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(54) **SEARCH ENGINE**

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(51) Int. Cl.^{7} **G06F 17/30**
(52) U.S. Cl. **707/100**; 707/501.1; 707/3
(58) Field of Search 707/1–4, 501, 707/513, 523, 100, 501.1; 709/206

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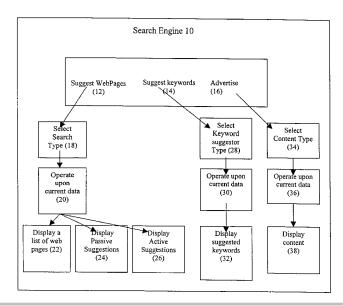
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(57) **ABSTRACT**

The present invention provides for a method of updatig an internet search engine database with the results of a user's selection of specific web page listings from the general web page listing provided to the user as a result of his initial keyword search entry. By updating the database with the selections of many different users, the database can be updated to prioritize those web listings that have been selected the most with respect to a given keyword, and thereby presenting first the most popular web page listings in a subsequent search using the same keyword search entry.

5 Claims, 27 Drawing Sheets

Search Engine 10

Suggest WebPages (12)   Suggest keywords (14)   Advertise (16)

Select Search Type (18)

Select Keyword suggestor Type (28)

Select Content Type (34)

Operate upon current data (20)

Operate upon current data (30)

Operate upon current data (36)

Display a list of web pages (22)

Display Passive Suggestions (24)

Display Active Suggestions (26)

Display suggested keywords (32)

Display content (38)

Figure 1A

```
┌──────────────┐          ┌──────────────┐
│ User Site/    │          │ User Site/    │
│ Computer      │          │ Computer      │
│ 100A          │          │ 100B          │
└──────────────┘          └──────────────┘
        ⇕                         ⇕

┌─────────────────────────────────────┐      ┌──────────────┐
│ Server 102A                          │ ⇔    │ Developer    │
│                                      │      │ Site/        │
│                                      │      │ Computer     │
│                                      │      │ 104A         │
└─────────────────────────────────────┘      └──────────────┘
                   ⇕

┌─────────────────────────────────────┐      ┌──────────────┐
│ Server 102B                          │ ⇔    │ Developer    │
│                                      │      │ Site/        │
│                                      │      │ Computer     │
│                                      │      │ 104B         │
└─────────────────────────────────────┘      └──────────────┘
        ⇕                         ⇕
┌──────────────┐          ┌──────────────┐
│ User Site/    │          │ User Site/    │
│ Computer      │          │ Computer      │
│ 100C          │          │ 100D          │
└──────────────┘          └──────────────┘
```
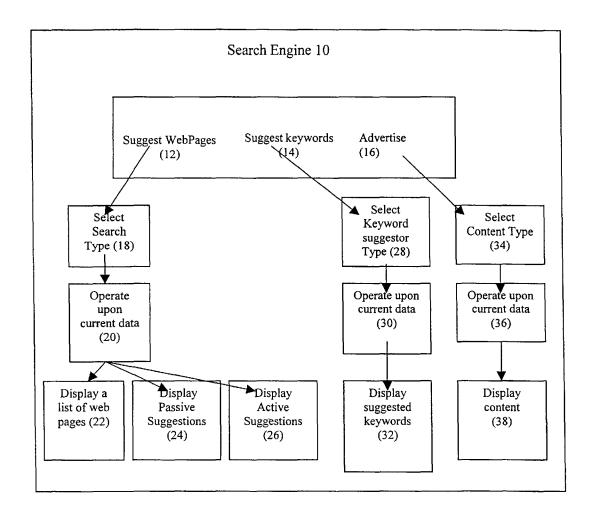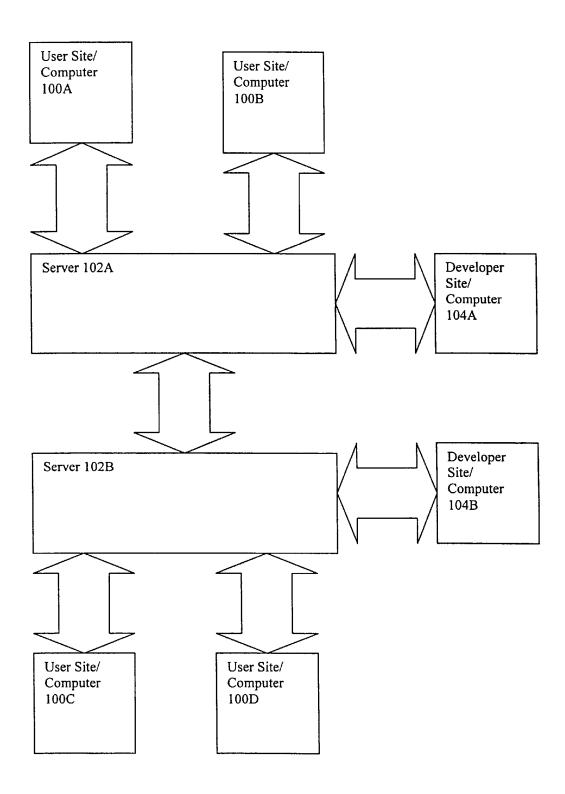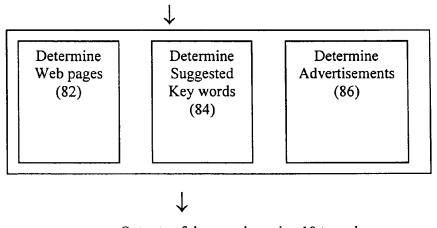
Figure 1B

Data inputs to the search engine 50
- User (keyword 52 , profile types 54 , user ID 56 , search type 58, date-time 60, IP address 62 , other 64)
- Web page developer (URL 66, description 68, keywords 70, target audience 72, date-time 74)
- Advertiser (bids 76, advertising details 78)
- Results from other search engines 80

↓

Determine Web pages (82)	Determine Suggested Key words (84)	Determine Advertisements (86)

↓

Outputs of the search engine 10 to end user
- list of web pages 90
- suggested keywords 92
- advertisements 94

Figure 2

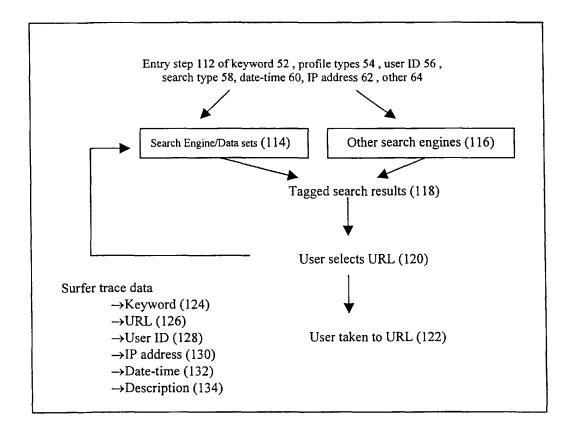Entry step 112 of keyword 52 , profile types 54 , user ID 56 ,
search type 58, date-time 60, IP address 62 , other 64

Search Engine/Data sets (114)   Other search engines (116)

Tagged search results (118)

User selects URL (120)

Surfer trace data
→Keyword (124)
→URL (126)
→User ID (128)   User taken to URL (122)
→IP address (130)
→Date-time (132)
→Description (134)

Figure 3A

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