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(12) **United States Design Patent** (10) **Patent No.:** **US D807,332 S**
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(54) **ANTENNA**

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(**) Term: **15 Years**

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(52) **U.S. Cl.**
USPC **D14/230**

(58) **Field of Classification Search**
USPC D12/42, 43; D14/138, 230-238.1, 240,
D14/299, 358
CPC H01L 33/48; H01L 23/02; H01Q 7/00;
H01Q 13/10
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,061,437 B2	6/2006	Lin et al.
7,148,849 B2	12/2006	Lin
7,215,296 B2	5/2007	Abramov et al.
D546,821 S	7/2007	Oliver
D549,696 S	8/2007	Oshima et al.
7,333,067 B2	2/2008	Hung et al.
7,336,959 B2	2/2008	Khitrik et al.
D573,589 S	7/2008	Montgomery et al.
7,405,704 B1	8/2008	Lin et al.
7,477,195 B2	1/2009	Vance
D592,195 S	5/2009	Wu et al.
7,570,215 B2	8/2009	Abramov et al.
D599,334 S	9/2009	Chiang

D606,053 S	12/2009	Wu et al.
D607,442 S	1/2010	Su et al.
D608,769 S	1/2010	Bufe
D612,368 S	3/2010	Yang et al.
7,705,783 B2	4/2010	Rao et al.
7,729,662 B2	6/2010	Abramov et al.
D621,819 S	8/2010	Tsai et al.
7,843,390 B2	11/2010	Liu
7,847,385 B1 *	12/2010	Naem H01L 23/3171 257/686

D633,483 S	3/2011	Su et al.
D635,127 S	3/2011	Tsai et al.
7,907,971 B2	3/2011	Salo et al.
D635,560 S	4/2011	Tsai et al.
D635,963 S	4/2011	Podduturi
D635,964 S	4/2011	Podduturi
D635,965 S	4/2011	Mi et al.
D636,382 S	4/2011	Podduturi
7,965,242 B2	6/2011	Abramov et al.
D649,962 S	12/2011	Tseng et al.

(Continued)

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(57) **CLAIM**

The ornamental design for an antenna, as shown and described.

DESCRIPTION

FIG. 1 is a top plan view of an antenna with a base in broken lines.

FIG. 2 is a front elevation view of the antenna of FIG. 1.

FIG. 3 is a bottom plan view of the antenna of FIG. 1.

