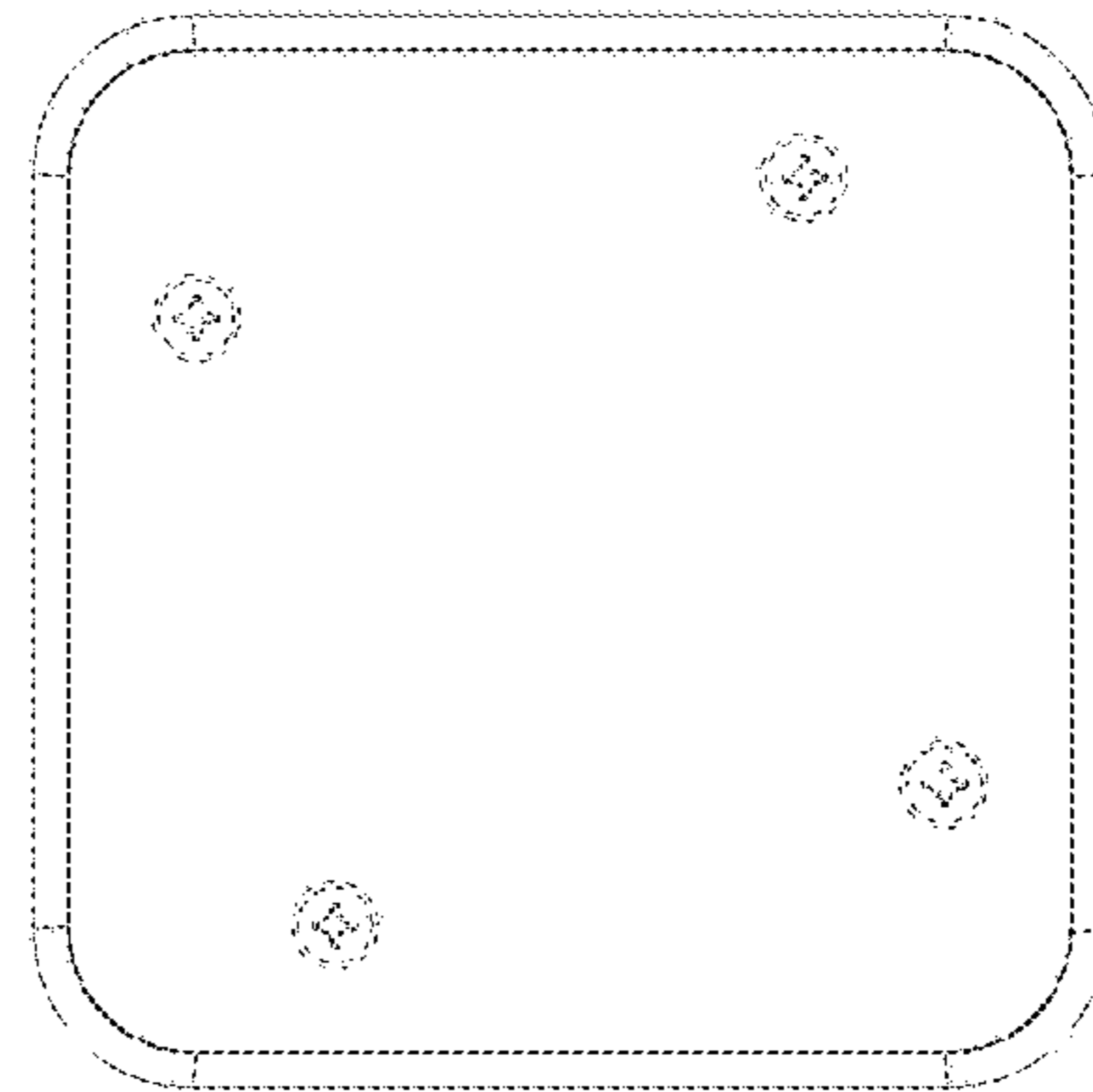


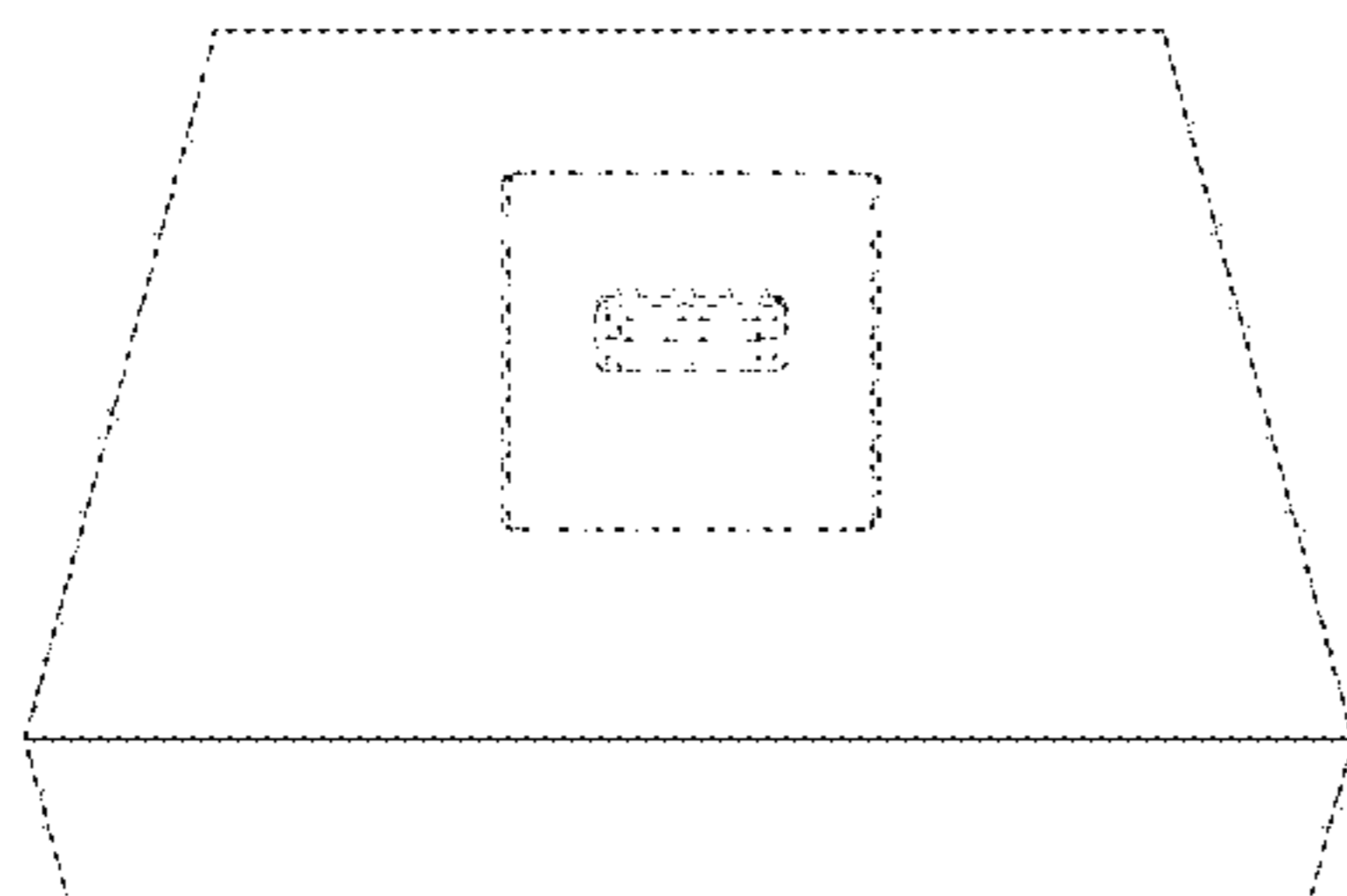
