EXHIBIT C
Part 5

3 searching mode, a network navigation mode, a network browsing mode, an

4 email reading mode, an email writing mode, a document writing mode, a

5 viewing "pushed" information mode, a finding expert advice mode, and a

6 product purchasing mode.

1 6. The method of claim 1 further comprising crawling network documents, wherein

2 the crawling comprises parsing crawled documents for links, calculating probable

3 user interest in the parsed links using the learning machine, and preferentially

4 following links likely to be of interest to the user.

1 7. The method of claim 1 wherein the identified properties of the document d

2 comprise a user u-independent property selected from the group consisting of:

3 a) a probability $P(t,d)$ that the document d is of interest to users interested in a

4   topic t;

5 b) a topic classifier discrete probability distribution $P(t\ d)$;

6 c) a product model discrete probability distribution $P(p|d)$;

7 d) product feature values extracted from the document d;

8 e) an author of the document d;

9 f) an age of the document d;

10 g) a list of documents linked to the document d;

11 h) a language of the document d;

12 i) a number of users who have accessed the document d;

13 j) a number of users who have saved the document d in a favorite document

14   list; and

15 k) a list of users previously interested in the document d.

1 8. The method of claim 1 wherein the parameters of the learning machine define a

2 user u-dependent function selected from the group consisting of:

3 a) a user topic probability distribution $P(t|u)$ representing interests of the user u

4   in various topics t;

5 b) a user product probability distribution $P(p|u)$ representing interests of the

6   user u in various products p;

7 c) a user product feature probability distribution $P(f|u,p)$ representing interests

8   of the user u in various features f of each of the various products p;

9   d)   a web site probability distribution $P(s|u)$ representing interests of the user u

10   in various web sites s;

11   e)   a cluster probability distribution $P(c(u)|u)$ representing similarity of the user

12   u to users in various clusters $c(u)$;

13   f)   a phrase model probability distribution $P(w|u)$ representing interests of the

14   user u in various phrases w;

15   g)   an information theory based measure $I(I_w; I_u)$ representing mutual

16   information between various phrases w and the user u;

17   h)   an information theory based measure $I(I_t; I_u)$ representing mutual information

18   between various topics t and the user u;

19   i)   an information theory based measure $I(I_s; I_u)$ representing mutual

20   information between various web sites s and the user u;.

21   j)   an information theory based measure $I(I_p; I_u)$ representing mutual

22   information between various products p and the user u; and

23   k)   an information theory based measure $I(I_f; I_u)$ representing mutual information

24   between various features f of each of the various products p and the user u.

1   9.   The method of claim 1 wherein the parameters of the learning machine define:

2   a)   a user product probability distribution $P(p|u)$ representing interests of the

3   user u in various products p; and

4   b)   a user product feature probability distribution $P(f|u,p)$ representing interests

5   of the user u in various features f of each of the various products p;

6   and wherein the method further comprises estimating a probability $P(u|d,$ product

7   described=p) that a document d that describes a product p is of interest to the user

8   u, wherein the probability is estimated in part from the user product probability

9   distribution and the user product feature probability distribution.

1   10.   The method of claim 9 further comprising recommending products to the

2   user based on the probability $P(u|d,$ product described=p).

1   11.   The method of claim 1 further comprising estimating a posterior probability

2          $P(u|d,q)$ that the document d is of interest to the user u, given a query q submitted

3   by the user.

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12. The method of claim 11 wherein estimating the posterior probability comprises estimating a probability $P(q|d,u)$ that the query q is expressed by the user u with an information need in the document d.

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13. The method of claim 1 further comprising applying the identified properties of the document d to a learning machine having product parameters characterizing a product p to estimate a probability $P(p|d)$ that the document d refers to the product p.

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14. The method of claim 13 further comprising updating the product parameters based on the identified properties of the document d and the estimated probability $P(p|d)$.

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15. The method of claim 13 further comprising initializing the product parameters based on a set of documents associated with the product p.

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16. The method of claim 1 further comprising clustering multiple users into clusters of similar users, wherein the clustering comprises calculating distances between User Models, and selecting similar users based on the calculated distances between User Models.

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17. The method of claim 1 further comprising calculating relative entropy values between User Models of multiple users, and clustering together users based on the calculated relative entropy values.

