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- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,

BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

- (88) **Date of publication of the international search report:**
4 February 2016



WO 2015/144898 A3

(54) **Title:** COMPOSITIONS AND DEVICES FOR SCLEROTHERAPY USING LIGHT HARDENING GLUES

(57) **Abstract:** The present invention relates to new compositions for sclerotherapy. In particular, the invention relates to the use of light activated biocompatible glues and catheter for the application of said glue. The catheter of the present invention comprises a light source for the glue activation.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2015/056760

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 all searchable 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.:

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.:

1-4, 16-18(completely); 15(partially)

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.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2015/056760

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61L24/00
ADD.

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)
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 practicable, search terms used)
EPO-Internal, CHEM ABS Data, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2012/109191 A1 (MARANO JR JOHN P [US] ET AL) 3 May 2012 (2012-05-03) paragraph [0013] - paragraph [0015] paragraph [0019] - paragraph [0021] -----	1-4, 15-18
Y	WO 2010/096717 A1 (SAPHEON INC [US]; RAABE RODNEY [US]; CRAWFORD DON [US]; CHU JACK [US];) 26 August 2010 (2010-08-26) paragraph [0024] paragraph [0052] paragraph [0061] ----- -/--	1,2,4, 15-18

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 1 July 2015	Date of mailing of the international search report 11/12/2015
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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, Fax: (+31-70) 340-3016	Authorized officer Fort, Marianne
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2015/056760

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>MANDLEY D J ET AL: "PHOTON ACTIVATED BIOLOGICAL ADHESIVES IN SURGERY", INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES, GUILDFORD, SURREY, GB, vol. 20, 1 January 2000 (2000-01-01), pages 97-102, XP001000202, DOI: 10.1016/S0143-7496(99)00042-1 cited in the application the whole document -----</p>	1,2,4, 15-18

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2015/056760

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2012109191	A1	03-05-2012	AU	2012352183 A1	24-07-2014
			CA	2858580 A1	20-06-2013
			EP	2790594 A1	22-10-2014
			JP	2015503951 A	05-02-2015
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			US	2012109191 A1	03-05-2012
			US	2015005742 A1	01-01-2015
			WO	2013090563 A1	20-06-2013

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			EP	2398402 A1	28-12-2011
			JP	5717100 B2	13-05-2015
			JP	2012518482 A	16-08-2012
			KR	20120021299 A	08-03-2012
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			US	2010217313 A1	26-08-2010
			US	2015265264 A1	24-09-2015
			WO	2010096717 A1	26-08-2010

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, 16-18(completely); 15(partially)

A composition for use in sclerotherapy comprising a) a pharmaceutically acceptable tissue glue, b) a sclerosant drug, preferably in the form of a foam, and c) optionally a medical gas acceptable for intravenous use, wherein the pharmaceutically acceptable tissue glue is injectable, light-hardening or light-activatable, biodegradable and/or biocompatible, and preferably flexible after hardening, a kit comprising said composition and an injection catheter comprising a light source, a method for sclerotherapy wherein the vein is occluded using a light-hardening glue and a light-hardening glue for use in the treatment of vein diseases

2. claims: 5-14(completely); 15(partially)

An injection catheter device comprising a light source
