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GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

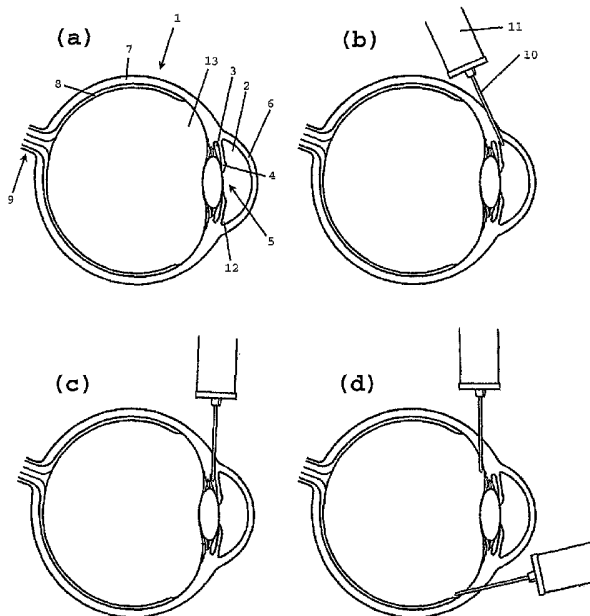
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: USE OF A VISCOELASTIC COMPOSITION FOR TREATING INCREASED INTRAOCULAR PRESSURE



(57) Abstract: A viscoelastic medium is useful for the manufacture of a medicament, such as a medical device, for treatment of increased intraocular pressure in the eye of a human or an animal. The medicament is administrable into at least one sclerally penetrating fistula of the eye such that the fistula is filled with the medicament. The medium is also useful in a method of treating increased intraocular pressure in the eye of a human or an animal in need thereof, comprising the step of injecting the viscoelastic medium into at least one sclerally penetrating fistula in the eye such that the fistula is filled with the medium.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/SE2005/000663

A. CLASSIFICATION OF SUBJECT MATTER A61K9/00 A61K47/36 A61P27/06		
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) 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, BIOSIS, EMBASE		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 819 722 A (CORNEAL INDUSTRIE) 26 July 2002 (2002-07-26) page 1, lines 6-10 page 3, lines 6-12, 16-26 page 3, line 31 - page 4, line 2 page 4, line 29 - page 5, line 9 page 5, line 26 - page 6, line 2 page 6, lines 12-18 page 7, lines 1-3; examples <div style="text-align: center;">----- -/--</div>	1-22
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents :		
<ul style="list-style-type: none"> °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 	<ul style="list-style-type: none"> °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 	
Date of the actual completion of the international search <div style="text-align: center;">19 January 2006</div>	Date of mailing of the international search report <div style="text-align: center;">30/01/2006</div>	
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 <div style="text-align: center;">Marttin, E</div>	

