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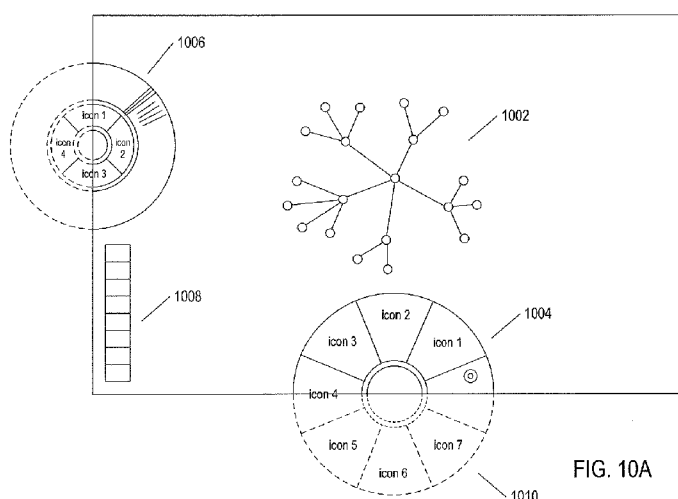
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## Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR SEARCHING AND ANALYZING LARGE NUMBERS OF ELECTRONIC DOCUMENTS



(57) Abstract: The current document is directed to methods and systems for accessing, searching, analyzing, and visualizing electronically stored information, including electronic documents. These methods and systems construct graph-like representations of information searches that can be visualized and manipulated in three dimensions. The three-dimensional rendering of search results allows for very large numbers of search results to be visualized conveniently using a graphical user interface displayed on an electronic display device. Methods and systems provide for three-dimensional manipulation of graph-like renderings of search results, visualization-assisted searching, and a large number of research tools for discovering and storing various types of links, connections, and relationships between electronically stored information entities.

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- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

**A. CLASSIFICATION OF SUBJECT MATTER****G06F 17/30(2006.01)i**

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 17/30; G06F 3/048; G06F 15/16; G06F 3/14; G06F 7/00; G06T 11/20

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords: three-dimensional, visualization, document, search, node, link, and similar terms.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                                        | Relevant to claim No. |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| A         | US 2011-0131211 A1 (STEVEN J. HARRINGTON) 02 June 2011<br>See paragraphs [0035]–[0036], [0038], [0042] and [0052]; and figures 1–3 and 5. | 1–20                  |
| A         | US 2008-0270946 A1 (JOHN S. RISCH et al.) 30 October 2008<br>See paragraphs [0182]–[0189]; and figures 17–19 and 40–41.                   | 1–20                  |
| A         | US 2002-0171646 A1 (ESER KANDOGAN) 21 November 2002<br>See paragraphs [0022]–[0030]; and figures 1–3.                                     | 1–20                  |
| A         | US 2004-0030741 A1 (RICHARD ERNEST WOLTON et al.) 12 February 2004<br>See paragraphs [0219]–[0256]; and figures 1a–1c.                    | 1–20                  |
| A         | US 6628312 B1 (RAMANA B. RAO et al.) 30 September 2003<br>See column 7, line 44 – column 8, line 21; and figures 11–12.                   | 1–20                  |



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 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

"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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2014/017428**

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
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| US 2011-0131211 A1                        | 02/06/2011          | US 08458187 B2             | 04/06/2013          |
| US 2008-0270946 A1                        | 30/10/2008          | US 07373612 B2             | 13/05/2008          |
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| US 2002-0171646 A1                        | 21/11/2002          | US 07659895 B2             | 09/02/2010          |
| US 2004-0030741 A1                        | 12/02/2004          | None                       |                     |
| US 6628312 B1                             | 30/09/2003          | None                       |                     |