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(71) Applicant (for all designated States except US): **ALCON, INC.** [CH/CH]; Bösch 69, P.O. Box 62, CH-6331 Hünenberg (CH).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BINGAMAN, David, P.** [US/US]; 2713 Hwy. 920, Weatherford, Texas 76088 (US).

(74) Agents: **SCHULTZ, Teresa, J.** et al.; Alcon Research, LTD., R & D Counsel, Q-148, 6201 South Freeway, Fort Worth, Texas 76134-2099 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available):

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, 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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15 March 2007

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: METHODS FOR TREATING OCULAR ANGIOGENESIS, RETINAL EDEMA, RETINAL ISCHEMIA, AND DIABETIC RETINOPATHY USING SELECTIVE RTK INHIBITORS

(57) Abstract: The present invention provides compositions and methods for treating ocular neovascularization, angiogenesis, retinal edema, diabetic retinopathy, and/or retinal ischemia in order to prevent the loss of visual acuity associated with such conditions. More specifically, the present invention provides compositions containing receptor tyrosine kinase (RTK) inhibitors having unique binding profiles and their use in treating ocular disorders.



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**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/US2006/006570

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. A61K31/00 A61K31/416 A61K31/423 A61P27/02

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 A61P

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, CHEM ABS 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 2005/020603 A1 (DAI YUJIA ET AL) 27 January 2005 (2005-01-27) cited in the application paragraphs [0212], [0213], [0296], [0297]; claims; examples	1-140
X	US 5 773 459 A (TANG ET AL) 30 June 1998 (1998-06-30) column 9, line 25; claims column 8, lines 33-38	1-140
X	WO 03/031438 A (SUGEN, INC; MATTSON, MATTHEW; VOJKOVSKY, TOMAS; LIANG, CONGXIN; TANG,) 17 April 2003 (2003-04-17) pages 5-6; claims	1-140
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Further documents are listed in the continuation of Box C.       See patent family annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier document but published on or after the international filing date	"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
"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)	"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.
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  <b>30 October 2006</b>	Date of mailing of the international search report  <b>14/11/2006</b>
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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  <b>Blott, Catherine</b>
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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2006/006570

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/225273 A1 (MICHAELIDES MICHAEL R ET AL) 4 December 2003 (2003-12-04) claims	1-140
X	WO 03/068228 A (BAYER CORPORATION; DUMAS, JACQUES; SCOTT, WILLIAM, J; ELTING, JAMES; H) 21 August 2003 (2003-08-21) claims	1-140
X	WO 01/85691 A (NOVARTIS AG; NOVARTIS-ERFINDUNGEN VERWALTUNGSGESELLSCHAFT M.B.H; SEIDE) 15 November 2001 (2001-11-15) page 7 - page 8; claims 6-11	1-140
X	WO 00/67738 A (JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE; DE JUAN, EUGENE, JR) 16 November 2000 (2000-11-16) claims	1-140
X	US 2004/198782 A1 (ALTMANN KARL-HEINZ ET AL) 7 October 2004 (2004-10-07) paragraphs [0077], [0078], [0087]; claims	1-140
X	US 2003/199525 A1 (HIRST GAVIN C ET AL) 23 October 2003 (2003-10-23) paragraph [0268]; claims	1-140
X	EP 1 259 234 A (SUGEN, INC) 27 November 2002 (2002-11-27) pages 6,25,31 page 32	1-140
P, X	GU X ET AL: "The receptor tyrosine kinase inhibitor, AL-39324, completely inhibits preretinal NV in the rat OIR model" IOVS, vol. 46, no. Suppl. S, 2005, page 3262, XP009072426 & ANNUAL MEETING OF THE ASSOCIATION-FOR-RESEARCH-IN-VISION-AND-OPHTHALMOLOGY; FT LAUDERDALE, FL, USA; MAY 01 -05, 2005 ISSN: 0146-0404 the whole document	1-140

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## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/006570

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	<p>TAKAHASHI K ET AL: "Systemic or intraocular administration of VEGF receptor kinase inhibitors causes regression of choroidal neovascularization" IOVS, vol. 46, no. Suppl. S, 2005, page 1423, XP009072424 &amp; ANNUAL MEETING OF THE ASSOCIATION-FOR-RESEARCH-IN-VISION-AND-OPHTHALMOLOGY; FT LAUDERDALE, FL, USA; MAY 01 -05, 2005 ISSN: 0146-0404 the whole document</p>	1-140
P,X	<p>BINGAMAN D P ET AL: "AL-39324: A potential 2nd generation agent for the treatment of pathologic choroidal neovascularization (CNV)" IOVS, vol. 46, no. Suppl. S, 2005, page 464, XP009072425 &amp; ANNUAL MEETING OF THE ASSOCIATION-FOR-RESEARCH-IN-VISION-AND-OPHTHALMOLOGY; FT LAUDERDALE, FL, USA; MAY 01 -05, 2005 ISSN: 0146-0404 the whole document</p>	1-140
P,X	<p>DATABASE MEDLINE [Online] US NATIONAL LIBRARY OF MEDICINE (NLM), BETHESDA, MD, US; September 2005 (2005-09), CARLSON DAWN M ET AL: "Targeting the unmet medical need: the Abbott Laboratories oncology approach." XP002404954 Database accession no. NLM16224444 abstract &amp; CLINICAL ADVANCES IN HEMATOLOGY &amp; ONCOLOGY : H&amp;O SEP 2005, vol. 3, no. 9, September 2005 (2005-09), pages 703-710, ISSN: 1543-0790</p>	1-140

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2006/006570

## 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:  
  
Although claims 1-140 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 compound/composition.
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/US2006/006570

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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