FIG. 2



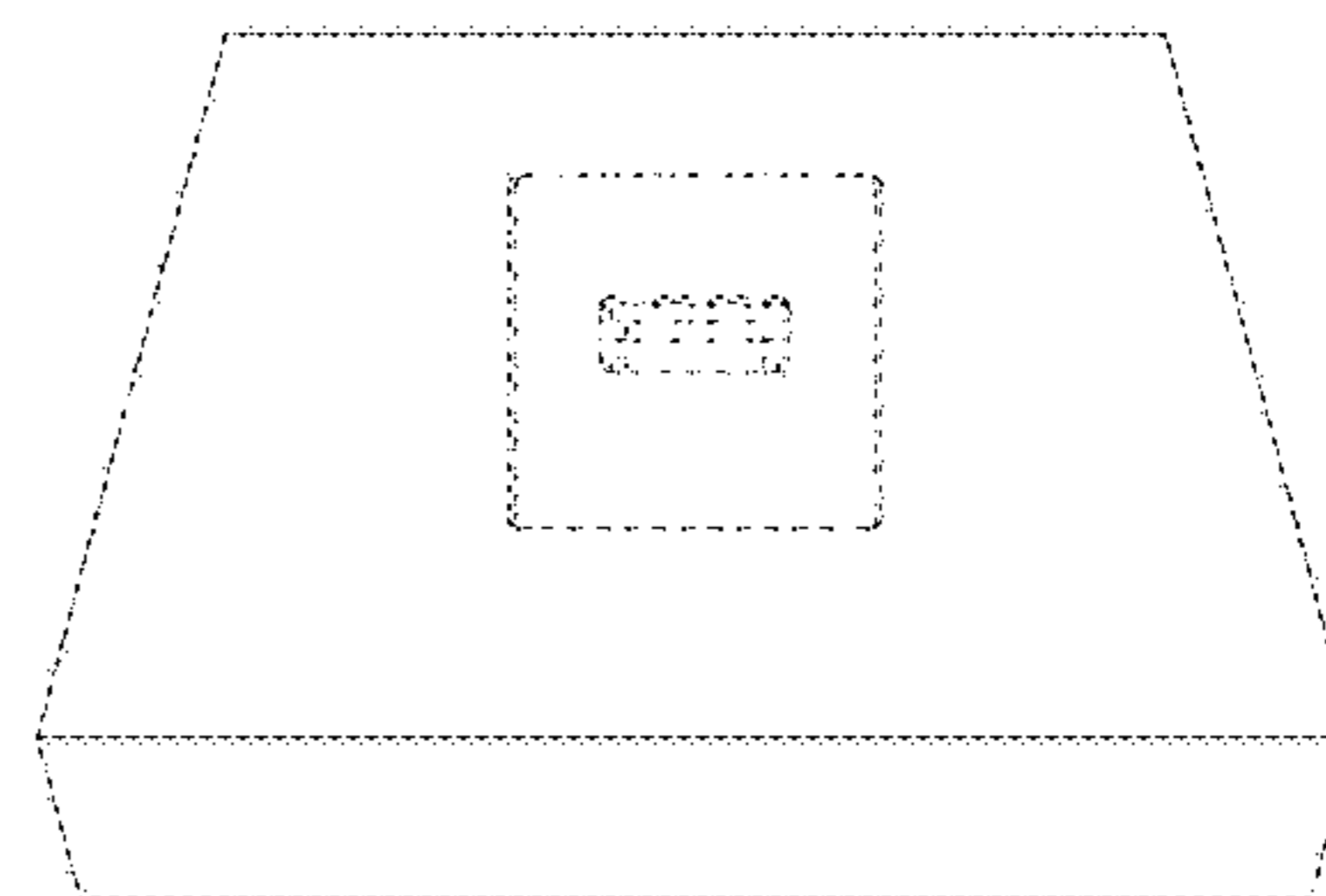