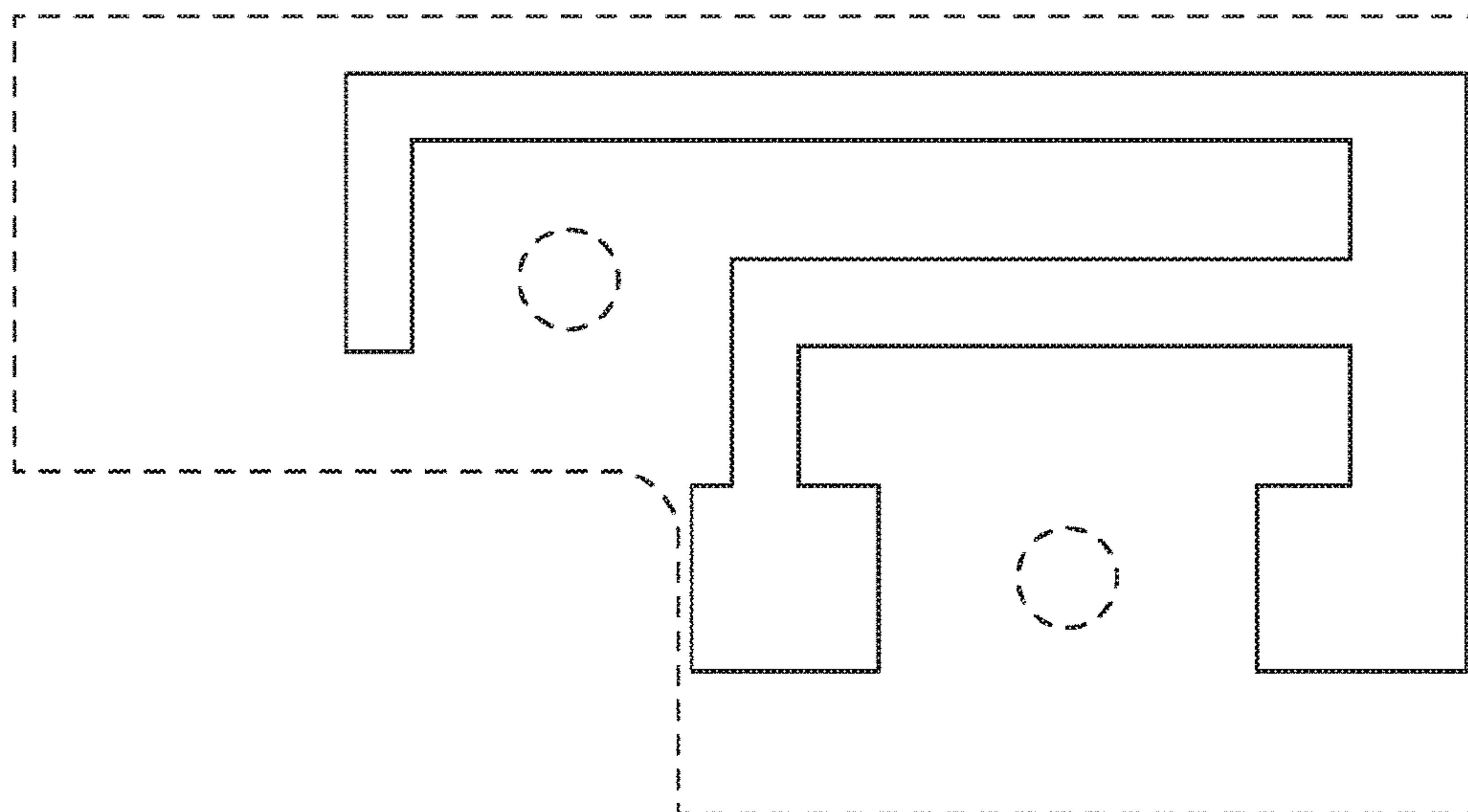
FIG. 4 is a top perspective view of the antenna of FIG. 1.

FIG. 5 is a top plan view of an antenna; and,

FIG. 6 is a front elevation view of the antenna of FIG. 5.

The broken lines are for illustration purposes only and form no part of the claimed invention.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D651,198 S 12/2011 Mi et al.
D654,059 S 2/2012 Mi et al.
D654,060 S 2/2012 Ko et al.
D658,639 S 5/2012 Huang et al.
D659,129 S 5/2012 Mi et al.
D659,685 S 5/2012 Huang et al.
D659,688 S 5/2012 Huang et al.
8,175,036 B2 5/2012 Visuri et al.
8,184,601 B2 5/2012 Abramov et al.
D662,916 S 7/2012 Huang et al.
8,248,970 B2 8/2012 Abramov et al.
D671,097 S 11/2012 Mi et al.
8,310,402 B2 11/2012 Yang
D676,429 S 2/2013 Gosalia et al.
D678,255 S 3/2013 Ko et al.
8,423,084 B2 4/2013 Abramov et al.
D684,565 S 6/2013 Wei
D685,352 S 7/2013 Wei
D685,772 S 7/2013 Zheng et al.
D686,600 S 7/2013 Yang
D689,474 S 9/2013 Yang et al.
D692,870 S 11/2013 He
D694,738 S 12/2013 Yang
D695,279 S 12/2013 Yang et al.
D695,280 S 12/2013 Yang et al.
D703,195 S 4/2014 Zheng
D703,196 S 4/2014 Zheng
D706,247 S 6/2014 Zheng et al.
D706,750 S 6/2014 Bringuir
D706,751 S 6/2014 Chang et al.
D708,602 S 7/2014 Gosalia et al.