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18. The method of claim 1 wherein the parameters defining the User Model comprise calculated distances between the User Model and User Models of users similar to the user.

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19. The method of claim 1 further comprising selecting in a group of users an expert user in an area of expertise, wherein selecting the expert user comprises finding an expert User Model among User Models of the group of users, such that the expert User Model indicates a strong interest of the expert user in a document associated with the area of expertise.

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20. The method of claim 1 further comprising parsing the document *d* for hyperlinks, and separately estimating for each of the hyperlinks a probability that the hyperlink is of interest to the user *u*.

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21. The method of claim 1 further comprising sending to a third party web server user interest information derived from the User Model, whereby the third party web server may customize its interaction with the user.

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22. The method of claim 1 wherein the monitored user interactions include a sequence of interaction times.

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23. The method of claim 1 further comprising initializing the User Model using information selected from the group consisting of a set of documents provided by the user, a web browser history file associated with the user, a web browser bookmarks file associated with the user, ratings by the user of a set of documents, and previous product purchases made by the user.

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24. The method of claim 1 further comprising modifying the User Model based on User Model modification requests provided by the user.

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25. The method of claim 1 further comprising providing to the user a score for a document identified by the user, wherein the score is derived from the estimated probability.

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26. The method of claim 1 further comprising providing to the user a 3D map of a hyper linked document collection, wherein the 3D map indicates a user interest in each document.

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27. The method of claim 1 further comprising temporarily using a User Model that is built from a set of predetermined parameters of a profile selected by the user.

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28. The method of claim 1 further comprising initializing the User Model by selecting a set of predetermined parameters of a prototype user selected by the user.

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29. The method of claim 28 further comprising updating the predetermined parameters of the prototype user based on actions of users similar to the prototype user.

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30. The method of claim 1 further comprising identifying a set of users interested in the document d.

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31. The method of claim 30 further comprising calculating a range of interests in the document d for the identified set of users.

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32. A program storage device accessible by a central computer, tangibly embodying a program of instructions executable by the central computer to perform method steps for providing automatic, personalized information services to a user u, the method steps comprising:

a) transparently monitoring user interactions with data while the user is engaged in normal use of a client computer in communication with the central computer;

b) updating user-specific data files, wherein the user-specific data files comprise the monitored user interactions with the data and a set of documents associated with the user;

c) estimating parameters of a learning machine, wherein the parameters define a User Model specific to the user and wherein the parameters are estimated in part from the user-specific data files;

d) analyzing a document d to identify properties of the document;

e) estimating a probability $P(u|d)$ that the document d is of interest to the user u, wherein the probability $P(u|d)$ is estimated by applying the identified properties of the document to the learning machine having the parameters defined by the User Model; and

f) using the estimated probability to provide automatic, personalized information services to the user.

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33. The program storage device of claim 32 wherein the user-specific data files include documents of interest to the user u and documents that are not of interest

3   to the user *u*, and wherein estimating the parameters comprises distinct treatment

4   of the documents of interest and the documents that are not of interest.

1   34. The program storage device of claim 32 wherein analyzing the document *d*

2   provides for the analysis of documents having multiple distinct media types.

1   35. The program storage device of claim 32 wherein transparently monitoring user

2   interactions with data comprises monitoring multiple distinct modes of user

3   interaction with network data.

1   36. The program storage device of claim 35 wherein the multiple distinct modes

2   of user interaction comprise a mode selected from the group consisting of a

3   network searching mode, a network navigation mode, a network browsing

4   mode, an email reading mode, an email writing mode, a document writing

5   mode, a viewing "pushed" information mode, a finding expert advice mode,

6   and a product purchasing mode.

1   37. The program storage device of claim 32 wherein the method steps further

2   comprise crawling network documents, wherein the crawling comprises parsing

3   crawled documents for links, calculating probable user interest in the parsed links

4   using the learning machine, and preferentially following links likely to be of

5   interest to the user.