**FIG. 3**



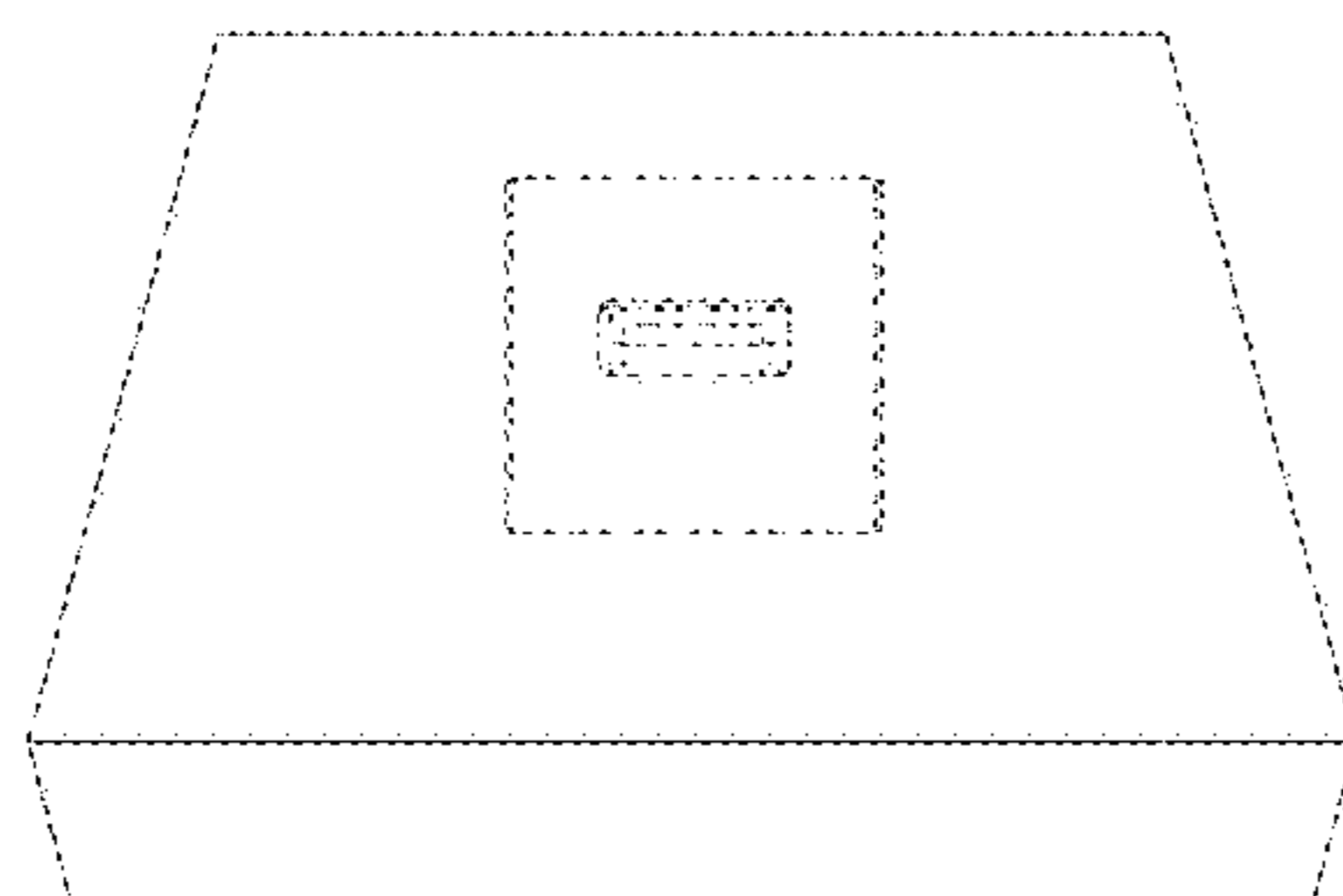
