

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 April 2008 (03.04.2008)

PCT

(10) International Publication Number
WO 2008/039311 A3

(51) International Patent Classification:
G06F 17/30 (2006.01)

(21) International Application Number:
PCT/US2007/020025

(22) International Filing Date:
14 September 2007 (14.09.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/534,402 22 September 2006 (22.09.2006) US

(71) Applicant (for all designated States except US):
RAYTHEON COMPANY [US/US]; 870 Winter Street,
Waltham, MA 02451-1449 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COMI, Gabriel, D.** [US/US]; 2321 Falconpointe Drive, State College,
PA 16801 (US). **PETERMAN, Kelly, L.** [US/US]; 152
Forrest Glen Circle, Port Matilda, PA 16870 (US).

(74) Agents: **MOFFORD, Donald, F.** et al.; Daly, Crowley,
Mofford & Durkee, Llp, Suite 301a, 354a Turnpike St.,
Canton, MA 02021 (US).

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

AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH,
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, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK,
LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW,
MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY,
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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

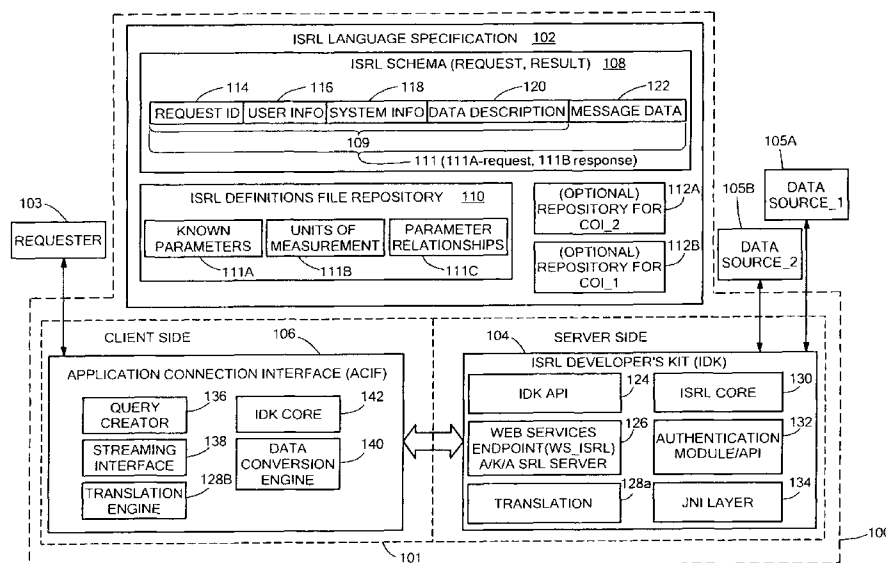
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report

[Continued on next page]

(54) Title: SYTEM AND METHOD FOR CONVERTING A QUERY FOR RETRIEVAL OF INFORMATION FROM A DATA SOURCE



(57) Abstract: The invention provides a system configured to enable a first entity to query a second entity for a result. An interface is operable to receive from the second entity an instance of a generic request that is specific to the second entity, the instance of the generic request providing information about at least one query element that is supported in a second-entity specific request; and convert a first query from the first entity to the second entity into a second query, wherein the second query includes the at least one query element that is supported in the second-entity specific request.

WO 2008/039311 A3



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) **Date of publication of the international search report:**

18 September 2008

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/020025

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F17/30

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)
G06F

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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 566 746 A (UBS AG [CH]) 24 August 2005 (2005-08-24) abstract paragraph [0008] - paragraph [0033] paragraph [0045] - paragraph [0079] claims	1-5,8-16
X	WO 02/21259 A (UNIV CALIFORNIA [US]; GUPTA AMARNATH [US]; LUDAESCHER BERTRAM [US]; MA) 14 March 2002 (2002-03-14) the whole document	1-5,8-16
A	US 2004/049495 A1 (LEE CHUNG-I [TW] ET AL) 11 March 2004 (2004-03-11) the whole document	1-5,8-16
-/--		

☒ 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
- *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

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

Date of the actual completion of the international search

10 March 2008

Date of mailing of the international search report

04/07/2008

Name and mailing address of the ISA/

European Patent Office, P.B. 5618 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Abbing, Ralf

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/020025

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2004/077277 A (BEA SYSTEMS INC [US]; RICCARDI FABIO [US] BEA SYSTEMS INC [US]; RICCAR) 10 September 2004 (2004-09-10) the whole document -----	1-5,8-16
A	KRISHNASWAMY S ET AL: "Federated data mining services and a supporting XML-based language" SYSTEM SCIENCES, 2001. PROCEEDINGS OF THE 34TH ANNUAL HAWAII INTERNATIONAL CONFERENCE ON JANUARY 3-6, 2001, PISCATAWAY, NJ, USA, IEEE, 3 January 2001 (2001-01-03), pages 986-995, XP010549691 ISBN: 0-7695-0981-9 the whole document -----	1-5,8-16
A	AMER-YAHIA S ET AL: "A web-services architecture for efficient XML data exchange" DATA ENGINEERING, 2004. PROCEEDINGS. 20TH INTERNATIONAL CONFERENCE ON BOSTON, MA, USA 30 MARCH - 2 APRIL 2004, PISCATAWAY, NJ, USA, IEEE, 30 March 2004 (2004-03-30), pages 523-534, XP010714132 ISBN: 0-7695-2065-0 the whole document -----	1-5,8-16

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 6,7,17,18

Claim 6 describes additional steps of the independent method, to which the claim refers, whereby the relation of the steps of claim 6 to the steps of the independent method is highly unclear and not derivable from the claims or from the description. Especially the technically highly unclear relation of the "initial request" formulated in a "first language" (claim 6) to the "first query from the client" (claim 1), the relation of the "initial request" (claim 6) to the "instance of a generic request" (claim 1) and the fact that a conversion of the initial request is performed in claim 6 without referring at all to the generic request or the subsequently provided information about at least one query element that is supported by the data source (claim 1) renders the subject-matter of claim 6 so unclear, that, even with due regard to the description, a meaningful search is not possible (Article 17(2)(ii) PCT).

Present claim 7 relates to a method which is merely defined by the lack of a technical feature, i.e. the method is not at all defined by the presence of features. Additionally, even the feature lacking is described in such unclear terms ("substantial advanced knowledge"), that a determination of features actually being present, i.e. of characterizing features usable for performing a search, is not possible.

Claims 17 and 18 merely describe a desired property or effect of the system claimed without providing any details about how to achieve the effect. It is technically not clear how the interface at an undefined () entity situated between the first and second entity can determine the use of at least one parameter at the second entity (claim 17) and any technical details concerning the result wished to be achieved by the system of claim 18 ("... in a manner that enables the object to be recreated at a different place or time") are lacking. A meaningful search for technical features, which might characterise the subject-matter of claims 17 and 18, is thus not possible.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/020025

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.: 6, 7, 17, 18
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 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 allsearchable 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.:

1-18

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-18

Method for querying a data source by converting a first query into a second query based on a received generic request from the data source.

2. claims: 19,20

Query enabling system comprising means for defining a communication language.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/020025

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1566746	A	24-08-2005	NONE	
WO 0221259	A	14-03-2002	AU 9064601 A	22-03-2002
US 2004049495	A1	11-03-2004	TW 289261 B	01-11-2007
WO 2004077277	A	10-09-2004	US 2005131875 A1	16-06-2005
			US 2005114328 A1	26-05-2005