1   38. The program storage device of claim 32 wherein the identified properties of the

2   document *d* comprise a user *u*-independent property selected from the group

3   consisting of:

4   a) a probability $P(t,d)$ that the document *d* is of interest to users interested in a

5   topic *t*;

6   b) a topic classifier discrete probability distribution $P(t|d)$;

7   c) a product model discrete probability distribution $P(p|d)$;

8   d) product feature values extracted from the document *d*;

9   e) an author of the document *d*;

10   f) an age of the document *d*;

11   g) a list of documents linked to the document *d*;

12	h)	a language of the document d;
13	i)	a number of users who have accessed the document d;
14	j)	a number of users who have saved the document d in a favorite document
15		list; and
16	k)	a list of users previously interested in the document d.

1   39.   The program storage device of claim 32 wherein the parameters of the learning

2   machine define a user u-dependent function selected from the group consisting of:

3   a)   a user topic probability distribution $P(t|u)$ representing interests of the user u

4   in various topics t;

5   b)   a user product probability distribution $P(p|u)$ representing interests of the

6   user u in various products p;

7   c)   a user product feature probability distribution $P(f|u,p)$ representing interests

8   of the user u in various features f of each of the various products p;

9   d)   a web site probability distribution $P(s|u)$ representing interests of the user u

10   in various web sites s;

11   e)   a cluster probability distribution $P(c(u)|u)$ representing similarity of the user

12   u to users in various clusters $c(u)$;

13   f)   a phrase model probability distribution $P(w|u)$ representing interests of the

14   user u in various phrases w;

15   g)   an information theory based measure $I(I_w; I_u)$ representing mutual

16   information between various phrases w and the user u;

17   h)   an information theory based measure $I(I_t; I_u)$ representing mutual information

18   between various topics t and the user u;

19   i)   an information theory based measure $I(I_s; I_u)$ representing mutual

20   information between various web sites s and the user u;.

21   j)   an information theory based measure $I(I_p; I_u)$ representing mutual

22   information between various products p and the user u; and

23   k)   an information theory based measure $I(I_f; I_u)$ representing mutual information

24   between various features f of each of the various products p and the user u.

1   40.   The program storage device of claim 32 wherein the parameters of the learning

2   machine define:

3   a)   a user product probability distribution $P(p|u)$ representing interests of the

4   user u in various products p; and

5   b)   a user product feature probability distribution $P(f|u,p)$ representing interests

6   of the user u in various features f of each of the various products p;

7   and wherein the method steps further comprise estimating a probability $P(u|d,$

8   product described=p) that a document d that describes a product p is of interest to

9   the user u, wherein the probability is estimated in part the user product probability

10   distribution and the user product feature probability distribution.

1   41.   The program storage device of claim 40 wherein the method steps further

2   comprise recommending products to the user based on the probability $P(u|d,$

3   product described=p).

1   42.   The program storage device of claim 32 wherein the method steps further

2   comprise estimating a posterior probability $P(u|d,q)$ that the document d is of

3   interest to the user u, given a query q submitted by the user.

1   43.   The program storage device of claim 42 wherein estimating the posterior

2   probability comprises estimating a probability $P(q|d,u)$ that the query q is

3   expressed by the user u with an information need in the document d.

1   44.   The program storage device of claim 32 wherein the method steps further

2   comprise applying the identified properties of the document d to a learning

3   machine having product parameters characterizing a product p to estimate a

4   probability $P(p|d)$ that the document d refers to the product p.

1   45.   The program storage device of claim 44 wherein the method steps further

2   comprise updating the product parameters based on the identified properties

3   of the document d and the estimated probability $P(p|d)$.

1   46.   The program storage device of claim 44 wherein the method steps further

2   comprise initializing the product parameters based on a set of documents

3   associated with the product p.

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47. The program storage device of claim 32 wherein the method steps further comprise clustering multiple users into clusters of similar users, wherein the clustering comprises calculating distances between User Models, and selecting similar users based on the calculated distances between User Models.

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48. The program storage device of claim 32 wherein the method steps further comprise calculating relative entropy values between User Models of multiple users, and clustering together users based on the calculated relative entropy values.

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49. The program storage device of claim 32 wherein the parameters defining the User Model comprise calculated distances between the User Model and User Models of users similar to the user.

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50. The program storage device of claim 32 wherein the method steps further comprise selecting in a group of users an expert user in an area of expertise, wherein selecting the expert user comprises finding an expert User Model among User Models of the group of users, such that the expert User Model indicates a strong interest of the expert user in a document associated with the area of expertise.

