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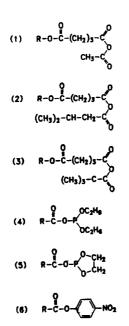
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[Continued on next page]

(54) Title: RAPID GELLING BIOCOMPATIBLE POLYMER COMPOSITION



(11)
$$R-C-O-N$$
(12) $R-C-O-N$
(13) $R-C-O-N$
(14) $R-C-O-N$
(15) $R-C-O-N$
(17) $R-C-O-N$
(18) $R-C-O-N$
(19) $R-C-O-N$
(19)

(57) Abstract: This invention relates generally to two-part polymer compositions that rapidly form covalent linkages when mixed together. Such compositions are particularly well suited for use in a variety of tissue related applications when rapid adhesion to the tissue and gel formation is desired. In particular, they are useful as tissue sealants, in promoting hemostasis, for drug delivery, in effecting tissue adhesion, in providing tissue augmentation, and in the prevention of surgical adhesions.



MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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.

INTERNATIONAL SEARCH REPORT

International Application No: PCT/US 00/10053

A. CLASSIFICATION OF SUBJECT MATTER A61L24/00, A61L26/00, A61L33/00

According to International Patent Classification (IPC) or to both national classification and IPC⁷

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61L

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.	
Y	WO 97/22371 A1 (COLLAGEN CORPORATION) 26 June 1997, page 7-11, page 18-21, claims.	1-15, 19,21- 35,37	
Y	US 5496872 A (CONSTANCIS et al.) 05 March 1996, column 1, line 39 - column 2, line 46, column 8, line 29 - column 10, line 64, example 12,14, claims.	1-15, 19,21- 35,37	
Y	US 5292362 A (BASS et al.) 08 March 1994, column 5, lines 9-19, column 12, lines 41-57,	1-15, 19,21- 35,37	

Ø	Further documents are listed in the continuation of box C.	Patent family members are listed in annex.		
"A"	cial categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance earlier document but published on or after the international filing date 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) document referring to an oral disclosure, use, exhibition or other means 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 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 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.		
Date of the actual completion of the international search 21 July 2000		Date of mailing of the international search report		
Name	e 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 BAUMSCHABL		

C. (Continua	tion) DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
	claims 1-25.	1 / 7		
A	DE 2809799 A1 (CIBA-GEIGY AG) 14 September 1978, page 5, lines 15-21, page 8, line 26 - page 9, line 11, claims	1,4,7, 8,10, 24,27, 28,30		

International application No.

INTERNATIONAL SEARCH REPORT

PCT/US 00/10053

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This int	ernational search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X	Claims Nos.: 17 because they relate to subject matter not required to be searched by this Authority, namely:
	Remark: Although claim 17 is partially directed to a method of treatment of the human body the search has been carried out and based on the alleged effects of the component compositions.
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 Into	ernational 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 scarchable claims could be scarches 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.:
Remark (The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

ANHANG

Zum internationalen Recherchenbericht über die internationale Patentanmeldung Nr.

In diesem Anhang sind die Mitglieder der Patentfamilien der im obengenannten internationalen Recherchenbericht angeführten Patentdokumente angegeben. Diese Angaben dienen nur zur Unterrichtung und erfolgen ohne Gewähr.

ANNEX

To the International Search Report to the international Patent Application No.

PCT/US 00/10053 SAE 279570

This annex lists the patent family members relating to the patent documents cited in the above-mentioned search report.
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

ANNEXE

Au rapport de recherche international relativ à la demande de brevet international n°

La presente annexe indique les membres de la famille de brevets relatifs aux documents de brevets cités dans le rapport de recherche international visée ci-dessus. Les renseignements fournis sont donnés à titre indicatif et n'engagent pas la responsibilité de l' Office.

		de l' Office.				
Im Recherchenbericht angeführte Patentdokumente Patent document cited in search report Document de brevet cité dans le rapport de recherche		Datum der Veröffentlichung Publication date Date de publication	Mitglied(er) der Patentfamilie Patent family member(s) Membre(s) de la familie de brevets			Datum der Veröffentlichung Publication date Date de publication
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