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- (71) Applicant (for all designated States except US): **NY-COMED PHARMA AS** [NO/NO]; Drammensveien 852, Post Office Box 205, N-1371 Asker (NO).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **STIMMEDER, Dagmar** [AT/AT]; Neubauzeile 112 a/2, A-4020 Linz (AT).
- (74) Agent: **SCHOUBOE, Anne**; Plougmann & Vingtoft a/s, P.O. Box 3007, DK-1021 Copenhagen K (DK).
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**WO 02/058749 A3**

(54) Title: CARRIER WITH SOLID FIBRINOGEN AND SOLID THROMBIN

(57) Abstract: The present invention relates to a solid composition useful for tissue gluing, tissue sealing and haemostasis consisting essentially of a) a carrier which has at least one of the following physical properties: elasticity module in the range of 5-100 N/cm, density of 1-10 mg/cm<sup>3</sup>, chamber diameter of more than 0.75 mm and less than 4 mm and/or having a chamber diameter average below 3 mm and evenly distributed and fixed upon said carrier, b) solid fibrinogen, and c) solid thrombin. The carrier is a biodegradable polymer such as a polyhyaluronic acid, polyhydroxy acid, e.g. lactic acid, glucolic acid, hydroxybutanoic acid, a cellulose, gelatine or collagen, such as a collagen sponge, e.g. a collagen sponge consisting essentially of collagen type I fibres. The fibrinogen and thrombin are preferably human, purified from a natural source, or transgenic or recombinant human fibrinogen and/or thrombin. In a preferred embodiment the composition does not comprise any antifibrinolytic agent such as aprotinin, ε-aminocaproic acid or α<sub>2</sub>-antiplasmin.

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 02/01453**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61L24/10

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 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)

MEDLINE, EPO-Internal, WPI Data, PAJ, BIOSIS, COMPENDEX

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 56797 A (ZYMOGENETICS INC) 11 November 1999 (1999-11-11) page 23, line 4 - line 11 claims 1,3 ---	1-23
X	OSADA H ET AL: "Clinical evaluation of a haemostatic and anti-adhesion preparation used to prevent post-surgical adhesion." JOURNAL OF INTERNATIONAL MEDICAL RESEARCH, vol. 27, no. 5, 1999, pages 247-252, XP001085094 ISSN: 0300-0605 abstract ---	1,2,4,6, 9,12-17, 19,22
X	WO 99 59647 A (TUTHILL DAVID ;BAYER VALDISLAV (US); BEALL DAWSON (US); AMERICAN N) 25 November 1999 (1999-11-25) claims ---	1,2,4,6, 9,12-17, 19-22
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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
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- \*Z\* document member of the same patent family

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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

Muñoz, M

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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.
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X	US 4 606 337 A (ZIMMERMANN EBERHARD ET AL) 19 August 1986 (1986-08-19)  claims  -----	1,2,4,6, 9,12-17, 19-22

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