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51. The program storage device of claim 32 wherein the method steps further comprise parsing the document d for hyperlinks, and separately estimating for each of the hyperlinks a probability that the hyperlink is of interest to the user u.

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52. The program storage device of claim 32 wherein the method steps further comprise sending to a third party web server user interest information derived from the User Model, whereby the third party web server may customize its interaction with the user.

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53. The program storage device of claim 32 wherein the monitored user interactions include a sequence of interaction times.

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54. The program storage device of claim 32 wherein the method steps further comprise initializing the User Model using information selected from the group

3   consisting of a set of documents provided by the user, a web browser history file

4   associated with the user, a web browser bookmarks file associated with the user,

5   ratings by the user of a set of documents, and previous product purchases made by

6   the user.

1   55.   The program storage device of claim 32 wherein the method steps further

2   comprise modifying the User Model based on User Model modification requests

3   provided by the user.

1   56.   The program storage device of claim 32 wherein the method steps further

2   comprise providing to the user a score for a document identified by the user,

3   wherein the score is derived from the estimated probability.

1   57.   The program storage device of claim 32 wherein the method steps further

2   comprise providing to the user a 3D map of a hyper linked document collection,

3   wherein the 3D map indicates a user interest in each document.

1   58.   The program storage device of claim 32 wherein the method steps further

2   comprise temporarily using a User Model that is built from a set of predetermined

3   parameters of a profile selected by the user.

1   59.   The program storage device of claim 32 wherein the method steps further

2   comprise initializing the User Model by selecting a set of predetermined

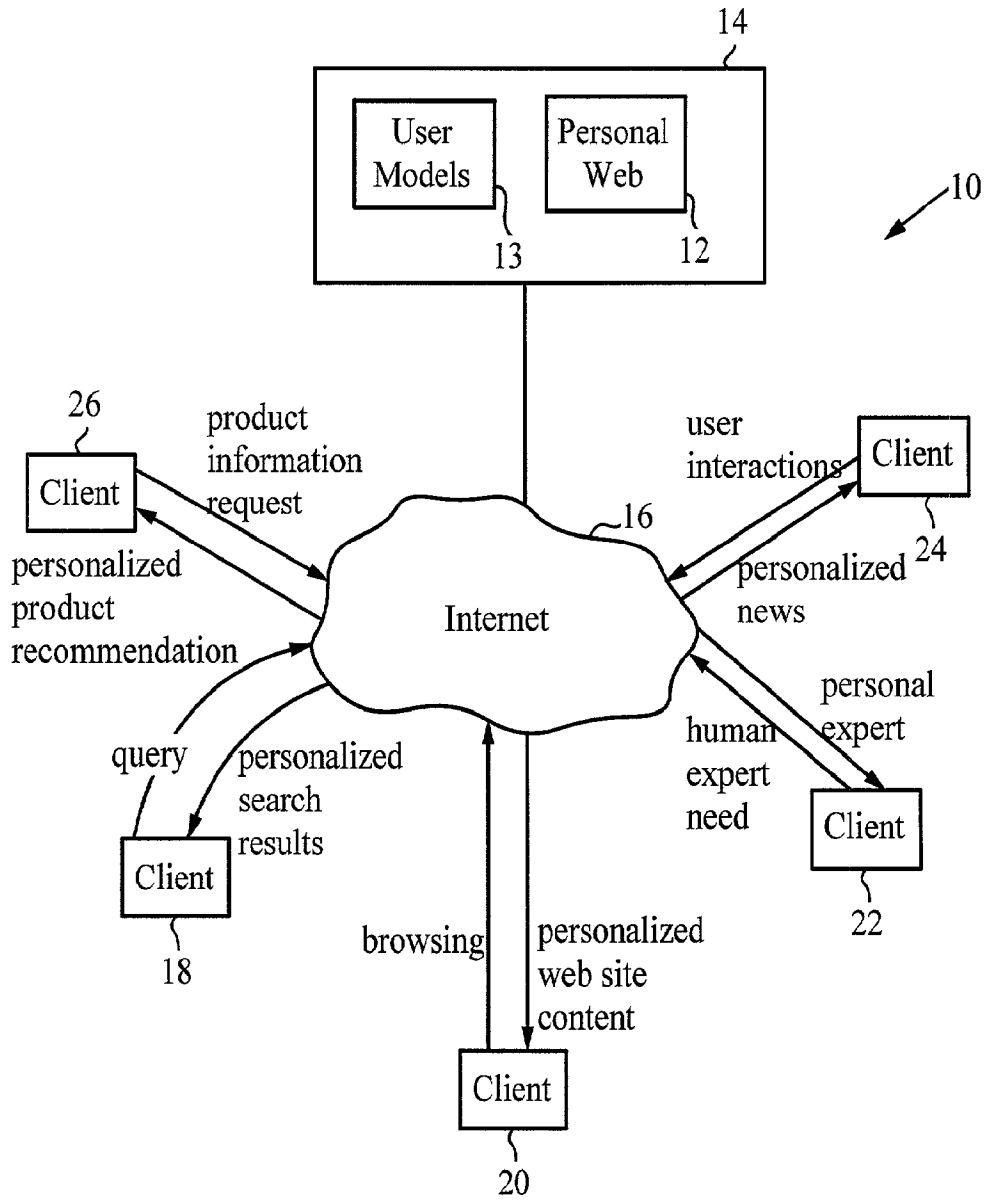3   parameters of a prototype user selected by the user.