D709,053 S 7/2014 Chang et al.
D710,832 S 8/2014 Yang
D710,833 S 8/2014 Zheng et al.
8,854,265 B1 10/2014 Yang et al.
D716,775 S 11/2014 Bidermann
D788,086 S * 5/2017 He D14/230
D792,381 S * 7/2017 He D14/230
D792,871 S * 7/2017 Zheng D14/230
D794,616 S * 8/2017 Gosalia D14/230
D795,228 S * 8/2017 He D14/230
D795,846 S * 8/2017 Chang D14/230
D795,848 S * 8/2017 Zheng D14/230
D796,493 S * 9/2017 Podduturi D14/230
2002/0003499 A1 1/2002 Kouam et al.
2004/0222936 A1 11/2004 Hung et al.
2005/0073462 A1 4/2005 Lin et al.
2005/0190108 A1 9/2005 Lin et al.
2006/0208900 A1 9/2006 Tavassoli Hozouri
2007/0030203 A1 2/2007 Tsai et al.
2008/0150829 A1 6/2008 Lin et al.
2009/0002244 A1 1/2009 Woo
2009/0058739 A1 3/2009 Konishi
2009/0135072 A1 5/2009 Ke et al.
2009/0262028 A1 10/2009 Murnbru et al.
2010/0188297 A1 7/2010 Chen et al.
2010/0309067 A1 12/2010 Tsou et al.
2011/0006950 A1 1/2011 Park et al.
2012/0038514 A1 2/2012 Bang
2012/0229348 A1 9/2012 Chiang
2012/0242546 A1 9/2012 Hu et al.
2015/0162660 A1 * 6/2015 Orsi H01Q 7/00
343/848
2016/0233576 A1 * 8/2016 Li H01Q 1/243

