



US00D606056S

(12) **United States Design Patent**  
**Oliver**

(10) **Patent No.:** **US D606,056 S**

(45) **Date of Patent:** **\*\* Dec. 15, 2009**

(54) **WAVEGUIDE ASSISTED CORE ANTENNA FOR RFID TAGS**

(75) **Inventor:** **Ronald A. Oliver**, Seattle, WA (US)

(73) **Assignee:** **Impinj, Inc.**, Seattle, WA (US)

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

(21) **Appl. No.:** **29/331,734**

(22) **Filed:** **Jan. 30, 2009**

(51) **LOC (9) Cl.** ..... **14-03**

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

(58) **Field of Classification Search** ..... D14/138,  
D14/230-238, 299, 358; D12/42, 43; 343/700 MS,  
343/700 R-705, 711-713, 741, 748, 767,  
343/795, 819, 840, 846, 866, 871-908; 455/90.2,  
455/90.3, 91, 128, 269, 344, 347, 562.1;  
333/193, 195

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,471,178	A *	11/1995	Hickernell	.....	333/193
5,949,306	A *	9/1999	Hickernell	.....	333/195
6,184,836	B1 *	2/2001	Ali	.....	343/702
6,208,224	B1 *	3/2001	Taniguchi et al.	.....	333/193
6,570,470	B2 *	5/2003	Maehara et al.	.....	333/193
6,839,029	B2 *	1/2005	Mendolia et al.	.....	343/700 MS
6,842,143	B2 *	1/2005	Otaka et al.	.....	343/700 MS
6,867,746	B2 *	3/2005	Mendolia et al.	.....	343/841
6,882,316	B2 *	4/2005	McKinzie et al.	.....	343/700 MS

6,937,192	B2 *	8/2005	Mendolia et al.	.....	343/700 MS
7,336,243	B2 *	2/2008	Jo et al.	.....	343/895
7,417,588	B2 *	8/2008	Castany et al.	.....	343/700 MS
2002/0175866	A1 *	11/2002	Gram	.....	343/702
2004/0075608	A1 *	4/2004	Scott et al.	.....	343/700 MS
2004/0125016	A1 *	7/2004	Atwood et al.	.....	343/700 MS
2004/0150566	A1 *	8/2004	Yuanzhu	.....	343/700 MS
2005/0237244	A1 *	10/2005	Annabi et al.	.....	343/702
2005/0280579	A1 *	12/2005	Liang et al.	.....	343/700 MS
2006/0044081	A1 *	3/2006	Tanaka et al.	.....	333/195
2007/0120623	A1 *	5/2007	Sakiyama et al.	.....	333/133
2008/0309433	A1 *	12/2008	Shibahara et al.	.....	333/193

\* cited by examiner

*Primary Examiner*—T. Chase Nelson

*Assistant Examiner*—John Windmuller

(74) *Attorney, Agent, or Firm*—Turk IP Law, LLC

(57) **CLAIM**

The ornamental design for a waveguide assisted core antenna for RFID tags, as shown and described.

