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Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv))

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see Notice of 14 February 2008

(54) Title: A SILICONE ACRYLATE HYBRID COMPOSITION

(57) Abstract: A silicone acrylate hybrid composition includes the reaction product of a silicon-containing pressure sensitive adhesive composition, an ethylenically unsaturated monomer, and an initiator. The silicon-containing pressure sensitive adhesive composition includes acrylate or methacrylate functionality. A method of making the hybrid composition includes polymerizing the ethylenically unsaturated monomer and the silicon-containing pressure sensitive adhesive composition in the presence of the initiator.



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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER

INV. C08F283/12 C09J151/08 C08L51/08 C09J183/00 C09J4/00
C08F290/06 C08F290/14

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)

C08F C08L C09J C09D C08G A61K

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 practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 278 618 A (DOW CORNING [US]) 17 August 1988 (1988-08-17) claims 1-6 page 5, lines 23-27 page 5, line 54 - page 6, line 8 page 6, lines 23-25	1,4-10, 23
X	WO 92/20752 A (MINNESOTA MINING & MFG [US]) 26 November 1992 (1992-11-26) cited in the application claims 1,3,4 page 24, lines 18-21 page 16, lines 11-33 page 13, line 30 - page 15, line 19 page 22, lines 1-20 page 23, lines 14-19 page 24, lines 22-24	1,4-6, 8-10,23
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 2007/050580 A (DOW CORNING [US]; MITCHELL TIMOTHY P [US]) 3 May 2007 (2007-05-03) * same applicant, same invention * abstract; claims 1,2 paragraph [0070] paragraphs [0085], [0086] paragraphs [0090] - [0093] paragraphs [0064] - [0067]; claims 3-22 examples -----	1-29, 31-36
X	EP 1 076 081 A (3M INNOVATIVE PROPERTIES CO [US]) 14 February 2001 (2001-02-14) claims 1,6-8 page 9, lines 41,42,48 page 11, lines 28-36 abstract -----	1,4,6, 8-10, 21-23
X	US 4 655 767 A (WOODARD JOHN T [US] ET AL) 7 April 1987 (1987-04-07) column 9, lines 16-27 column 10, line 25 column 9, lines 6-15 column 2, lines 18-52 column 5, line 39 - column 10, line 34 column 12, lines 47,48; claims 1-52 column 3, line 20 - column 4, line 47 column 19, line 61 - column 20, line 44 -----	1-29, 31-36
X	US 5 624 763 A (MELANCON KURT C [US] ET AL) 29 April 1997 (1997-04-29) claim 1 column 11, lines 51-53 column 7, lines 7-57 column 10, lines 43-63 -----	1,4-6, 8-10,23
X	WO 96/39458 A (LOCTITE CORP [US]) 12 December 1996 (1996-12-12) claim 46 claim 45 page 9, line 14 - page 11, line 20 page 26, line 21 - page 27, line 20 -----	1,4, 6-10,23
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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/013321

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 418 016 A (CORNFORTH DAVID A [GB] ET AL) 23 May 1995 (1995-05-23) claim 1 claims 2-8 column 3, lines 12,35,36 abstract	1,6, 8-10,23
A	EP 1 025 843 A (DOW CORNING [US]) 9 August 2000 (2000-08-09) abstract paragraph [0041]	1-36
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INTERNATIONAL SEARCH REPORT

International application No.
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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
1-36
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☒ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1,4-10

A silicone acrylate hybrid composition comprising the product of (A) a silicon containing pressure sensitive adhesive composition comprising acrylate or methacrylate functionalitiy ; (B) an ethylenically unsaturated monomer ; (C) an initiator.

2. claims: 2,3,11-20

Further specific hybrid compositions, in which for claim 2 comprising (A) the condensation reaction product of a silicon-containing capping agent which provides acrylate or methacrylate functionalitiy, and a pressure sensitive adhesive ; (B) ethhylenically unsaturated monomer ; (C) initiator ; and in which for claim 3 the pressure sensitive adhesive comprises the specific condensation reaction product of a silicone resin, and a silicone polymer, as described therein.

The additional contributing features c/f invention 1, are the specific condensation silicone products which would change the composition's properties c/f other non-condensation silicone products.

3. claims: 21-22

A further specific blended composition of a non-hybrid pressure sensitive adhesive composition blended with a hybrid compositionas described in claim 1.
The additional contributing features c/f invention 1, are non-hybrid composition blends which would change the composition's properties c/f simple hybrid compositions.

4. claims: 23-29

An independent multi-step method of making silicone acrylate hybrid compositions which are not dependent on any previous application claim.

The additional contributing features are the independent multi-step process steps which do not specifically relate to the claim1 compositions.

5. claim: 30

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

A further independent composition comprising the reaction product of the components as described in the application claim 30.

The additional contributing features are the independent condensation silicone components as described in claim 30.

6. claims: 31-36

An independent transdermal drug delivery system as described in the application claim 31.

The additional contributing features are the active agents for controlled transdermal delivery.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/013321

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