



US00D488136S

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

(10) **Patent No.:** **US D488,136 S**

(45) **Date of Patent:** **\*\* Apr. 6, 2004**

(54) **PORTION OF A MATRIX FOR SURFACE MOUNT PACKAGE LEADFRAME**

(75) Inventors: **James Harnden**, Hollister, CA (US);  
**Richard K. Williams**, Cupertino, CA (US);  
**Anthony Chia**, Singapore (SG);  
**Chu Weibing**, Shanghai (CN); **Allen K. Lam**, Fremont, CA (US)

(73) Assignee: **GEM Services, Inc.**, San Jose, CA (US)

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

(21) Appl. No.: **29/173,646**

(22) Filed: **Jan. 3, 2003**

(51) **LOC (7) Cl.** ..... **13-03**

(52) **U.S. Cl.** ..... **D13/182**

(58) **Field of Search** ..... D13/182; 29/622,  
29/740, 827; 174/52.2, 52.4; 206/713, 714,  
715, 716, 727, 728; 257/667, 668; 333/185;  
428/573

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,698,074 A	*	10/1972	Helda et al.	29/827
4,118,859 A		10/1978	Busler	
4,234,666 A		11/1980	Gursky	
4,298,883 A		11/1981	Komatsu et al.	
4,633,582 A		1/1987	Ching et al.	
4,809,054 A		2/1989	Waldner	
4,818,960 A		4/1989	Satoh et al.	
4,852,250 A		8/1989	Andrews	

4,865,193 A		9/1989	Shimamoto et al.	
5,115,299 A		5/1992	Wright	
5,554,886 A		9/1996	Song	
5,900,582 A		5/1999	Tomita et al.	
6,016,918 A		1/2000	Ziberna	
6,170,151 B1 *		1/2001	Link et al.	29/740
6,265,761 B1 *		7/2001	Ghai	257/666
6,329,710 B1 *		12/2001	Corisis et al.	257/692
6,389,672 B1 *		5/2002	Ishii et al.	29/430
D465,207 S		11/2002	Williams et al.	
6,486,538 B1 *		11/2002	Reiss et al.	257/668
6,543,512 B1 *		4/2003	Hamren	156/540
6,566,740 B2 *		5/2003	Yasunaga et al.	257/670

\* cited by examiner

*Primary Examiner*—Philip S. Hyder

*Assistant Examiner*—Selina Sikder

(74) *Attorney, Agent, or Firm*—Townsend and Townsend and Crew LLP

(57) **CLAIM**

The ornamental design for a portion of a matrix for surface mount package leadframe, as shown and described.