* cited by examiner

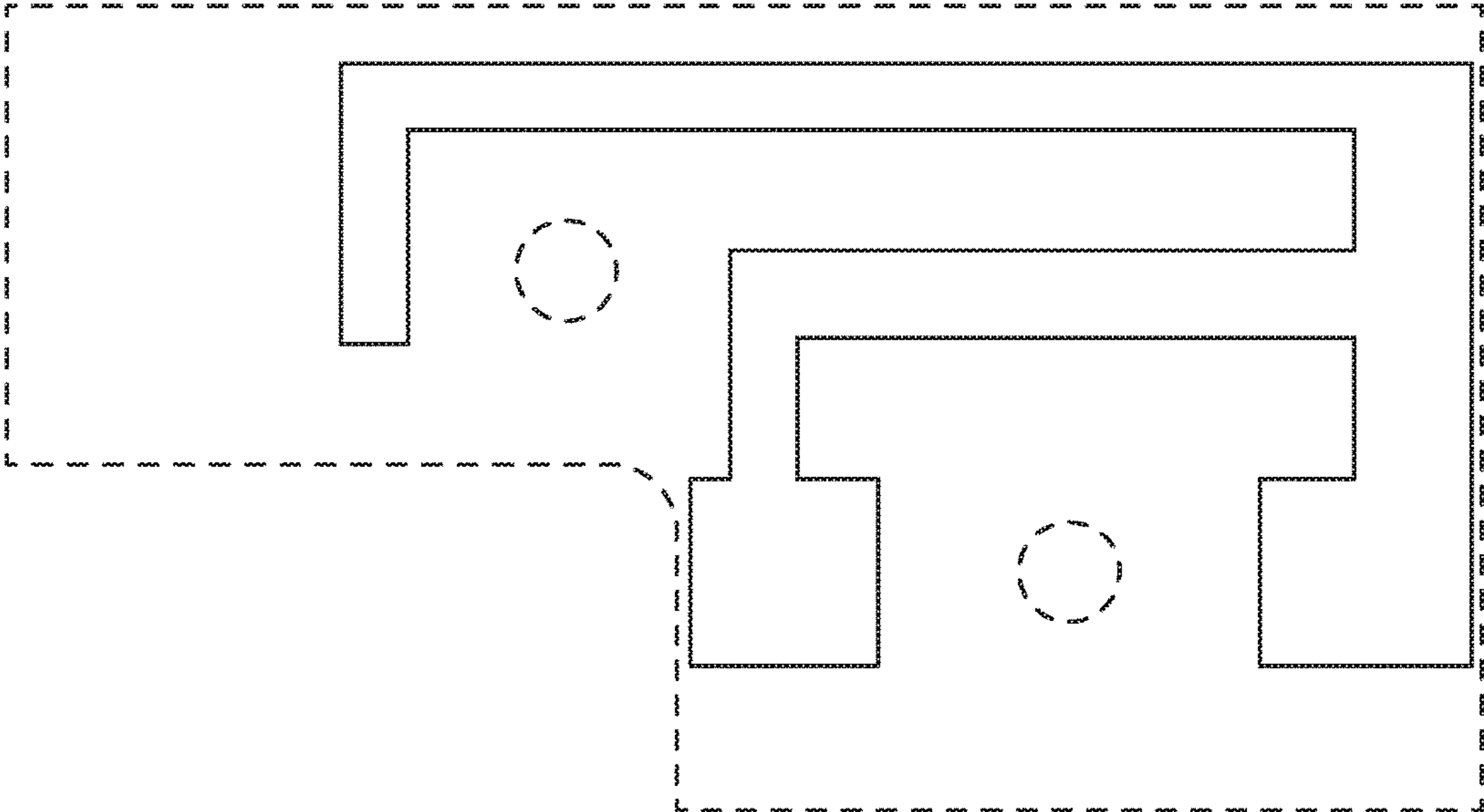


FIG. 1



FIG. 2

