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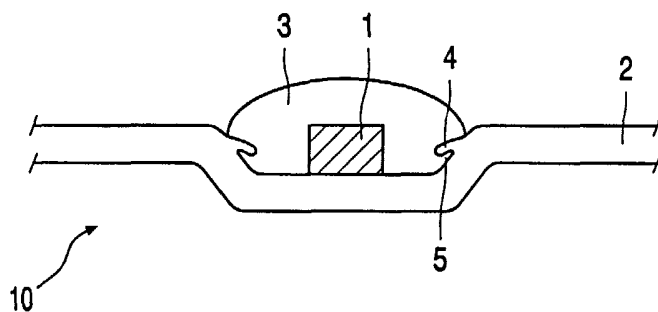
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE AND A SUPPORT PLATE, AND A SEMICONDUCTOR DEVICE OBTAINED BY MEANS OF SAID METHOD



(57) Abstract: The invention relates to a method of manufacturing a semiconductor device (10) in which a semiconductor element (1), such as a diode (1), is attached to a support plate (2) and provided with a plastic encapsulation (3). The plate (2) is provided with a flange (4) which is provided with an undercut region (5) in order to improve the connection between the plate (2) and the encapsulation (3). The known method is comparatively complicated and expensive. In a method according to the invention, the plate (2) is made from a ductile material. A step is formed in the surface of

the plate (2) by pressing using a first die (6), and by pressing using a second die (8), the flange (4) provided with the undercut region (5) is formed at, or near, the wall of the step (7). This method, which only employs a pressing technique, is simple and inexpensive and, in addition, results in a better and more reliable connection between the plate (2) and the encapsulation (3). The flange (4) should be formed at, or very close to, the wall of the step (7) in the plate (2).

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5 701 034 A (MARRS ROBERT C) 23 December 1997 (1997-12-23) abstract; figures 1,5 column 4, line 56 -column 5, line 33 column 9, line 38 -column 10, line 15 ---	1,2,8-10 3,6
X A	EP 0 577 966 A (MOTOROLA INC) 12 January 1994 (1994-01-12) abstract; figure 3 column 2, line 40 -column 4, line 18 ---	1,8-10 2-4,6
A	US 3 475 662 A (ZIDO JOSEPH E) 28 October 1969 (1969-10-28) abstract; figures 1-5 column 1, line 61 -column 2, line 9 column 2, line 21 - line 63 --- -/--	1-10



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Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 43 41 269 A (BOSCH GMBH ROBERT) 22 June 1995 (1995-06-22) cited in the application abstract; figures 1-6 column 2, line 42 -column 5, line 10 -----	1-10

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