

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 June 2007 (14.06.2007)

PCT

(10) International Publication Number  
**WO 2007/066110 A1**

(51) International Patent Classification:

*C09J 5/00* (2006.01) *B29C 39/10* (2006.01)  
*B29C 65/54* (2006.01) *B01L 3/00* (2006.01)

(21) International Application Number:

PCT/GB2006/004569

(22) International Filing Date:

6 December 2006 (06.12.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0524854.7 6 December 2005 (06.12.2005) GB

(71) Applicant (for all designated States except US): **EPIGEM LIMITED** [GB/GB]; Malmo Court, Kirkleatham Business Park, Redcar TS10 5SQ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SUMMERSGILL, Philip** [GB/GB]; 9 Greenlands Road, Redcar TS10 2DG (GB). **RYAN, Timothy, George** [GB/GB]; Aireyholme House, Aireyholme Lane, Great Ayton, Middlesbrough TS10 5SQ (GB).

(74) Agent: **NOVAGRAAF PATENTS LIMITED**; The Crescent, 54 Blossom Street, York YO24 1AP (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

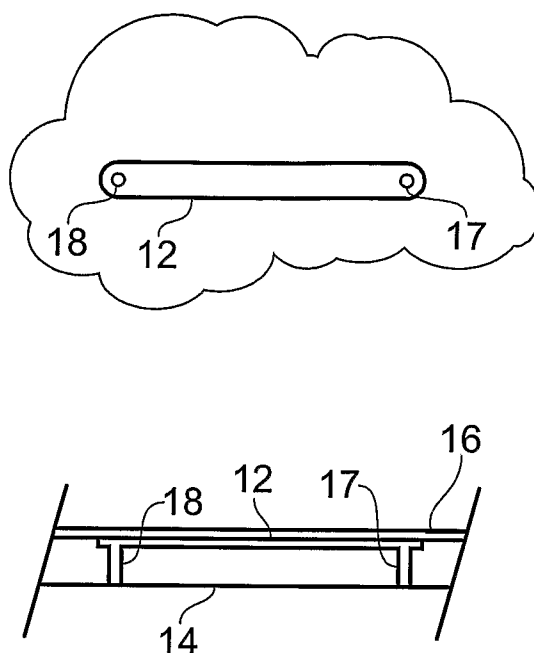
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, 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
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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: FINE LINE BONDING AND/OR SEALING SYSTEM AND METHOD



(57) Abstract: A method of providing a fine line adhesive bond and/ or seal or gasket and/ or lined channel, and in particular a fine line bonding seal, between a first (14) and a second ply (16), especially of dissimilar materials, comprises the steps of: fabricating a microscale recess in at least a first ply; lidding the first ply with a second ply such that the recess or recesses in the ply or plies form a fluidly continuous channel (12), - urging curable material into this channel so as to substantially fill the channel with curable material, and in particular urging the material via an inlet (17) into a fluidly continuous channel until it emerges from an outlet (18) remote therefrom; curing the curable material in situ. A system for implementing the method and the bonded and/or sealed and/ or lined product of such method are also described.

WO 2007/066110 A1