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Harnden et al.

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

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(*) Notice: This patent is subject to a terminal disclaimer.

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

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

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(56) **References Cited**

U.S. PATENT DOCUMENTS

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	257/667
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	
6,028,350	A	*	2/2000	Sabyeying	257/670
6,183,589	B1	*	2/2001	Kim et al.	156/249
6,314,639	B1	*	11/2001	Corisis	29/827
6,377,742	B1	*	4/2002	Go	385/134
D461,170	S		8/2002	Williams et al.	
D461,172	S		8/2002	Harnden et al.	
D461,459	S		8/2002	Harnden et al.	
D461,783	S		8/2002	Williams et al.	
D461,784	S		8/2002	Harnden et al.	
D462,062	S		8/2002	Williams et al.	
6,448,634	B1	*	9/2002	Hashimoto	257/668
D465,207	S	*	11/2002	Williams et al.	D13/182
6,486,538	B1	*	11/2002	Reiss et al.	257/668
D467,231	S		12/2002	Harnden et al.	
D467,560	S		12/2002	Harnden et al.	
D467,884	S		12/2002	Williams et al.	
D467,885	S		12/2002	Harnden et al.	
D471,165	S		3/2003	Williams et al.	
D483,336	S		12/2003	Harnden et al.	
D483,337	S		12/2003	Harnden et al.	
D484,103	S		12/2003	Harnden et al.	
D484,104	S		12/2003	Harnden et al.	
D484,858	S		1/2004	Harnden et al.	
D484,859	S		1/2004	Harnden et al.	
D485,243	S	*	1/2004	Harnden et al.	D13/182
D485,244	S	*	1/2004	Harnden et al.	D13/182
D485,808	S	*	1/2004	Harnden et al.	D13/182
D486,802	S	*	2/2004	Harnden et al.	D13/182
D487,431	S	*	3/2004	Williams et al.	D13/182
D487,432	S	*	3/2004	Harnden et al.	D13/182
D488,136	S	*	4/2004	Harnden et al.	D13/182
2002/0106835	A1	*	8/2002	Carter et al.	438/123

