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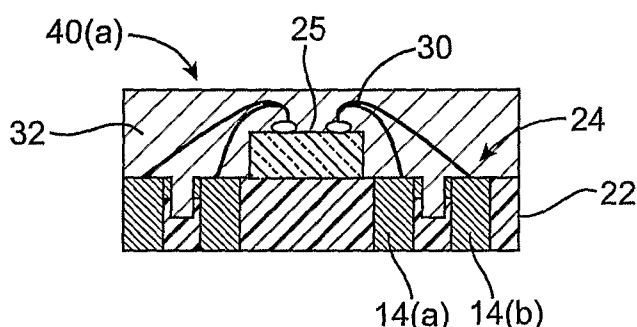
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SEMICONDUCTOR DIE PACKAGE AND METHOD FOR MAKING THE SAME



(57) Abstract: A semiconductor die package comprising a premolded substrate including a leadframe structure and a molding material. The leadframe structure has a first conductive portion, a second conductive portion and a pad region. A cavity is located between the first and second conductive portions. An encapsulating material covers the semiconductor die on the premolded substrate. An exterior surface of the pad region and the molding material are substantially coplanar and coincide with a surface of the premolded substrate.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/23851

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8): H01L 23/495; H01L 23/28 (2006.01)

USPC: 257/666,787

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)

U.S.: 257/ALL

U.S.: 438/ALL

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 practicable, search terms used)

PubWest: USPT,PGPB,EPAB,JPAB

Search terms: semiconductor die; leadframe; molding material; cutting; multiple dies; encapsulating; substrate; ; copper; MOSFET; wirebonded; overmolded; die pad; attach region; transistor;

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 6,034,441 A (CHEN) 07 March 2000 (07.03.2000), entire document, especially column 4, rows 15-30 and figures 1 and 3.	1-4, 6-11, 14-17
Y	US 6,876,068 B1 (LEE et al.) 05 April 2005 (05.04.2005), column 6, lines 8-22.	5, 12-13, 18, 21-79, 81-100
Y	US 6,624,507 B1 (NGUYEN et al.) 23 September 2003 (23.09.2003) entire document	5, 18
Y	US 6,624,507 B1 (NGUYEN et al.) 23 September 2003 (23.09.2003) entire document	21-40
Y	US 6,780,679 B2 (ITO et al.) 24 August 2004 (24.08.2004), entire document, especially column 6, rows 51-54 and figure 7.	41-60
Y	US 6,911,718 B1 (Alegre et al.) 28 June 2005 (28.06.2005), column 5, lines 40-60.	59, 61-79
X ----- Y	US 6,891,256 B2 (JOSHI et al) 10 May 2005 (10.05.2005), entire document.	101, 103, 106, 108, 110
		12-13, 28-29, 38-39, 43, 56-57, 68-69, 78-79, 102, 104-105, 107, 109

☒ Further documents are listed in the continuation of Box C.

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"&" document member of the same patent family

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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.
Y	US 6,404,044 B2 (Akram et al) 11 June 2002 (11.06.2002), column 10, lines 5-55.	23-24, 33-34 and 109
Y	US 6,858,467 B2 (Moden) 22 February 2005 (22.02.2005), entire document, especially figure 2A.	81-100, 102, 104-105, 107
X	US 6,806,580 A (JOSHI et al.) 19 October 2004 (19.10.2004), entire document.	111-130
A	US 6,720,642 B1 (JOSHI et al) 13 April 2004 (13.04.2004), entire document	12-13, 28-29, 38-39, 43, 56-57, 68-69, 78-79, 101-130