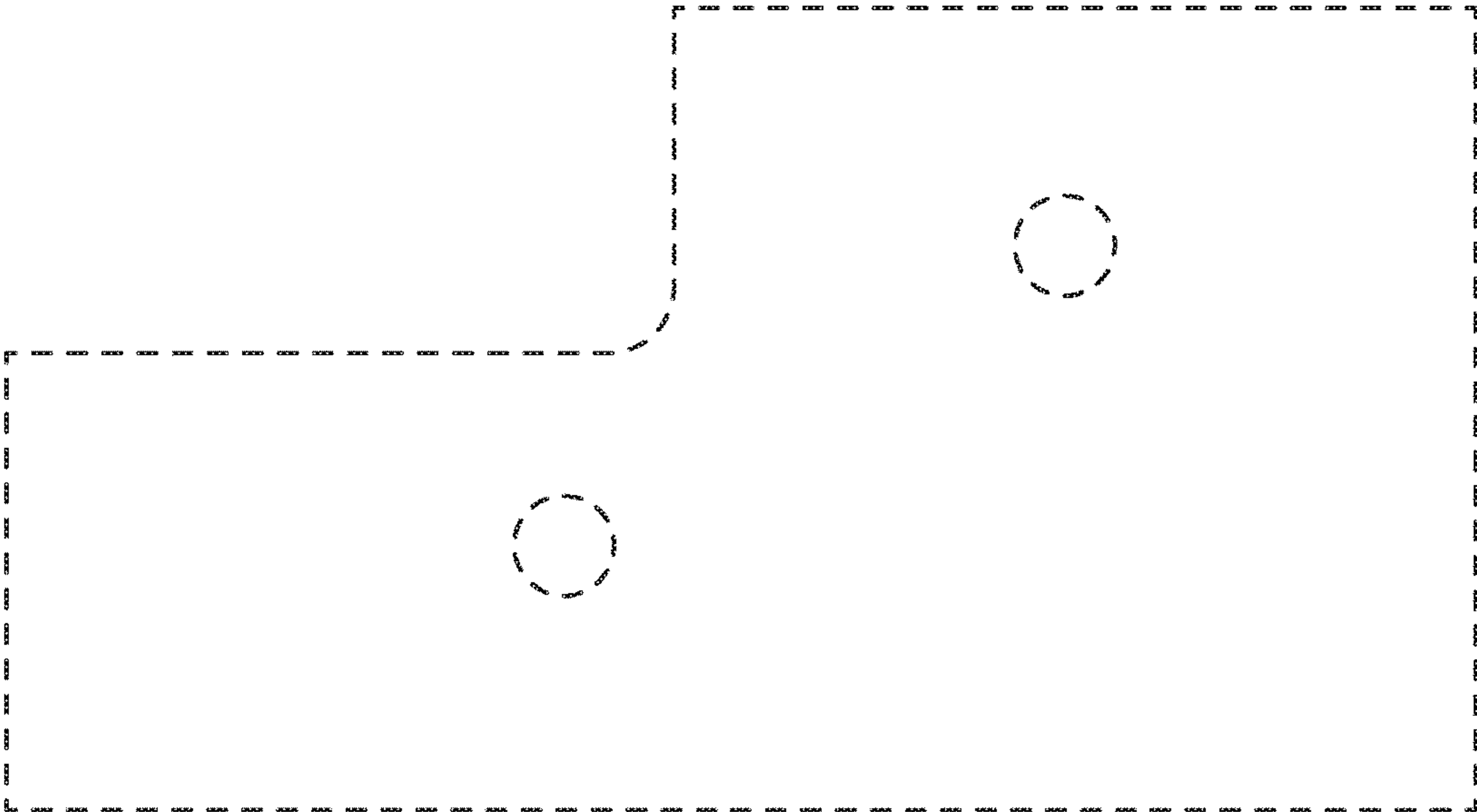


FIG. 3

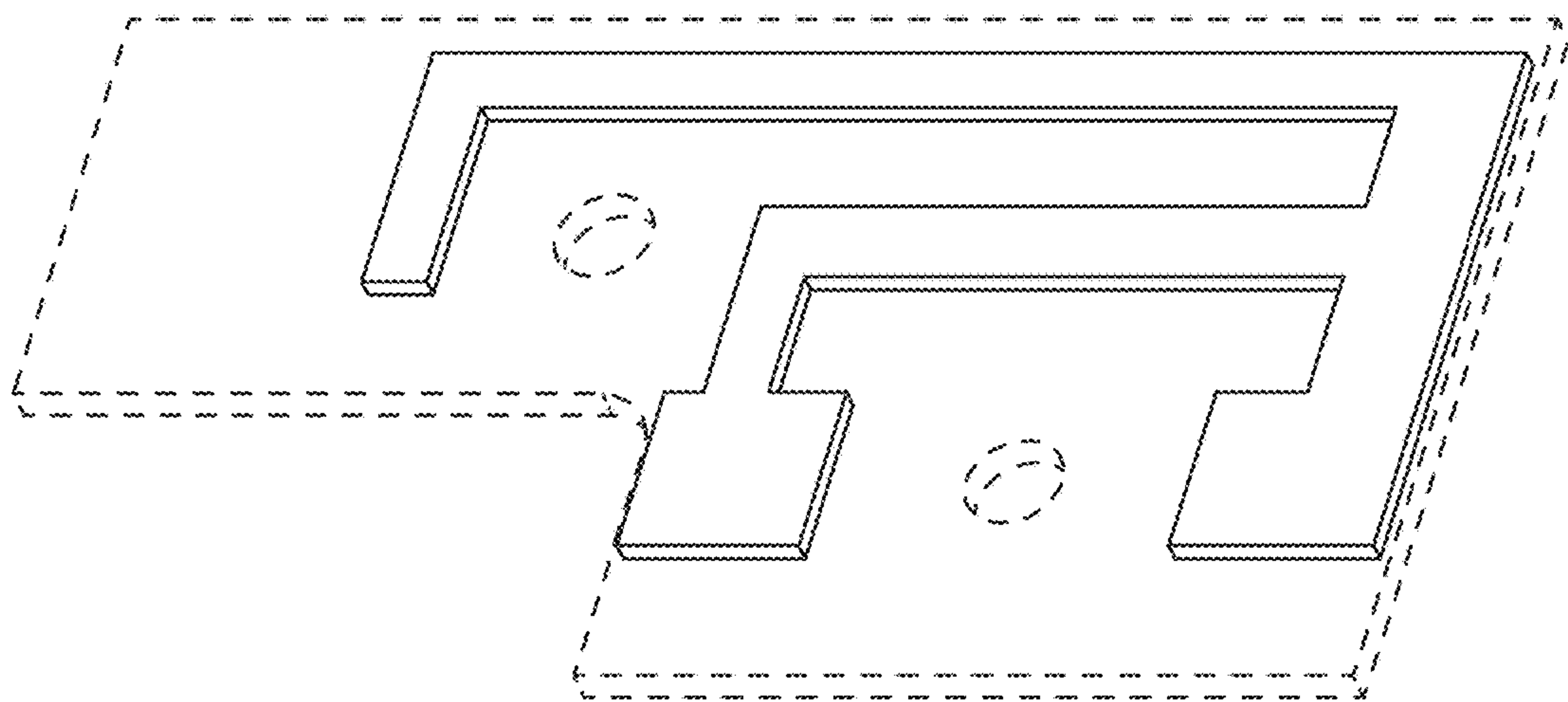


FIG. 4

