

(51) International Patent Classification:
C07F 7/08 (2006.01) C09J 179/08 (2006.01)
C09J 163/00 (2006.01) C09J 11/06 (2006.01)

(21) International Application Number:
PCT/US2009/037936

(22) International Filing Date:
23 March 2009 (23.03.2009)

(25) Filing Language:
English

(26) Publication Language:
English

(30) Priority Data:
61/038,728 21 March 2008 (21.03.2008) US

(71) Applicant (for all designated States except US): DE® SIGNER MOLECULES, INC. [US/US]: 10090 Willow Creek Road, San Diego, CA 92131 (US).

(72) Inventor; and

(74) Agent: BABIN, Jane; The Law Office of Jane K. Babin, PC, c/o Intellivate, PO Box 52050, USPTO Customer No. 71006, Minneapolis, MN 55402 (US).


(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report (Art. 21(3))
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report: 17 December 2009

(54) Title: ANTI-BLEED COMPOUNDS, COMPOSITIONS AND METHODS FOR USE THEREOF

On Au plated ceramic

Figure 1

(57) Abstract: The invention is based on the discovery that addition of certain carboxylic acid derivatives of siloxanes to thermosetting adhesive compositions and die-attach pastes renders such compositions and pastes extremely resistant to resin bleed. The present invention provides siloxane-carboxylic acid compounds useful as anti-bleed additives. Also provided are adhesive compositions and pastes containing the compounds of the invention, which are particularly useful in applications that require little to no resin bleed prior to curing of the compositions (such as e.g., electronic packaging applications).
INTERNATIONAL SEARCH REPORT

PCT/ISA/210 (second sheet) (May 2008)

INTERNATIONAL SEARCH REPORT

PCT/ISA/210 (second sheet) (May 2008)

INTERNATIONAL SEARCH REPORT

PCT/ISA/210 (second sheet) (May 2008)

INTERNATIONAL SEARCH REPORT

PCT/ISA/210 (second sheet) (May 2008)
<table>
<thead>
<tr>
<th>Patent document cited in search report</th>
<th>Publication date</th>
<th>Patent family member(s)</th>
<th>Publication date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SG 136050 A1</td>
<td>12.09.2007</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TW 200804437 A</td>
<td>16.01.2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP 0186507 B1</td>
<td>21.03.1990</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JP 01-0400034 B</td>
<td>24.08.1989</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JP 61-148184 A</td>
<td>05.07.1986</td>
</tr>
<tr>
<td>JP 11-246759 A</td>
<td>14.09.1999</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Form PCT/ISA/210 (patent family annex) (My 2008)