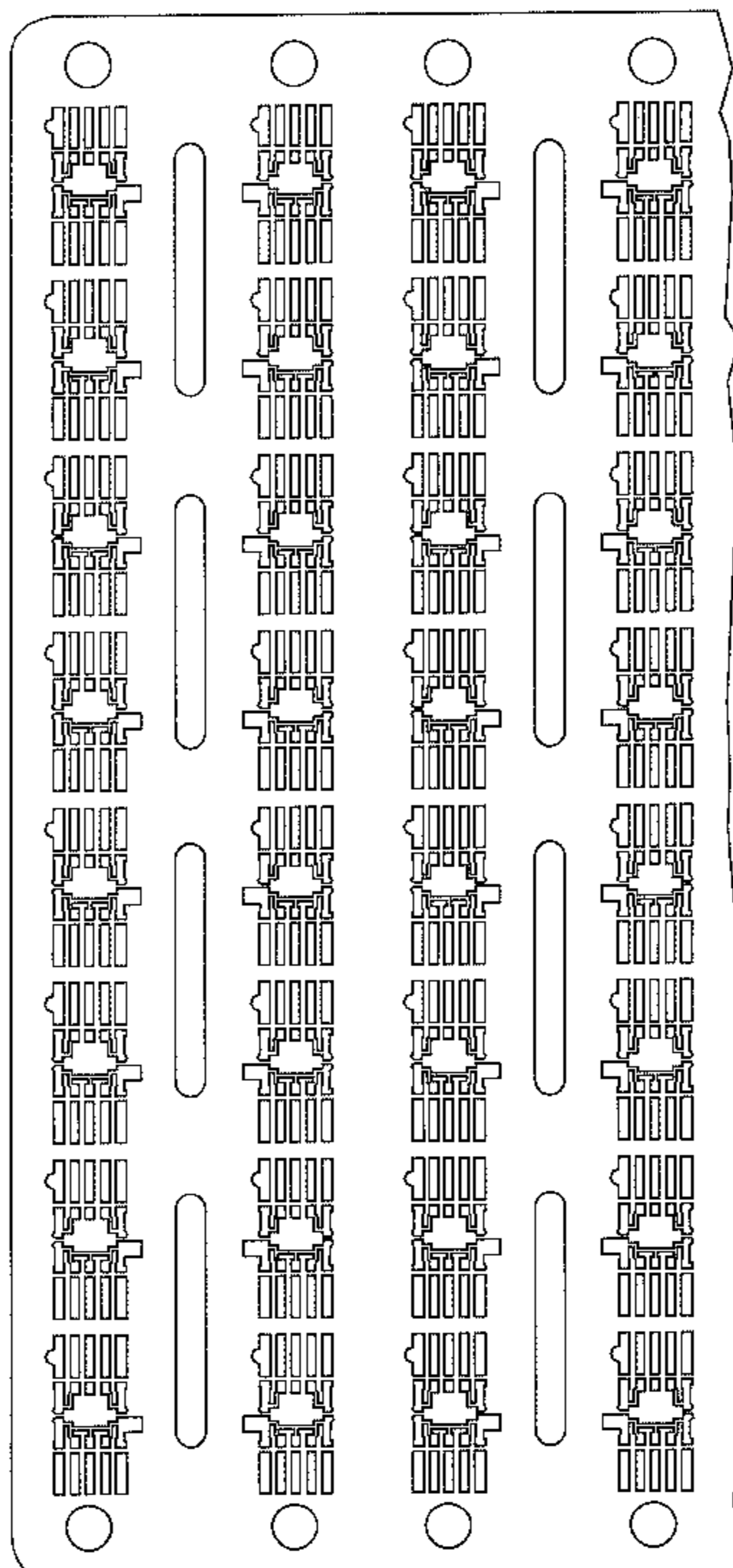
**DESCRIPTION**

FIG. 1 is a top plan view of a portion of a matrix for surface mount package leadframe showing my new design;

FIG. 2 is a top plan view of an enlarged fragment of the portion of a matrix for surface mount package leadframe; and,

FIG. 3 is a perspective view of a portion of a matrix for surface mount package leadframe.

