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(71) Applicant (for all designated States except US): APPLE INC. [US/US]; 1 Infinite Loop, MS: 3-SU, Cupertino, CA 95014-2084 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GOOSSENS, Thomas [FR/FR]; 9 rue des Dames, 75017 Paris (FR). BAUMANN, Laurent [FR/US]; 2 Infinite Loop, MS 302-2HI, Cupertino, CA 95014 (US).
- (74) Agents: SUN, Living et al.; Fish & Richardson P.C., P.O. Box 1022, Minnapolis, MN 55440-1022 (US).
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7 September 2012

(54) Title: PRESENTING AND BROWSING ITEMS IN A TILTED 3D SPACE

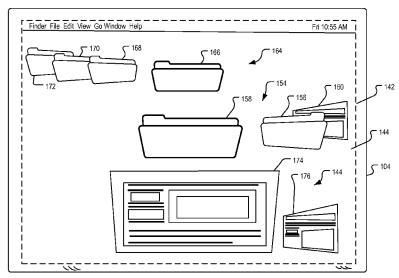


FIG. 1H

(57) Abstract: Methods, systems, and computer-readable media for presenting and browsing items in a tilted 3D space are disclosed. In tilted viewing mode, groups of items from several consecutive levels of a hierarchy can be presented in respective browsable parades shown at different depths into a viewable region of the tilted 3D space. The user can browse laterally across each browsable parade, and browse up and down the hierarchy within the tilted 3D space. With the combination of browsing laterally across the parades presented in the viewable region of the tilted 3D space and browsing up and down the hierarchy along the depth dimension of the 3D space, the user can navigate the entirety of the hierarchy in the tilted 3D space.



### INTERNATIONAL SEARCH REPORT

International application No PCT/US2011/060651

A. CLASSIFICATION OF SUBJECT MATTER INV. G06F3/048 G06F17/30

ADD.

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 practicable, search terms used)

EPO-Internal, COMPENDEX, INSPEC, IBM-TDB, WPI Data

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 99/08170 A2 (THEISEN KAREN [US]; JHONG EUGENE [US]) 18 February 1999 (1999-02-18) the whole document	1,2,6, 16,17 3-5,9
Υ	US 2008/307343 A1 (ROBERT JULIEN [FR] ET AL) 11 December 2008 (2008-12-11)  paragraphs [0006], [0008], [0041], [0105] - [0115]; figures 23, 24A-24G	3-5, 7-15,18, 19
Y A	US 2008/062141 A1 (CHANDHRI IMRAN [US]) 13 March 2008 (2008-03-13) paragraphs [0108] - [0110], [0113], [0134], [0138] - [0151]; figures 7,10,12a,12b,13-17,18	3-5 7-15,18, 19

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 application or patent 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	"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	Date of mailing of the international search report			
17 July 2012	26/07/2012			
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Dixon-Hundertpfund			

X See patent family annex.

X Further documents are listed in the continuation of Box C.

## **INTERNATIONAL SEARCH REPORT**

International application No
PCT/US2011/060651

0/0 !:		
C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 088 032 A (MACKINLAY JOCK D [US]) 11 July 2000 (2000-07-11) column 3, lines 8-67; figures 15,16	1-19
A	US 5 295 243 A (ROBERTSON GEORGE G [US] ET AL) 15 March 1994 (1994-03-15) column 1, line 48 - column 4, line 6; figures 1-6	1-19
Y	## ## ## ## ## ## ## ## ## ## ## ## ##	3-5,7,8, 10-15, 18,19

International application No. PCT/US2011/060651

## **INTERNATIONAL SEARCH REPORT**

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:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
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. X 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 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.:
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.  X 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: 1-6, 16, 17

computer-implemented method (or corresponding system or computer-readable medium) for presenting and browsing items of a hierarchy of items in a two-dimensional space (2D), said hierarchy including a plurality of levels, and in response to a user input, transitioning to presenting said items of said hierarchy of items in a three-dimensional (3D) space having a raised viewing angle

2. claims: 7-15, 18, 19

computer-implemented method (or corresponding system or computer-readable medium) for presenting and browsing items of a hierarchy of items in a first viewing mode of a three-dimensional (3D) space having a low viewing angle, said hierarchy including a plurality of levels, and in response to a user input, raising the viewing angle in 3D space, i.e. transitioning to presenting said items of said hierarchy of items in a second viewing mode of three-dimensional (3D) space having a raised viewing angle

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2011/060651

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