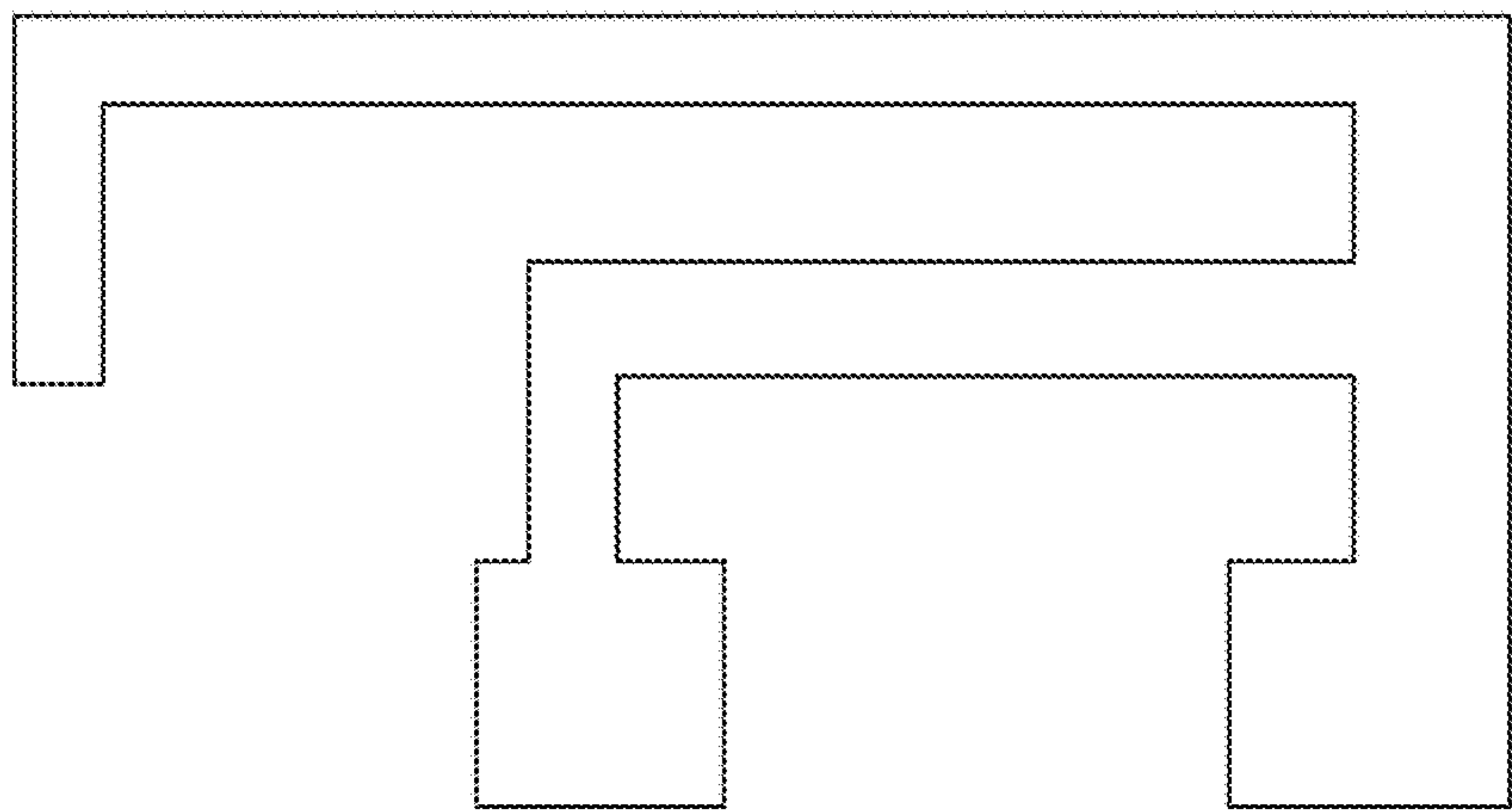


FIG. 5

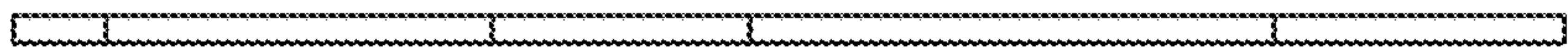


FIG. 6