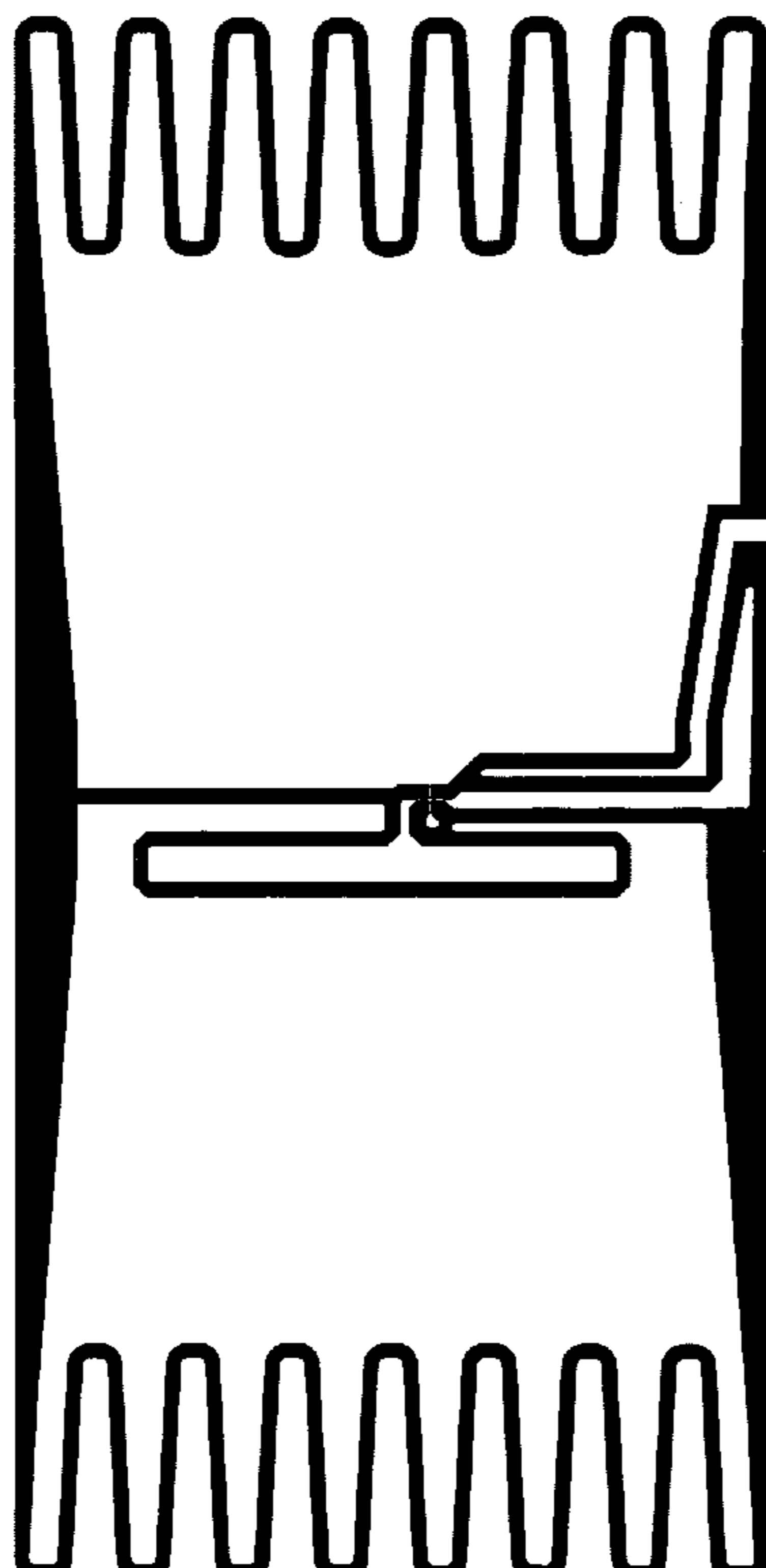
**DESCRIPTION**

FIG. 1 is a top plan view of a waveguide assisted core antenna for RFID tags showing my new design; and,

FIG. 2 is a top plan view thereof in use with an RFID chip.

The broken line showing of an RFID chip in FIG. 2 illustrates environment only and forms no part of the claimed design. The solid black areas constitute the entirety of the claimed design.