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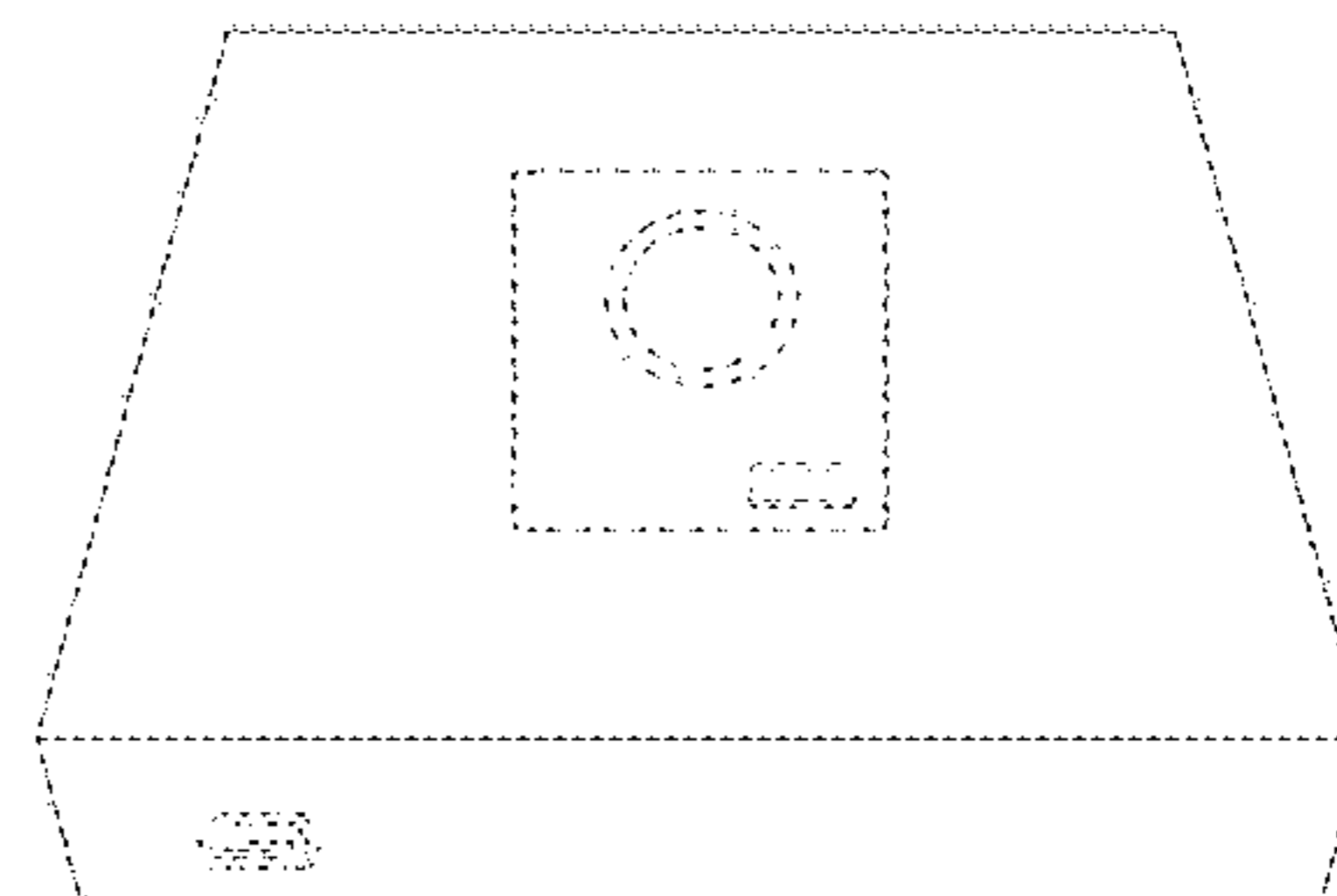
**FIG. 5**



**FIG. 6**



**FIG. 7**



**FIG. 8**