1   60.   The program storage device of claim 59 wherein the method steps further

2   comprise updating the predetermined parameters of the prototype user based

3   on actions of users similar to the prototype user.

1   61.   The program storage device of claim 32 wherein the method steps further

2   comprise identifying a set of users interested in the document d.
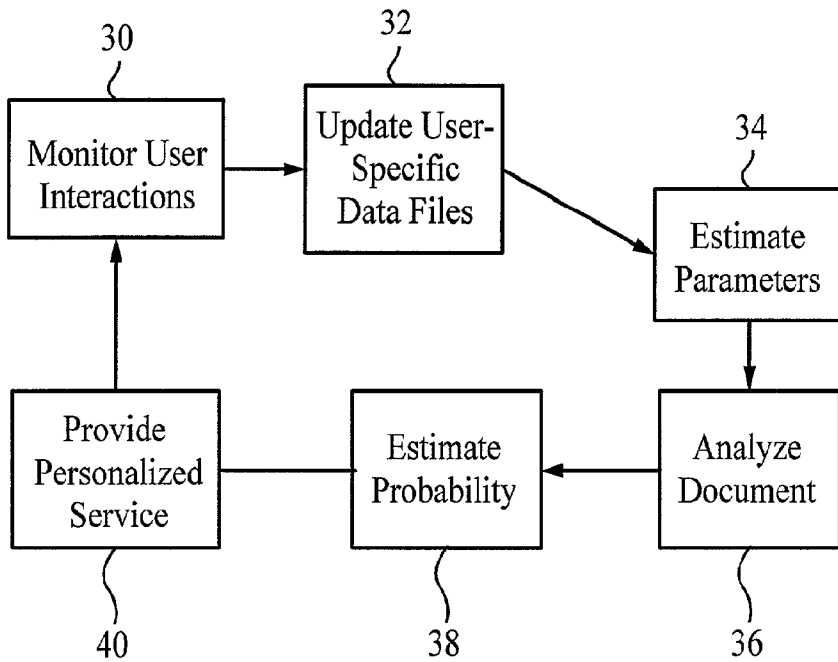
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62. The program storage device of claim 61 wherein the method steps further comprise calculating a range of interests in the document d for the identified set of users.
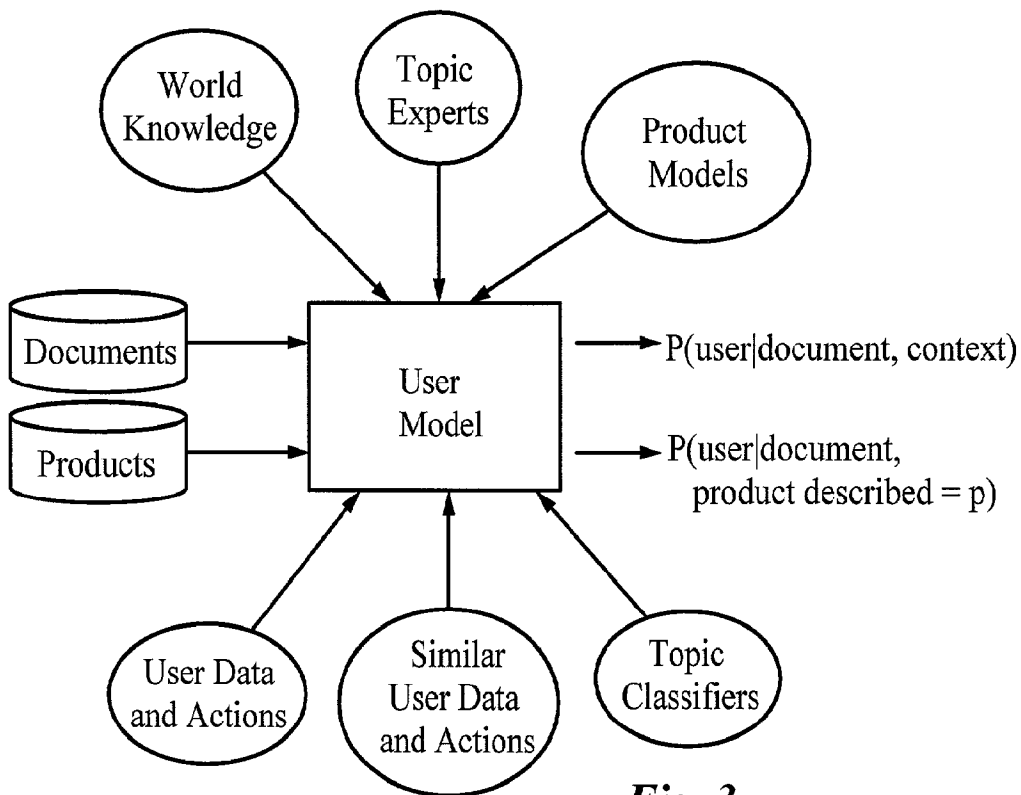
ABSTRACT OF THE DISCLOSURE