* cited by examiner

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(57) CLAIM

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

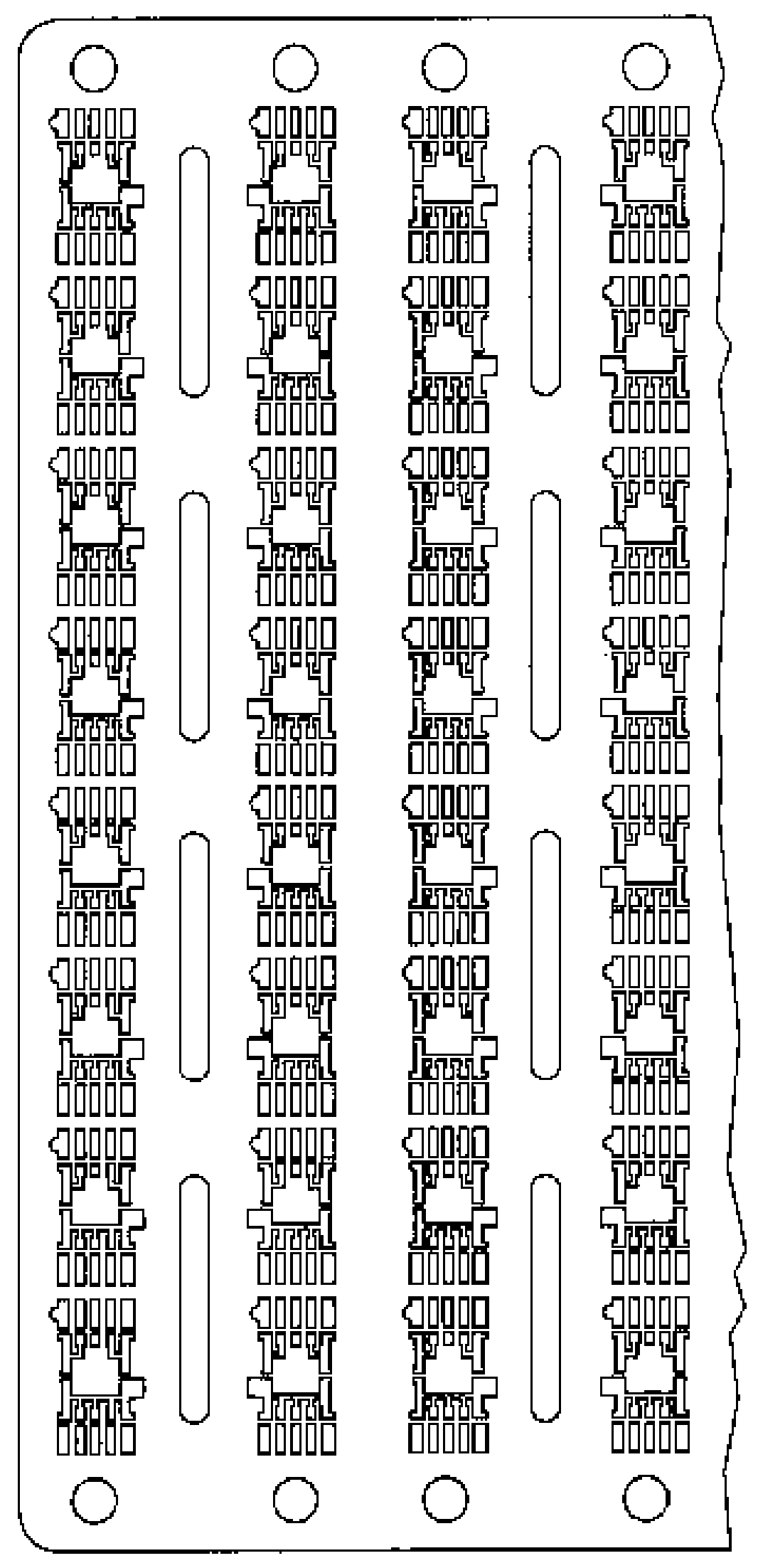
DESCRIPTION

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

1 Claim, 3 Drawing Sheets



