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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: NOVEL AMINE-BORANE COMPOUNDS AND USES THEREOF

(57) Abstract: Novel families of amine-borane compounds, including fluorinated aminoboranes, novel bis-aminoboranes and aminoboranes having saturated and unsaturated ring alkyl chains are provided. Processes of preparing, pharmaceutical compositions and methods utilizing these novel compounds are also provided. Radiolabeled aminoboranes and uses thereof in radioimaging (e.g., PET) and radiotherapy are further provided.



WO 2007/032005 A3

INTERNATIONAL SEARCH REPORT

International application No

PCT/IL2006/001074

A. CLASSIFICATION OF SUBJECT MATTER
INV. C07F5/02 A61K31/69 A61K51/00

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)

C07F 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, 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.
P,X	TAKROURI, KHULOUD ET AL: "Synthesis and Antifungal Activity of a Novel Series of Alkyldimethylamine Cyanoboranes and Their Derivatives" JOURNAL OF MEDICINAL CHEMISTRY, 49(16), 4879-4885 CODEN: JMCMAR; ISSN: 0022-2623, 2006, XP002419318 the whole document	1-25, 32-43,46
P,X	SHALOM, ELI ET AL: "Preparation of Novel Fluoro Derivatives of Amine Cyanoboranes and Amine Carboxyborane Esters" ORGANOMETALLICS, 24(23), 5776-5779 CODEN: ORGND7; ISSN: 0276-7333, 2005, XP002419319 the whole document ----- -/--	1-25, 32-43,46



Further documents are listed in the continuation of Box C.



See patent family annex.

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- *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
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- *&* document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IL2006/001074

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	DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; SHIBLI, AMAL ET AL: ".alpha.-Amino boronates as cyanoborane complexes: crystal structure and inhibition properties for the serine proteases: .alpha.-chymotrypsin and trypsin" XP002419326 retrieved from STN Database accession no. 2006:791981 abstract & APPLIED ORGANOMETALLIC CHEMISTRY , 20(7), 459-462 CODEN: AOCHX; ISSN: 0268-2605, 2006,	1-25, 32-43,46
X	----- DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; HALL, IRIS H. ET AL: "The anti-inflammatory activity of boron derivatives in rodents" XP002419327 retrieved from STN Database accession no. 123:510 cited in the application abstract & METAL-BASED DRUGS , 2(1), 1-12 CODEN: MBADEI; ISSN: 0793-0291, 1995,	1,17-19, 22
X	----- DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; SPIELVOGEL, BERNARD F. ET AL: "The cytotoxicity of amine-cyanoboranes, amine-cyanoalkylboranes, and aminomethyl-phosphonate cyanoborane adducts against the growth of murine and human tissue culture cells" XP002419328 retrieved from STN Database accession no. 116:120392 abstract & PHARMAZIE , 46(8), 592-4 CODEN: PHARAT; ISSN: 0031-7144, 1991, ----- -/--	1,17-19, 22

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.
X	DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; SOOD, ANUP ET AL: "Synthesis and hypolipidemic activity of amine-carboxyboranes, and their amides and esters in rodents" XP002419329 retrieved from STN Database accession no. 115:247450 cited in the application abstract & ARCHIV DER PHARMAZIE (WEINHEIM, GERMANY) , 324(7), 423-32 CODEN: ARPMAS; ISSN: 0365-6233, 1991, -----	1,17-19, 22
X	DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; HALL, IRIS H. ET AL: "The antineoplastic activity of trimethylamine carboxyboranes and related esters and amides in murine and human tumor cell lines" XP002419330 retrieved from STN Database accession no. 115:105431 abstract & ANTI-CANCER DRUGS , 1(2), 133-41 CODEN: ANTDEV; ISSN: 0959-4973, 1990, -----	1,17-19, 22
X	DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; HALL, IRIS H. ET AL: "Hypolipidemic activity of trimethylamine-carbomethoxyborane and related derivatives in rodents" XP002419331 retrieved from STN Database accession no. 107:228725 abstract & JOURNAL OF PHARMACEUTICAL SCIENCES , 76(5), 359-65 CODEN: JPMSAE; ISSN: 0022-3549, 1987, -----	1,17-19, 22

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2006/001074

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.: 26-31, 44, 45, 47, 48
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 26-31, 44, 45, 47, 48 are directed to a diagnostic method or to a method of treatment practised on 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.