INTERNATIONAL SEARCH REPORT

International Application No

P. SE2005/000663

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>RAITTA C ET AL: "EFFECTS OF INTRACAMERALLY OR SUBCONJUNCTIVALLY INJECTS CROSS-LINKEDHYALURONIC ACID ON THE INTRAOCULAR PRESSURE AND ON THE ANTERIOR SEGMENT OF THE RABBIT EYE" ACTA OPHTHALMOLOGICA, vol. 66, no. 5, 1988, pages 544-551, XPO01034883 cited in the application the whole document</p>	1-8, 10-15, 17-19, 21,22
Y		9,20
X	<p>----- US 5 360 425 A (CHO ET AL) 1 November 1994 (1994-11-01) cited in the application column 1, lines 8-30</p>	1-8, 10-19, 21,22
Y	<p>column 1, line 45 - column 2, line 6 column 2, lines 27-29 column 2, line 66 - column 3, line 3 column 3, lines 19-43 column 4, lines 6-24; claims 1,7,8; figure 5B</p>	9,20
X	<p>----- WO 92/00745 A (AUTOGENESIS TECHNOLOGIES, INC) 23 January 1992 (1992-01-23) cited in the application page 1, line 28 - page 2, line 8</p>	1-8, 10-19, 21,22
Y	<p>page 3, line 25 - page 5, line 10; example 4; tables II,III</p>	9,20
X	<p>----- US 5 360 399 A (STEGMANN ET AL) 1 November 1994 (1994-11-01) cited in the application column 1, lines 1-33</p>	1-8, 10-18, 21,22
Y	<p>column 2, line 40 - column 3, line 18; figure 1 column 4, lines 18-26 column 5, lines 1-40; claims 1,7,8</p>	8,9,19, 20
Y	<p>----- US 4 716 154 A (MAELSON ET AL) 29 December 1987 (1987-12-29) cited in the application column 2, lines 23-52 column 3, line 65 - column 4, line 9; examples 1,8,12</p>	8,9,19, 20
Y	<p>----- US 5 827 937 A (ANGSTROM GERUP ET AL) 27 October 1998 (1998-10-27) cited in the application column 2, lines 1-32 column 4, lines 31-49; examples 1,3,15</p>	8,9,19, 20
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INTERNATIONAL SEARCH REPORT

International Application No
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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.
Y	US 2003/211166 A1 (YAMAMOTO RONALD K ET AL) 13 November 2003 (2003-11-13) cited in the application paragraphs '0005! - '0007!, '0023! - '0031!, '0033!; examples 1-5 -----	8, 9, 19, 20

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Although claims 11-22 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.

Although claims 12-22 are directed to a method of surgery on the human/animal body, the search has been carried out and based on the alleged effects of the composition.

INTERNATIONAL SEARCH REPORT

national application No.
PCT/SE2005/000663

Box 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:
see FURTHER INFORMATION sheet PCT/ISA/210

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 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:

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.:

Remark on Protest

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

INTERNATIONAL SEARCH REPORT
Information on patent family members

International Application No
PCT/SE2005/000663

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
FR 2819722	A	26-07-2002	NONE		
US 5360425	A	01-11-1994	NONE		
WO 9200745	A	23-01-1992	CA	2086014 A1	04-01-1992
			JP	3224815 B2	05-11-2001
			JP	5508417 T	25-11-1993
US 5360399	A	01-11-1994	AT	141489 T	15-09-1996
			DE	59206951 D1	26-09-1996
			DK	550791 T3	09-09-1996
			EP	0550791 A1	14-07-1993
			ES	2090420 T3	16-10-1996
			JP	3254255 B2	04-02-2002
			JP	6086788 A	29-03-1994
US 4716154	A	29-12-1987	CA	1276142 C	13-11-1990
			DE	3565107 D1	27-10-1988
			EP	0185070 A1	25-06-1986
			JP	6069481 B	07-09-1994
			SE	442820 B	03-02-1986
			SE	8403090 A	09-12-1985
			WO	8600079 A1	03-01-1986
US 5827937	A	27-10-1998	AT	204000 T	15-08-2001
			AU	700215 B2	24-12-1998
			AU	6371896 A	18-02-1997
			BR	9609534 A	23-02-1999
			CN	1190974 A	19-08-1998
			CZ	9800129 A3	17-06-1998
			DE	69614391 D1	13-09-2001
			DE	69614391 T2	14-02-2002
			DE	839159 T1	07-10-1999
			DK	839159 T3	08-10-2001
			EA	980133 A1	29-10-1998
			EP	0839159 A1	06-05-1998
			ES	2161368 T3	01-12-2001
			GR	3037065 T3	31-01-2002
			HU	9901714 A2	28-09-1999
			JP	11509256 T	17-08-1999
			JP	3094074 B2	03-10-2000
			NO	980213 A	16-03-1998
			NZ	312229 A	25-11-1998
			PL	324608 A1	08-06-1998
			PT	839159 T	30-11-2001
			WO	9704012 A1	06-02-1997
			SK	6198 A3	11-01-1999
			TR	9800072 T1	21-05-1998
US 2003211166	A1	13-11-2003	NONE		