**1 Claim, 3 Drawing Sheets**



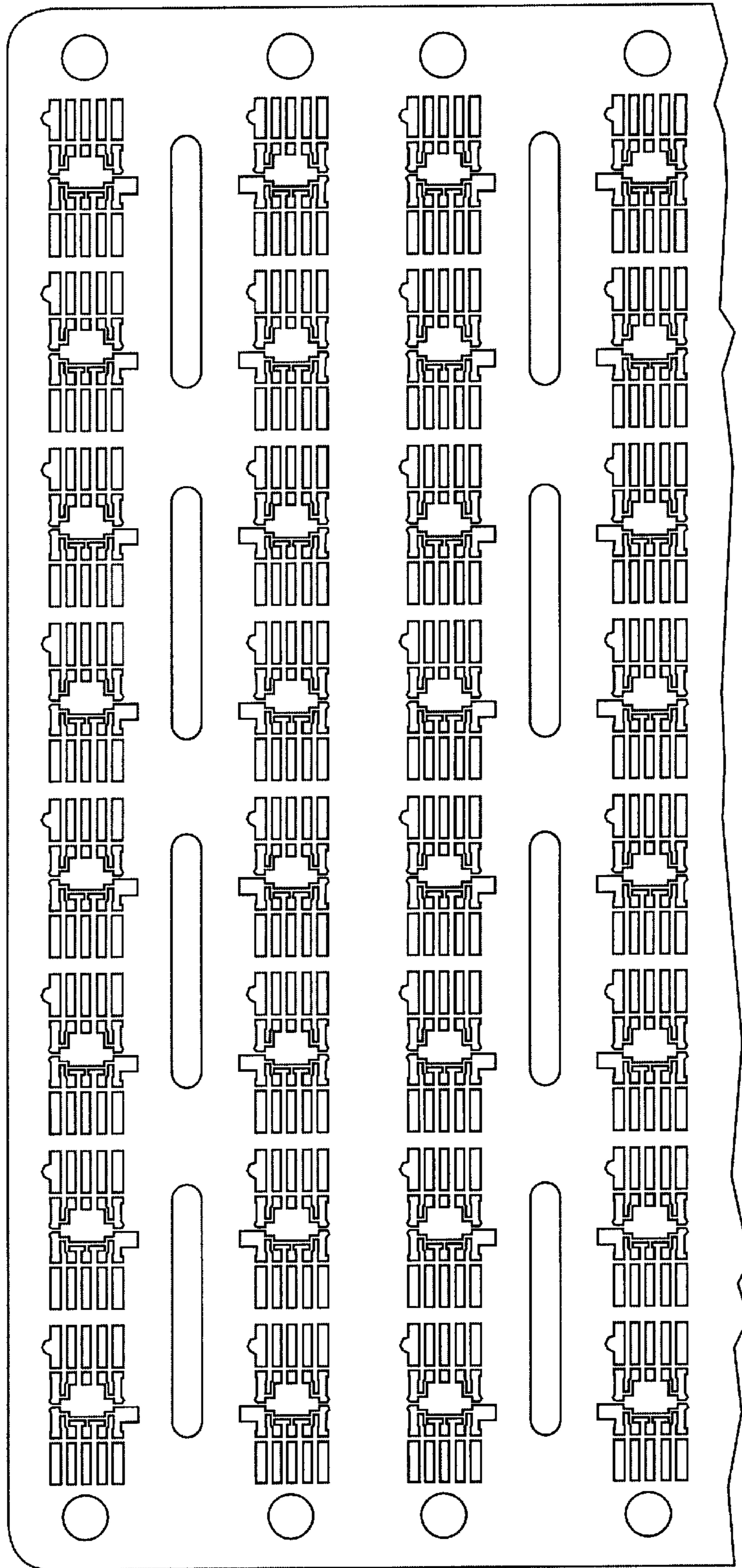


FIG. 1

