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— *of inventorship (Rule 4.17(iv)) for US only*
- Published:**  
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- 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.*



**WO 02/042360 A3**

(54) Title: PROCESS FOR MAKING SILICONE EMULSIONS

(57) Abstract: In a process for the production of a silicone in water emulsion in which a polysiloxane fluid, at least one surfactant and water are continuously fed to a high shear mixer in such proportions as to form a viscous oil in water emulsion which is continuously withdrawn from the mixer. The polysiloxane fluid may be a non-reactive fluid or may have reactive groups capable of taking part in a chain extension reaction. A desired emulsion particle size can be maintained by monitoring the pressure in the supply line at the inlet to the high shear mixer.

INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 01/13623

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C08J3/03 //C08L83:04

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 7 C08J

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 563 189 A (HOSOKAWA HIDEHIKO ET AL) 8 October 1996 (1996-10-08)	1,7,10
Y	claims 1,3,5,6 column 6, line 6 - line 40 example 1	1,7,10, 13,14
X	US 5 741 850 A (SUTO FUMITAKA ET AL) 21 April 1998 (1998-04-21)	1,7,10
Y	claims 1,3,4 example 1	1,7,10, 13,14
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Further documents are listed in the continuation of box C.  Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier document but published on or after the international filing date	"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
"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)	"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.
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search <b>24 April 2002</b>	Date of mailing of the international search report <b>19. 07. 02</b>
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer <b>Haltemeesch, A</b>
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INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 01/13623

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 874 017 A (DOW CORNING SA) 28 October 1998 (1998-10-28) cited in the application claims 1,3 page 2, line 21 - line 27 page 5, line 2 - line 10 -----	1,7,10, 13,14

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP 01/13623

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

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

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
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.:
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.:

1-17

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-17

Process for continuously producing a silicone in water emulsion using a high shear mixer and feeding the components through a single supply line while monitoring the pressure in the supply line.

2. Claims: 18-24

Process for continuously producing a reactive silicone in water emulsion together with a chain extending organopolysiloxane and a catalyst, whereby the compounds are fed into a high shear mixer through a single supply line, catalyst and organopolysiloxane being added either before or after the mixture is fed to the high shear mixer.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/EP 01/13623

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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