# **PCT**

# WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



### INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup>:

G06F 17/30

A3

(11) International Publication Number: WO 98/37474

(43) International Publication Date: 27 August 1998 (27.08.98)

(21) International Application Number: PCT/US98/02217

(22) International Filing Date: 10 February 1998 (10.02.98)

(30) Priority Data:

08/798,453

10 February 1997 (10.02.97) US

(71) Applicant: ACTIONEER, INC. [US/US]; 539 Bryant Street, San Francisco, CA 94107 (US).

- (72) Inventors: ALLEN, David; 1674 McNeil Road, Ojai, CA 93023 (US). SMIGA, Brian; 461 Second Street #220, San Francisco, CA 94107 (US). RABBANI, Danny; 1027 Chestnut Street #8, San Francisco, CA 94109 (US). BUCHHEIM, Dennis; 570 Ashton Avenue, Palo Alto, CA 94306 (US). MANN, Tony; 25628 S.E. 164th Street, Issaquah, WA 98027 (US). HAGAN, Thomas; 13 Union Wharf, Boston, MA 02109 (US). JOAQUIN, James; 460 Duboce Street #4, San Francisco, CA 94117 (US).
- (74) Agents: SALTER, James, H. et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (US).

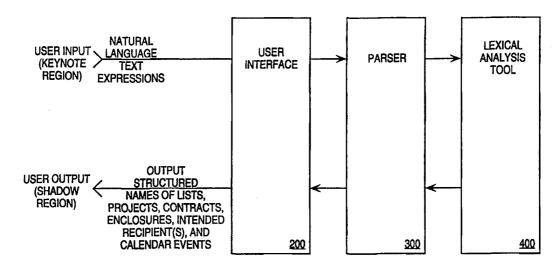
(81) Designated States: AL, AM, AT, AT (Utility model), AU (Petty patent), AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

#### **Published**

With international search report.

(88) Date of publication of the international search report: 22 October 1998 (22.10.98)

(54) Title: AN INFORMATION ORGANIZATION AND COLLABORATION TOOL FOR PROCESSING NOTES AND ACTION REQUESTS IN COMPUTER SYSTEMS



### (57) Abstract

A natural language-based information organization and collaboration tool for a computer system is disclosed. The present invention includes an apparatus and method for processing text expressions in a computer system, the apparatus including: 1) an object database defining an information object with an associated keyword; 2) a user input device (200) for receiving an input text expression; 3) a parsing device (300) including functions for linking the input text expression to the information object based on the keyword identified in the input text expression; and 4) a user output device for displaying to the user the identity of the information object to which the input text expression was linked. The apparatus of the present invention further includes supplemental information when a corresponding keyword is identified in the input text expression. The apparatus of the present invention further includes a method and apparatus for collaboration between users of a time and project management system.

# FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

| AL | Albania                  | ES | Spain               | LS | Lesotho               | SI                     | Slovenia                 |
|----|--------------------------|----|---------------------|----|-----------------------|------------------------|--------------------------|
| AM | Armenia                  | FI | Finland             | LT | Lithuania             | SK                     | Slovakia                 |
| AT | Austria                  | FR | France              | LU | Luxembourg            | SN                     | Senegal                  |
| AU | Australia                | GA | Gabon               | LV | Latvia                | SZ                     | Swaziland                |
| AZ | Azerbaijan               | GB | United Kingdom      | MC | Monaco                | TD                     | Chad                     |
| BA | Bosnia and Herzegovina   | GE | Georgia             | MD | Republic of Moldova   | TG                     | Togo                     |
| BB | Barbados                 | GH | Ghana               | MG | Madagascar            | ТJ                     | Tajikistan               |
| BE | Belgium                  | GN | Guinea              | MK | The former Yugoslav   | TM                     | Turkmenistan             |
| BF | Burkina Faso             | GR | Greece              |    | Republic of Macedonia | TR                     | Turkey                   |
| BG | Bulgaria                 | HU | Hungary             | ML | Mali                  | TT                     | Trinidad and Tobago      |
| ВJ | Benin                    | IE | Ireland             | MN | Mongolia              | UA                     | Ukraine                  |
| BR | Brazil                   | IL | Israel              | MR | Mauritania            | UG                     | Uganda                   |
| BY | Belarus                  | IS | Iceland             | MW | Malawi                | US                     | United States of America |
| CA | Canada                   | IT | Italy               | MX | Mexico                | $\mathbf{U}\mathbf{Z}$ | Uzbekistan               |
| CF | Central African Republic | JP | Japan               | NE | Niger                 | VN                     | Viet Nam                 |
| CG | Congo                    | KE | Kenya               | NL | Netherlands           | YU                     | Yugoslavia               |
| CH | Switzerland              | KG | Kyrgyzstan          | NO | Norway                | $\mathbf{z}\mathbf{w}$ | Zimbabwe                 |
| CI | Côte d'Ivoire            | KP | Democratic People's | NZ | New Zealand           |                        |                          |
| CM | Cameroon                 |    | Republic of Korea   | PL | Poland                |                        |                          |
| CN | China                    | KR | Republic of Korea   | PT | Portugal              |                        |                          |
| CU | Cuba                     | KZ | Kazakstan           | RO | Romania               |                        |                          |
| CZ | Czech Republic           | LC | Saint Lucia         | RU | Russian Federation    |                        |                          |
| DE | Germany                  | LI | Liechtenstein       | SD | Sudan                 |                        |                          |
| DK | Denmark                  | LK | Sri Lanka           | SE | Sweden                |                        |                          |
| EE | Estonia                  | LR | Liberia             | SG | Singapore             |                        |                          |
|    |                          |    |                     |    |                       |                        |                          |

## INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/02217

| A. CLASSIFICATION OF SUBJECT MATTER  IPC(6) :GO6F 17/30 US CL : 707/1,2  |  |   |                                 |  |  |  |  |  |
|--|--|---|---------------------------------|--|--|--|--|--|
| 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)  U.S.: 707/1,2   |  |   |                                 |  |  |  |  |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched                            |  |   |                                 |  |  |  |  |  |
| Electronic da  | ata base consulted during the international search (no   | ame of data base and, where practicable   | . search terms used)            |  |  |  |  |  |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  ACM web cite, IEEE, Dialog |  |   |                                 |  |  |  |  |  |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT   |  |   |                                 |  |  |  |  |  |
| Category*  | Citation of document, with indication, where ap  | Relevant to claim No.   |                                 |  |  |  |  |  |
| X,P  | US 5,634,121 A (TRACZ et al) 27 M  | 1   |                                 |  |  |  |  |  |
| X,E  | US 5,732,274 A (O'NEILL) 24 March  | 2   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  |  |   |                                 |  |  |  |  |  |
|  | r documents are listed in the continuation of Box C  |   |                                 |  |  |  |  |  |
| "A" docu   | pial categories of cited documents:<br>Iment defining the general state of the art which is not considered<br>e of particular relevance                      | "T" later document published after the inte<br>date and not in conflict with the appl<br>the principle or theory underlying the | ication but cited to understand |  |  |  |  |  |
|  | er document published on or after the international filing date  | "X" document of particular relevance; the considered novel or cannot be considered.   |                                 |  |  |  |  |  |
| cited  | ament which may throw doubts on priority claim(s) or which is<br>to establish the publication date of another citation or other<br>ial reason (as specified) | when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be                         |                                 |  |  |  |  |  |
|  | ament referring to an oral disclosure, use, exhibition or other  | considered to involve an inventive<br>combined with one or more other such<br>being obvious to a person skilled in t            | h documents, such combination   |  |  |  |  |  |
| "P" doce   | ment published prior to the international filing date but later than priority date claimed   | "&" document member of the same patent family   |                                 |  |  |  |  |  |
| Date of the a  | ctual completion of the international search   | Date of mailing of the international search report  |                                 |  |  |  |  |  |
| 09 JUNE 1  | 998  | 1 4AUG 1998   |                                 |  |  |  |  |  |
| Name and m   | ailing address of the ISA/US<br>er of Patents and Trademarks   | Authorized officer  |                                 |  |  |  |  |  |
| Box PCT  | D.C. 20231   | MICHAEL WALLACE (AHA) HO  |                                 |  |  |  |  |  |
| Facsimile No   |  | Telephone No. (703) 308-8996  | WINGHT - 119                    |  |  |  |  |  |