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[Continued on next page]

(54) Title: SPACER SEALANT ARTICLES

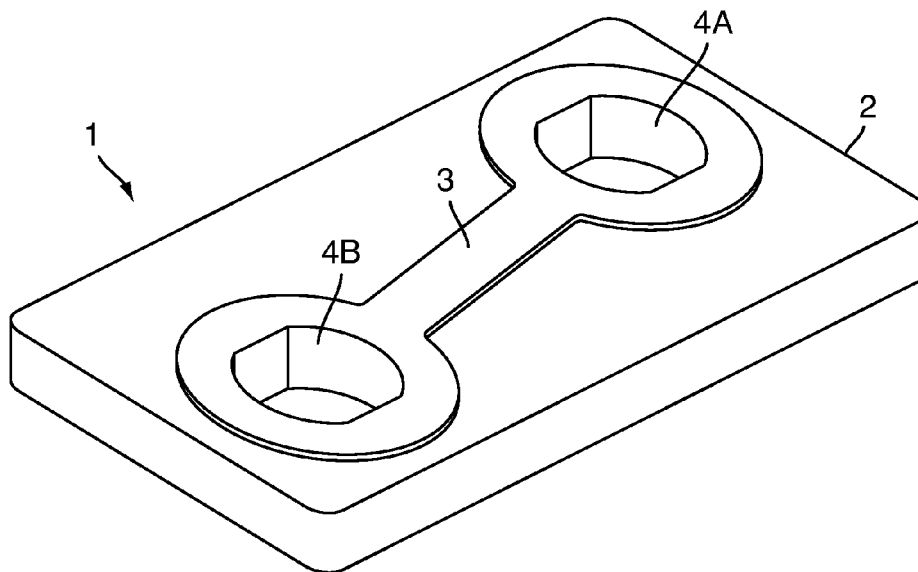


FIG. 1

(57) Abstract: Spacer sealant articles are provided that are useful in fastening one substrate to another by means of bolts or the like where it is desired to maintain a spacing between the substrates and yet seal around a bolt or the like that extends from one substrate through the other substrate. Such articles contain a) a heat resistant polymeric spacer element and b) a sealant element surrounded by said spacer element, wherein the sealant element has at least one through hole therein.

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A. CLASSIFICATION OF SUBJECT MATTER*F16B 17/00(2006.01)i, F16B 5/00(2006.01)i*

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 F16B

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

Korean Utility Model and applications for Utility Model since 1975 : IPC as above

Japanese Utility Model and applications for Utility Model since 1975 : IPC as above

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

eKIPASS(KIPO internal) "spacer, seal, polymer, plastic, bolt and similar terms"

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 4443145 A (PESCHGES, K. J.) 17. Apr. 1984 See claims 1-10 and figures 1-6	1, 2, 4, 6-11, 13-31 3, 5, 12, 32-34
A	KR 10-2002-0093124 A (ROBERT BOSCH GMBH) 12. Dec. 2002 See pages 2, 3 and figures 1, 2	1-34
A	KR 20-0117737 Y1 (KIA MOTORS CORP.) 15. May. 1998 See page 2 and figures 1-3	1-34
A	JP 58-032970 A (MITSUBISHI ELECTRIC CORP.) 26. Feb. 1983 See pages 1, 2 and figures 1-4	1-34
A	US 4971496 A (SCHOLZ, K. J.) 20. Nov. 1990 See the abstract and figures 1-3	1-34
A	US 5921737 A (IBEY, J. A.) 13. Jul. 1999 See the abstract, claims 1-10 and figures 1-4	1-34

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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