

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 May 2016 (12.05.2016)

(10) International Publication Number
WO 2016/073890 A1

(51) International Patent Classification:

C07K 16/24 (2006.01) A61K 39/00 (2006.01)
A61P 27/02 (2006.01)

(21) International Application Number:

PCT/US2015/059532

(22) International Filing Date:

6 November 2015 (06.11.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/077,105	7 November 2014 (07.11.2014)	US
62/087,448	4 December 2014 (04.12.2014)	US
62/247,705	28 October 2015 (28.10.2015)	US

(71) Applicant: ELEVEN BIOTHERAPEUTICS, INC.
[US/US]; 215 First Street, Suite 400, Cambridge, MA
02142 (US).

(72) Inventors; and

(71) Applicants : SCHMIDT, Michael, March [US/US]; 42
Eighth Street, Apt. 5114, Boston, MA 02129 (US). TIS-
DALE, Alison [US/US]; 207 White Street, Belmont, MA
02478 (US). FURFINE, Eric, Steven [US/US]; 221 Lin-
coln Rd, Lincoln, MA 01773 (US).

(74) Agent: MYERS, Louis, P.; Lando & Anastasi LLP, River-
front Office Park, One Main Street, Suite 1100, Cam-
bridge, MA 02142 (US).

(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.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: IMPROVED IL-6 ANTIBODIES

(57) Abstract: Improved IL-6 antibodies are provided. Uses of the antibodies in the treatment of IL-6 related diseases, e.g., ocular diseases such as diabetic macular edema, are disclosed.



WO 2016/073890 A1

PCT

(PCT Rule 92*bis*.1 and
Administrative Instructions, Section 422)

To:

GATTARI, Patrick, G.
McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Drive, Suite 3200
Chicago, Illinois 60606
ÉTATS-UNIS D'AMÉRIQUE

Date of mailing (<i>day/month/year</i>) 18 April 2017 (18.04.2017)	
Applicant's or agent's file reference 16-1508-WO	IMPORTANT NOTIFICATION
International application No. PCT/US2015/059532	International filing date (<i>day/month/year</i>) 06 November 2015 (06.11.2015)

1. The following indications appeared on record concerning: ☒ the applicant ☒ the inventor ☐ the agent ☐ the common representative							
Name and Address SCHMIDT, Michael, March TISDALE, Alison FURFINE, Eric, Steven ZARBIS-PAPASTOITSIS, Gregory		State of Nationality		State of Residence			
		Telephone No.					
		Facsimile No.					
		E-mail address					
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: ☐ the person ☐ the name ☐ the address ☐ the nationality ☐ the residence							
Name and Address See Box 3.		State of Nationality		State of Residence			
		Telephone No.					
		Facsimile No.					
		E-mail address ☐ Notifications by e-mail authorized					
3. Further observations, if necessary: The persons identified in Box 1 are now inventors only.							
4. A copy of this notification has been sent to: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> ☒ the receiving Office ☒ the International Searching Authority ☐ the Authority(ies) specified for supplementary search </td> <td style="width: 50%; vertical-align: top;"> ☐ the International Preliminary Examining Authority ☒ the designated Offices concerned ☐ the elected Offices concerned ☐ other: </td> </tr> </table>						☒ the receiving Office ☒ the International Searching Authority ☐ the Authority(ies) specified for supplementary search	☐ the International Preliminary Examining Authority ☒ the designated Offices concerned ☐ the elected Offices concerned ☐ other:
☒ the receiving Office ☒ the International Searching Authority ☐ the Authority(ies) specified for supplementary search	☐ the International Preliminary Examining Authority ☒ the designated Offices concerned ☐ the elected Offices concerned ☐ other:						

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 89 70	Authorized officer Zoltanski Andrzej e-mail pct.team6@wipo.int Telephone No. +41 22 338 74 06
--	--

PCT

GATTARI, Patrick, G.
McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Drive, Suite 3200
Chicago, Illinois 60606
ÉTATS-UNIS D'AMÉRIQUE

Date of mailing <i>(day/month/year)</i> 08 May 2017 (08.05.2017)	
Applicant's or agent's file reference 16-1508-WO	IMPORTANT NOTIFICATION
International application No. PCT/US2015/059532	International filing date <i>(day/month/year)</i> 06 November 2015 (06.11.2015)

1. The following indications appeared on record concerning: ☐ the applicant ☒ the inventor ☐ the agent ☐ the common representative			
Name and Address ZARBIS-PAPASTOITSIS, Gregory 34 Phillips Street Watertown, MA 02472 United States of America		State of Nationality	State of Residence
		Telephone No.	
		Facsimile No.	
		E-mail address	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: ☐ the person ☒ the name ☐ the address ☐ the nationality ☐ the residence			
Name and Address ZARBIS-PAPASTOITSIS, Grigorios 34 Phillips Street Watertown, MA 02472 United States of America		State of Nationality	State of Residence
		Telephone No.	
		Facsimile No.	
		E-mail address ☐ Notifications by e-mail authorized	
3. Further observations, if necessary: 			
4. A copy of this notification has been sent to: ☒ the receiving Office ☒ the International Searching Authority ☐ the Authority(ies) specified for supplementary search ☐ the International Preliminary Examining Authority ☒ the designated Offices concerned ☐ the elected Offices concerned ☐ other:			

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 89 70	Authorized officer Zoltanski Andrzej e-mail pct.team6@wipo.int Telephone No. +41 22 338 74 06
--	--