06/08/03
200305 0630

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

162162

(43) International Publication Date
29 August 2002 (29.08.2002)

PCT

(10) International Publication Number
WO 02/067322 A3

(51) International Patent Classification[7]: H01R 12/16, H05K 7/10, H01R 13/193

(21) International Application Number: PCT/US02/03557

(22) International Filing Date: 6 February 2002 (06.02.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/789,141 20 February 2001 (20.02.2001) US

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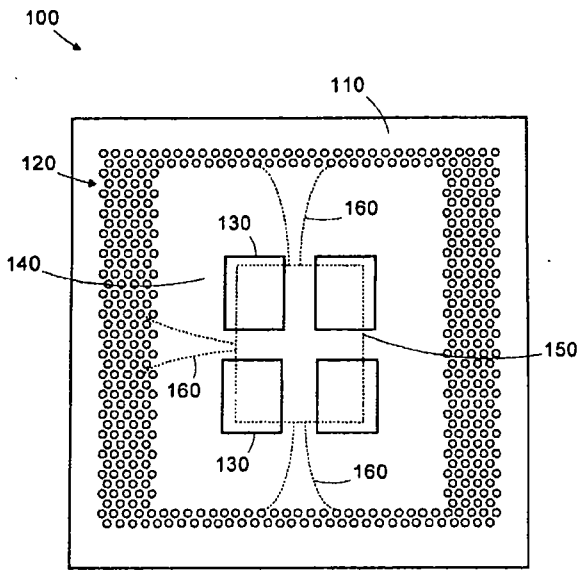
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) Title: SEMICONDUCTOR DEVICE HAVING SIGNAL CONTACTS AND HIGH CURRENT POWER CONTACTS



(57) Abstract: A semiconductor device (400) includes a casing (110), a semiconductor die (150) supported by the casing (110), at least one contact pad (420), and a plurality of external contacts (120). The casing (110) has an opening (410) exposing at least a portion (430) of the semiconductor die (150). The contact pad (420) is disposed on the exposed portion (430) of the semiconductor die (150). The plurality of external contacts (120) extends from the casing (110) and is coupled to the semiconductor die (150). The contact pad (420) has a higher current-carrying capacity than each of the external contacts (120). A circuit assembly includes a printed circuit board (300), a semiconductor device (100, 400), and a socket (200). The semiconductor device (100, 400) includes a casing (110), a semiconductor die (150) supported by the casing (110), at least one contact pad (130, 420) disposed on one of the casing (110) and the semiconductor die (150), and a plurality of external contacts (120) extending from the casing (110) and being coupled to the semiconductor die (150). The contact pad (130, 420) has a higher current-carrying capacity than each of the external contacts (120). The socket (200) is coupled to the printed circuit board (300) and adapted to receive the semiconductor device (100, 400). The socket (200) includes a first plurality of contacts (250) adapted to interface with the external contacts (120) of the semiconductor device (100, 400), at least one base contact (285) adapted to interface with the contact pad (130, 420), a base portion (220) having a first plurality of openings (220) having a first plurality of openings (240), and a top portion (210) slidingly engaged with the base portion (220). The first plurality of contacts (250) are coupled to the printed circuit board (300) and disposed within the first plurality of openings (240). The top portion (210) includes a second plurality of openings (230) corresponding to the first plurality of openings (240) in the base portion (220).

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ACTION

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
19 December 2002

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.