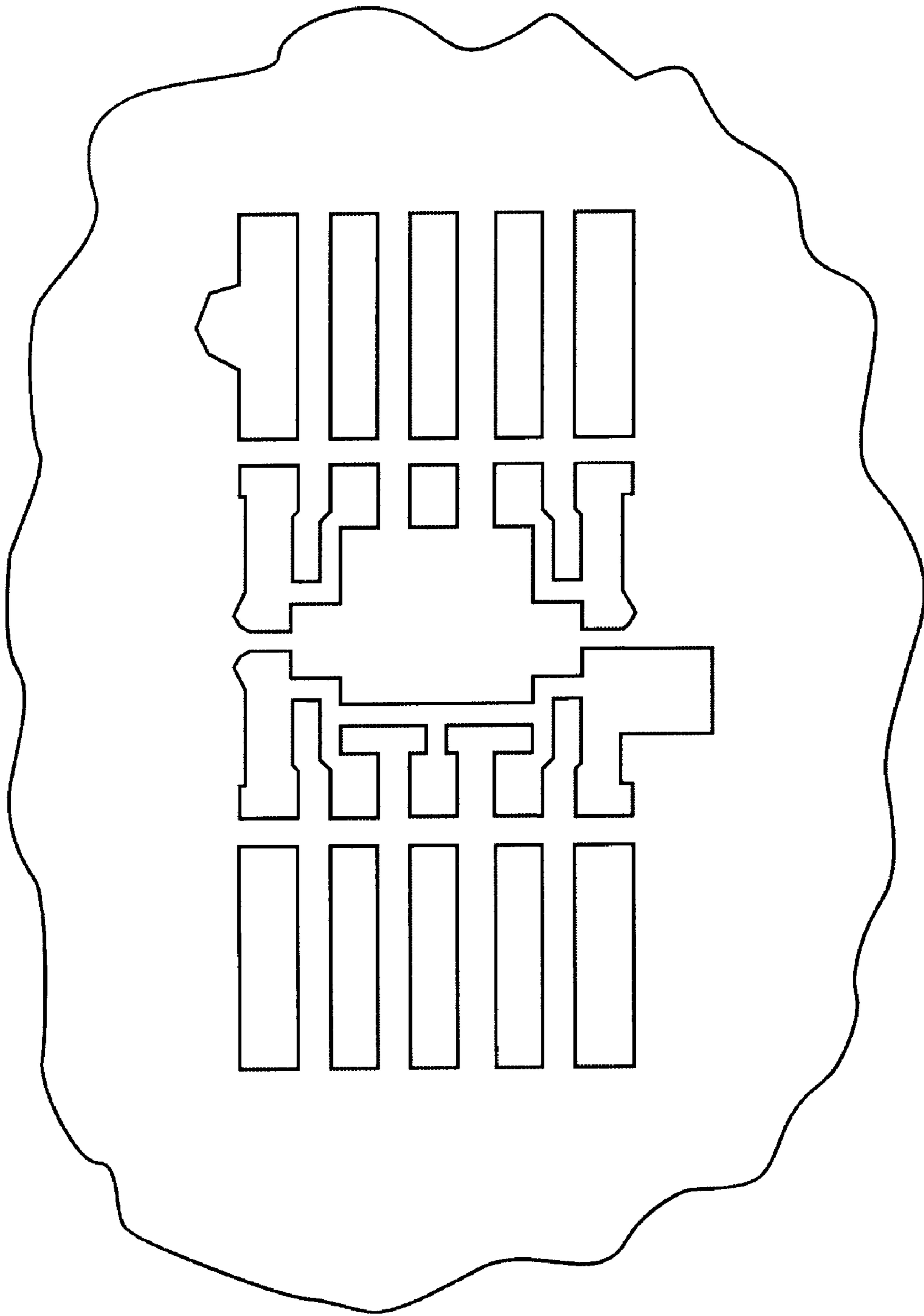


FIG. 2

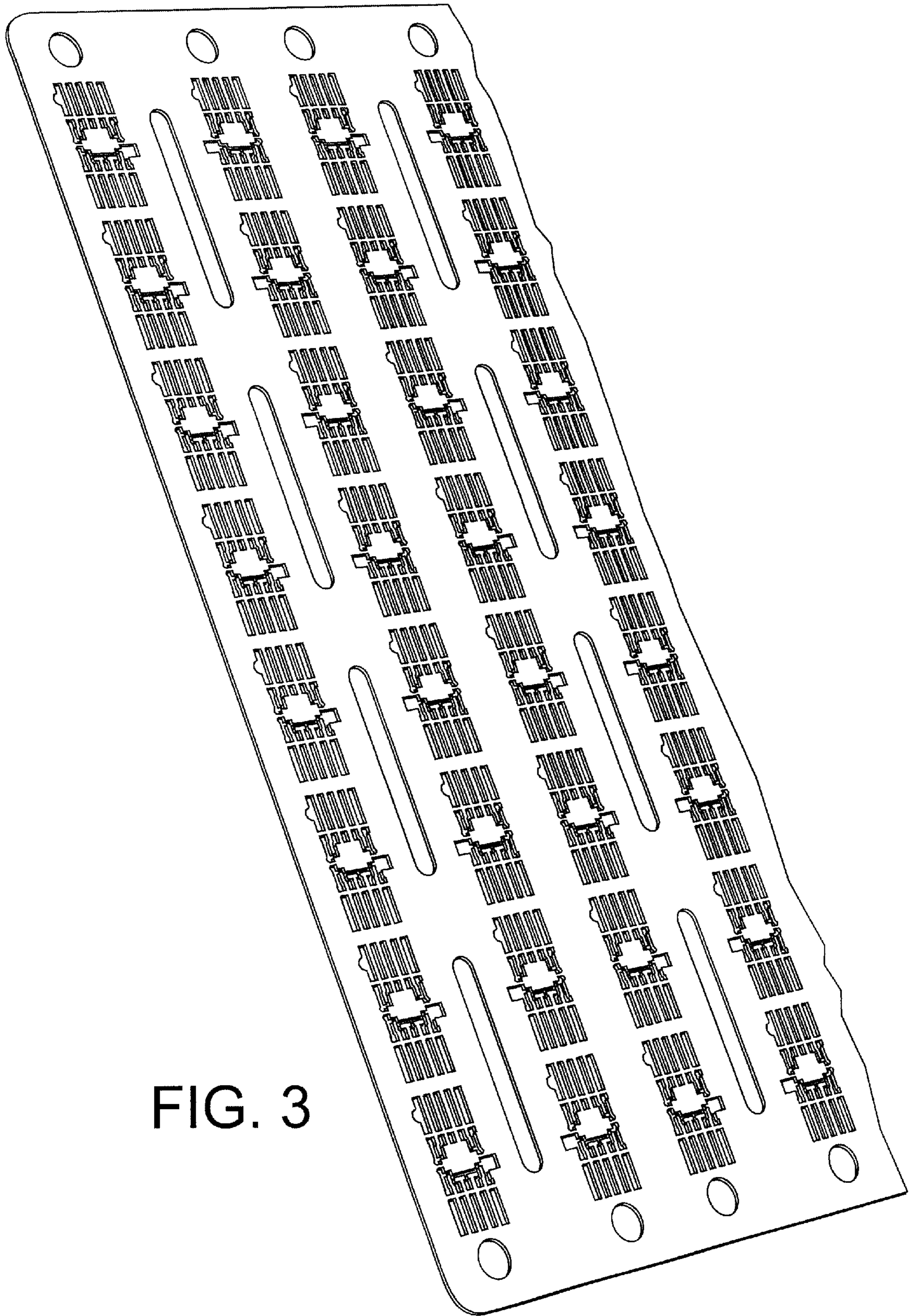


FIG. 3