

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
15 May 2008 (15.05.2008)

PCT

(10) International Publication Number  
**WO 2008/057345 A3**(51) **International Patent Classification:**  
**G06F 17/30 (2006.01) H04N 5/445 (2006.01)**(21) **International Application Number:**  
PCT/US2007/022949(22) **International Filing Date:** 29 October 2007 (29.10.2007)(25) **Filing Language:** English(26) **Publication Language:** English(30) **Priority Data:**  
11/591,972 1 November 2006 (01.11.2006) US  
11/591,929 1 November 2006 (01.11.2006) US(71) **Applicant (for all designated States except US): UNITED VIDEO PROPERTIES, INC.** [US/US]; 6922 Hollywood Boulevard, Los Angeles, CA 90028 (US).(72) **Inventors; and**(75) **Inventors/Applicants (for US only): BILLMAIER, David** [US/US]; 19822 184th Place NE, Woodinville, WA 98077 (US). **STARKENBURG, Michael, Ross** [US/US]; 401 East Bay Street, Costa Mesa, CA 92627 (US).(74) **Agents: BERTENTHAL, Matthew, S. et al; Ropes & Gray LLP**, 121 1 Avenue Of The Americas, New York, NY 10036 (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).**Published:**

— with international search report

[Continued on next page]

(54) **Title:** PRESENTING MEDIA GUIDANCE SEARCH RESULTS BASED ON RELEVANCY

DIGITAL CABLE												By Keyword		7:03pm	
<b>Keyword: Lord</b> One you have typed in your keyword, highlight and select it to see your results															
Keyword						Results (3 Matches)									
LORD						The Lord of the Rings: Return of the King									
Del		Sp		Save		The Lord of the Rings: The Two Towers									
A	B	C	D	E	F	The Lord of the Rings: Fellowship of the Ring									
G	H	I	J	K	L										
M	N	O	P	Q	R										
S	T	U	V	W	X										
Y	Z	1	2	3	4										
5	6	7	8	9	0										

FIG. 4A

(57) **Abstract:** Systems and methods for presenting search results based on relevancy in an interactive media guidance application are disclosed. After performing a user-initiated or automatic search for media content, the interactive media guidance application determines which of the hits are most relevant to the user. The guidance application then displays, or visually identifies, the relevant items. Some embodiments employ using different display arrangements based on the number of relevant items. Some embodiments display the relevant items in recommendation lists or hot lists.

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— *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:**

14 August 2008

# INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/022949

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. G06F17/30 H04N5/445

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)

H04N 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 , 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	<p>EP 1 463 307 A (MICROSOFT CORP [US])            29 September 2004 (2004-09-29)</p> <p>abstract; figures 1-4,6            paragraphs [0002], [0010]            paragraphs [0019] - [0021]            paragraphs [0063] - [0066]            paragraphs [0097], [0098]            -----</p>	<p>1,2,            8-12,            14-19,            25-29,            31-34</p>



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.

"&" document member of the same patent family

Date of the actual completion of the international search

28 March 2008

Date of mailing of the international search report

23/06/2008

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

Laurentowski , A

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2007/022949

## 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 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, 2, 8-12, 14-19, 25-29, 31-34

### 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/ £10

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

1. claims: 1, 2, 8-12, 14-19, 25-29, 31-34

The first group of claims appears to describe methods/systems for limiting search results based on relevancy in an interactive media guide application, comprising:  
searching a database of media guidance application data for items matching search criteria;  
determining whether items matching the search criteria meet a relevancy threshold; and  
generating a display having, from among the matching items only those matching items determined to meet or exceed the relevancy threshold.  
The problem to be solved by the subject matter of these claims seems to be how to provide the most relevant search results in an interactive media guide application.

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2. claims: 3-5, 7, 20-22, 24

The second group of claims appears to describe a method and a system which, in addition to the aforementioned features of the first group of claims, comprises determining the relevancy threshold based on personalization data for a user of the interactive media guide application.  
The problem to be solved by the subject matter of these claims seems to be how to satisfy user preferences during a search in an interactive media guide application.

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3. claims: 6, 23

The third group of claims appears to describe a method and a system which, in addition to the aforementioned features of the first group of claims, comprises  
determining whether the number of items meeting the relevancy threshold meets a minimum number; and  
in response determining that the number of items meeting the relevancy threshold is less than the minimum number, incrementally decreasing the relevancy threshold until the number of items meeting the relevancy threshold meets the minimum number.  
The problem to be solved by the subject matter of these claims seems to be an insufficient (or null) number of results returned by a search in an interactive media guide application.

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4. claims: 13, 30

## FURTHER INFORMATION CONTINUED FROM PCT/ASA/ 210

The fourth group of claims appears to describe a method and a system which, in addition to the aforementioned features of the first group of claims, comprises generating search criteria by the interactive media guidance application, based on personalization data for a user of the interactive media guidance application.

The problem to be solved by the subject matter of these claims seems to be how to relieve the user from manually providing search criteria in an interactive media guidance application.

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5. claims: 35-60

The fifth group of claims appears to describe methods/systems for graphically displaying search results based on a relevancy threshold in an interactive media guidance application display, comprising:  
searching a program guide database for items matching search criteria;  
determining, based on the number of matching items that meet a relevancy threshold, a graphical display definition for generating an interactive media guidance application display having the matching items; and  
generating the interactive media guidance application display, wherein the display has from among the matching items only those matching items determined to meet the relevancy threshold, and wherein the items of the display are displayed according to the determined graphical display definition.

The problem to be solved by the subject matter of these claims seems to be how to display search results in an interactive media guide application.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/022949

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1463307	A	29-09-2004	AU 2004200884 A1 14-10--2004
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