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United States Patent [19]
Smiga et al.

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[54] **METHOD AND APPARATUS FOR GROUP ACTION PROCESSING BETWEEN USERS OF A COLLABORATION SYSTEM** 5,749,079 5/1998 Yong et al. 707/100
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[57] **ABSTRACT**

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[51] **Int. Cl.**⁷ **G06F 17/00**

[52] **U.S. Cl.** **707/102; 707/530; 707/517; 707/3**

[58] **Field of Search** **707/1-540; 395/671-684; 709/106-304**

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 for receiving an input text expression; 3) a parsing device for identifying the keyword in the input text expression, the parsing device 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 in the object database which is related to the information object, the user output device further including functions for displaying the 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.

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24 Claims, 26 Drawing Sheets

OBJECT TYPE TABLE

KEY	TYPE	DESCRIPTION
0	ENVELOPE	"CONTAINER" OF A KEYNOTE THAT IS BEING SENT
1	LIST ITEM	ACTUAL KEYNOTE BODY AND STATUS INFORMATION
2	PROJECT	ACTIONEER PROJECT
3	SIMPLE DATE	NON-RECURRING (DUE) DATE
4	RECURRING DATE	RECURRING (DUE) DATE
5	PERSON	INDIVIDUAL CONTACT
6	LIST	ACTIONEER ACTION OR MEMO LIST
7	DELEGATE	PERSON TO WHOM A COLLABORATIVE NOTE IS DELEGATED
8	FYI RECIPIENT	PERSON TO WHOM A NOTE IS SENT FOR INFORMATION PURPOSES ONLY
9	ATTACHED PROJECT	PROJECT ATTACHED TO A NOTE
10	ATTACHED PERSON	PERSON ATTACHED TO A NOTE
11	KEYWORD	WORD(S) USED BY THE ACTIONEER PARSER TO INTERPRET A NOTE'S TEXT
12	PHYSICAL ADDRESS	HOME, WORK, ETC. ADDRESS
13	EMAIL ADDRESS	INTERNET, EXCHANGE, ETC. EMAIL ADDRESS
14	PHONE NUMBER	HOME, WORK, ETC. PHONE NUMBER
15	EMAIL TO	EMAIL ADDRESS TO SEND A NOTE TO (DELEGATE)
16	EMAIL FYI	EMAIL ADDRESS TO SEND A NOTE AS A "CC" (FYI RECIPIENT)
17	ENVELOPE CREATOR	PERSON WHO ORIGINALLY CREATED A PARTICULAR ENVELOPE
18	ENVELOPE SENDER	PERSON WHO SENT A PARTICULAR ENVELOPE TO THE CURRENT RECIPIENT