**1 Claim, 2 Drawing Sheets**



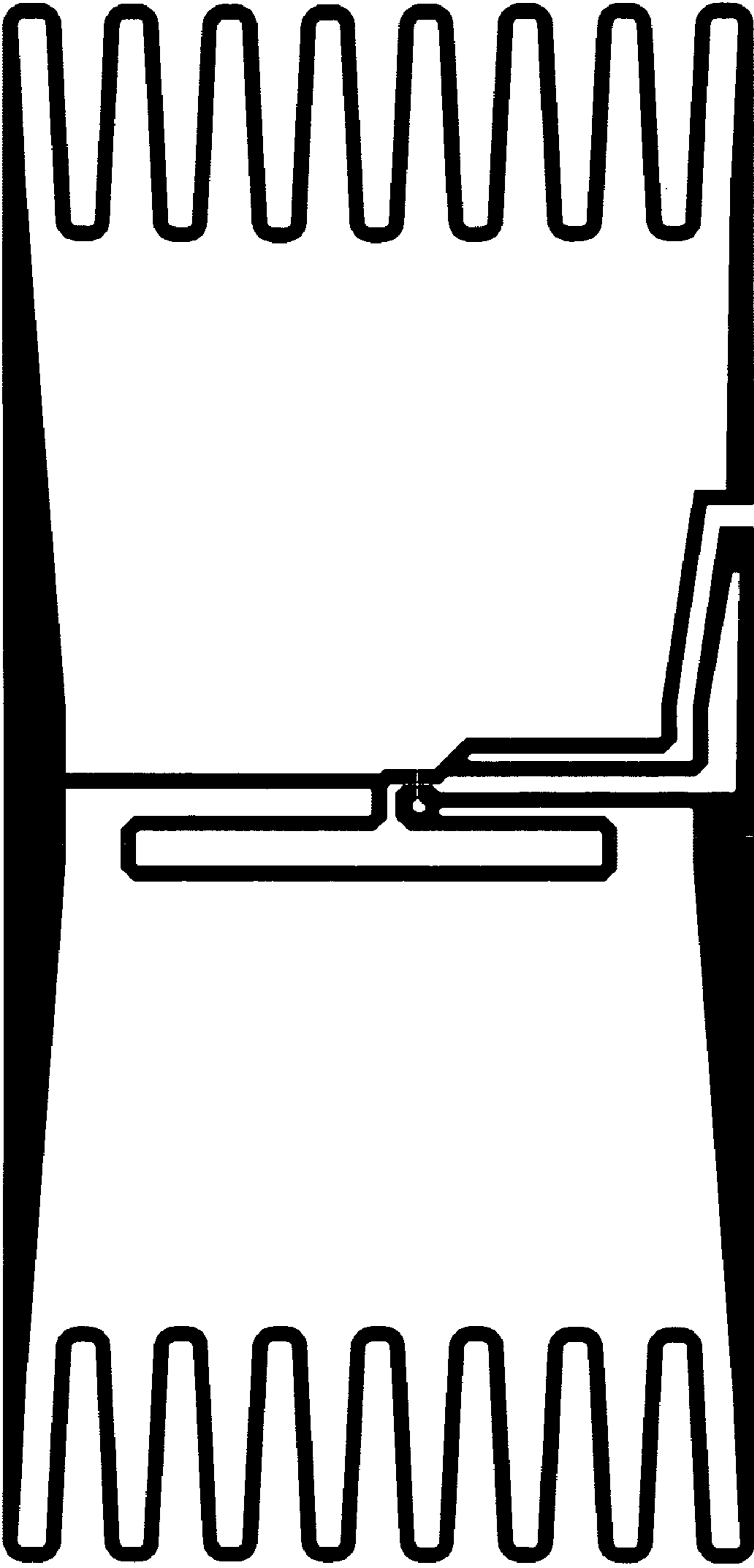


FIG. 1

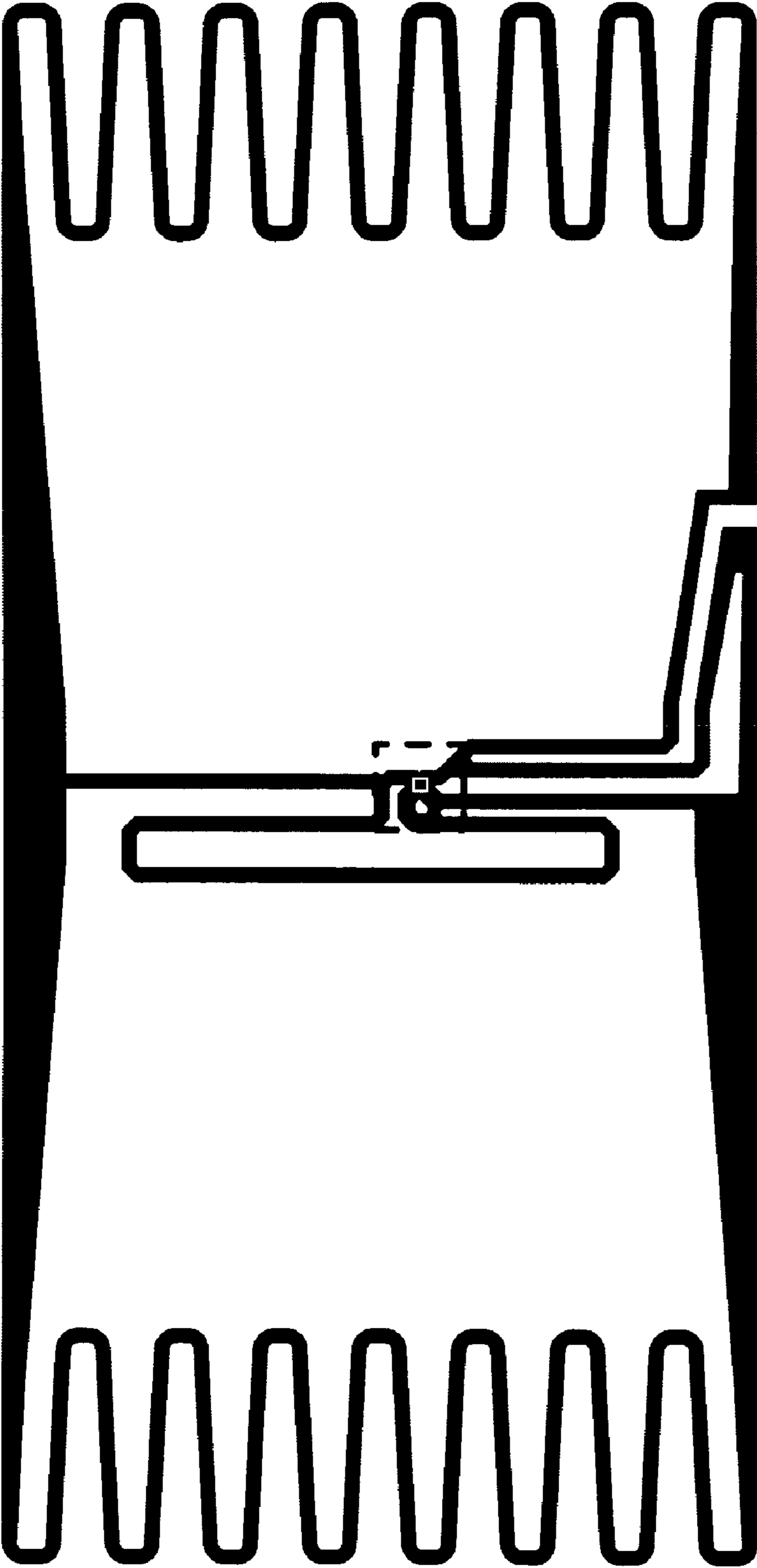


FIG. 2