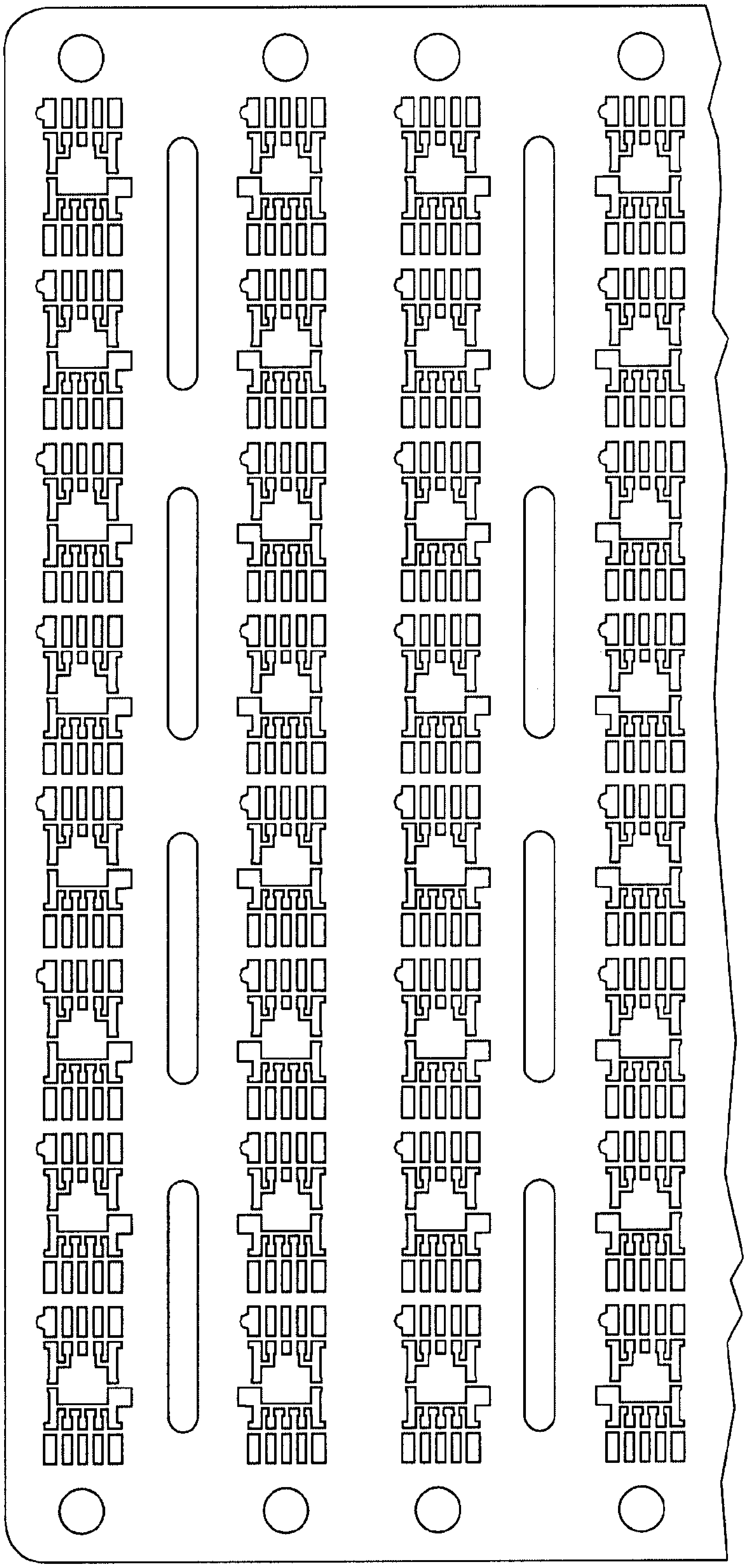


FIG. 1

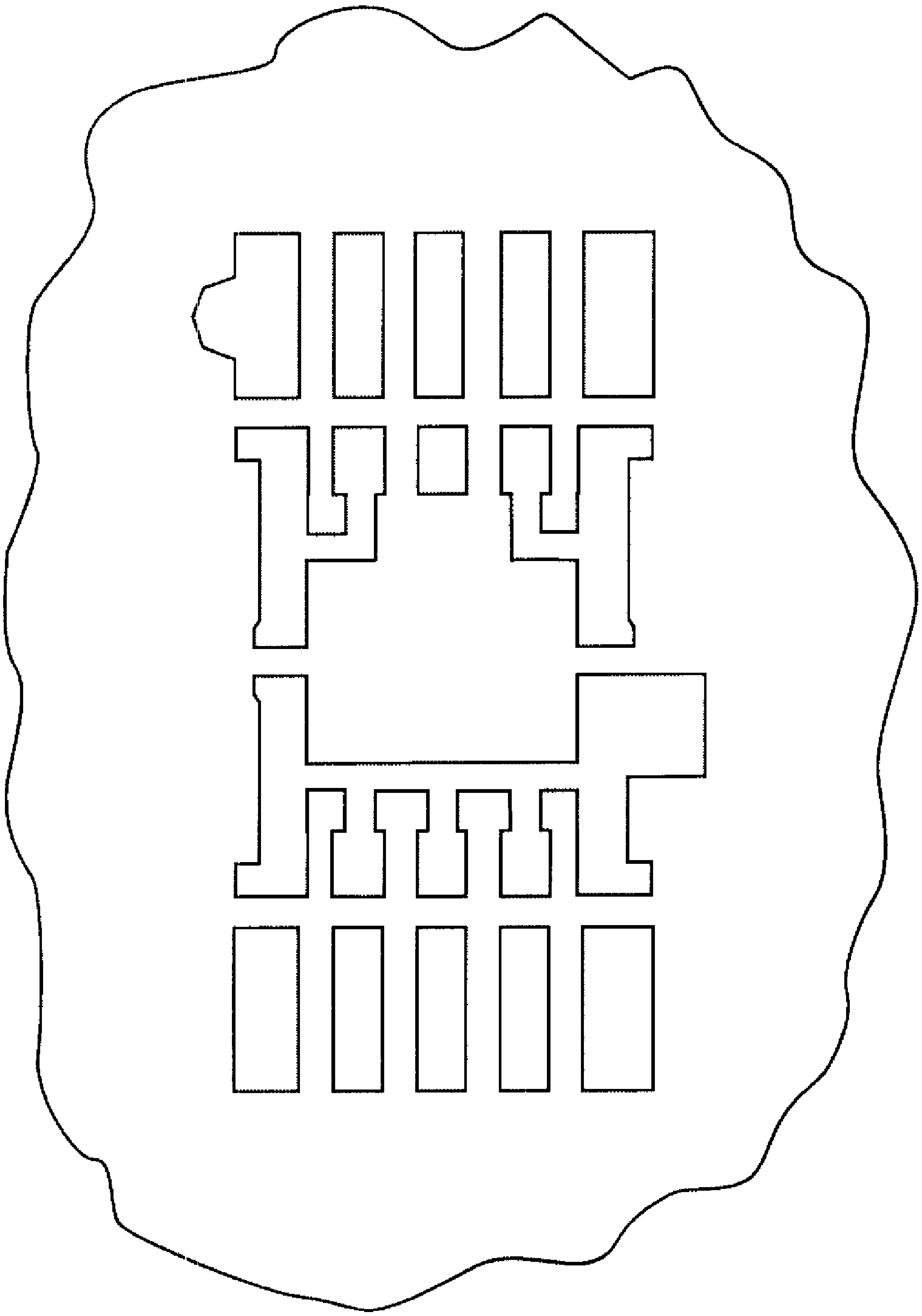


FIG. 2

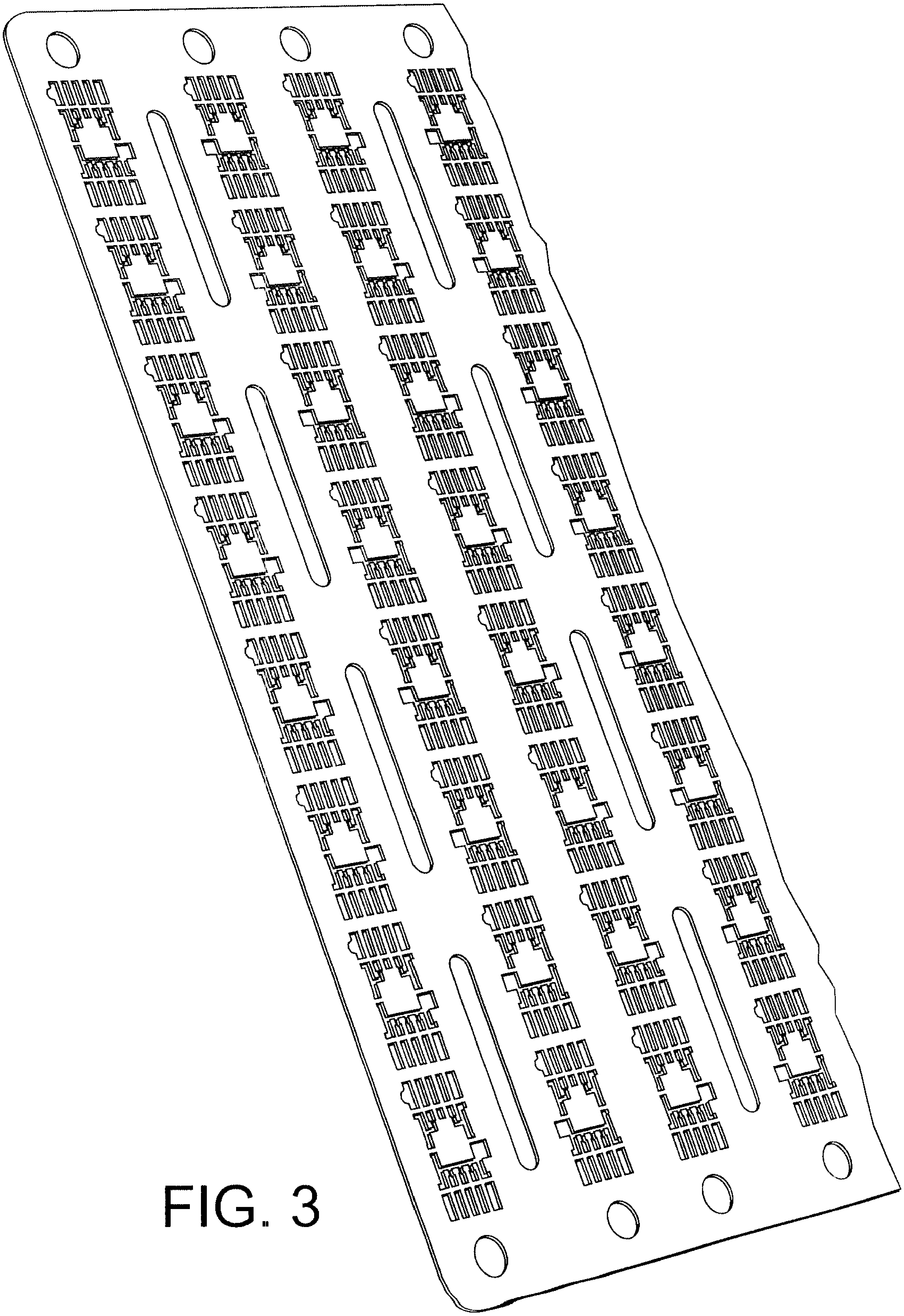


FIG. 3