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(54) Title: DRY SILICONE GELS AND THEIR METHODS OF MAKING USING THIOL-ENE CHEMISTRY

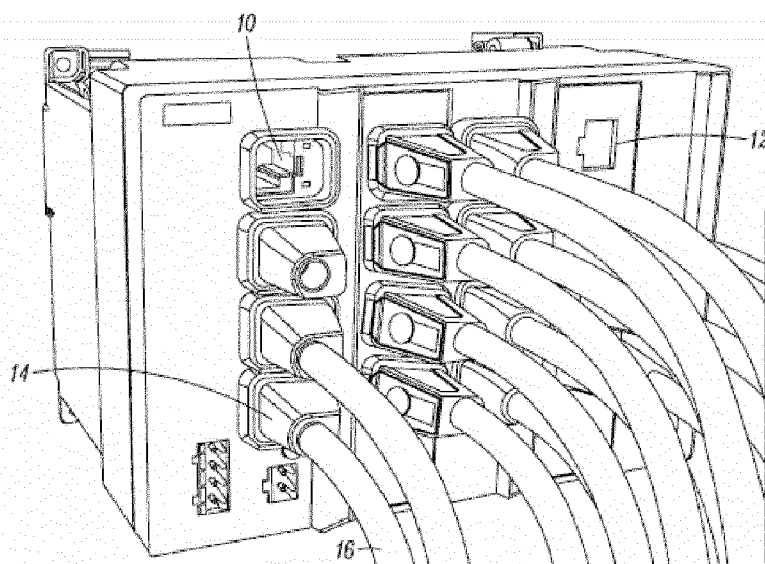


FIG. 1

(57) Abstract: Methods and systems are provided for a dry silicone gel. The dry silicone gel comprises a base polymer having a vinyl-silicone group and a crosslinker having thiol groups. The dry silicone gel may be made without the use of a catalyst by reacting the base polymer and crosslinker in the presence of a photo or thermal initiator. In some embodiments, the gel also comprises a chain extender having thiol groups. In certain embodiments, the dry silicone gel may comprise: (1) a hardness between 80 g and 300 g, (2) a stress relaxation between 20% and 65% when subjected to a deformation of 50% of the original size of the gel, (3) a compression set between 4% and 20% after 50% strain has been applied to the gel for 1000 hours at 70°C, and/or (4) less than 10% oil bleed out under compression of 1.2 atm after 60 days at 60°C.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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ADD.

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)

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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)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X A X,P	WO 2011/136170 A1 (THREE BOND CO LTD [JP]; SAKAMOTO YASUNORI) 3 November 2011 (2011-11-03) example 8 -& EP 2 565 235 A1 (THREE BOND CO LTD [JP]) 6 March 2013 (2013-03-06) paragraphs [0021] - [0031], [0038] - [0053]; example 8 -----	1,2,4-6, 9-25,27, 28 29-36 1,2,4-6, 10-15, 17-25,27
X A	US 2004/209972 A1 (CHAMBERS BRIAN R [US] ET AL) 21 October 2004 (2004-10-21) paragraphs [0015] - [0039]; examples 1-3 -----	1-6,9-28 29-36
X A	US 4 284 539 A (HOMAN GARY R ET AL) 18 August 1981 (1981-08-18) columns 2-8; example 11 -----	1,2, 4-25,27, 28 29-36



Further documents are listed in the continuation of Box C.



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Information on patent family members

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