A method for providing automatic, personalized information services to a computer user includes the following steps: transparently monitoring user interactions with data during

5   normal use of the computer; updating user-specific data files including a set of user-related documents; estimating parameters of a learning machine that define a User Model specific to the user, using the user-specific data files; analyzing a document to identify its properties; estimating the probability that the user is interested in the document by applying the document properties to the parameters of the User Model; and providing personalized

10   services based on the estimated probability. Personalized services include personalized searches that return only documents of interest to the user, personalized crawling for maintaining an index of documents of interest to the user; personalized navigation that recommends interesting documents that are hyperlinked to documents currently being viewed; and personalized news, in which a third party server customized its interaction with

15   the user. The User Model includes continually-updated measures of user interest in words or phrases, web sites, topics, products, and product features. The measures are updated based on both positive examples, such as documents the user bookmarks, and negative examples, such as search results that the user does not follow. Users are clustered into groups of similar users by calculating the distance between User Models.

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Fig. 1

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Monitor User Interactions → Update User-Specific Data Files → Estimate Parameters

Provide Personalized Service ← Estimate Probability ← Analyze Document

40   38   36

Fig. 2

World Knowledge

Topic Experts

Product Models

Documents →

Products →

User Model

→ P(user|document, context)

→ P(user|document, product described = p)

User Data and Actions

Similar User Data and Actions

Topic Classifiers

Fig. 3

Informative Word/Phrase List

Word ID	Word Grade	Last Access Time	Number of Accesses
Vegan	0.86	3/6/2000 12:22:41	173
Parasail	0.72	4/15/2000 18:51:27	220

Fig. 4A

Web Site Distribution

Site ID	Site Probability	Last Access Time	Number of Accesses
herring.com	0.61	5/1/2000 19:15:21	152
Java.com	0.43	4/24/2000 3:16:18	460

Fig. 4B

User Topic Distribution

Topic ID	Topic Parent	Topic Probability	Last Access Time	Number of Accesses
Computers	Industries	0.6	12/2/1999 1:21:22	74
Publishing	Industries	0.31	1/2/2000 6:25:31	62

Fig. 4C

User Product Distribution

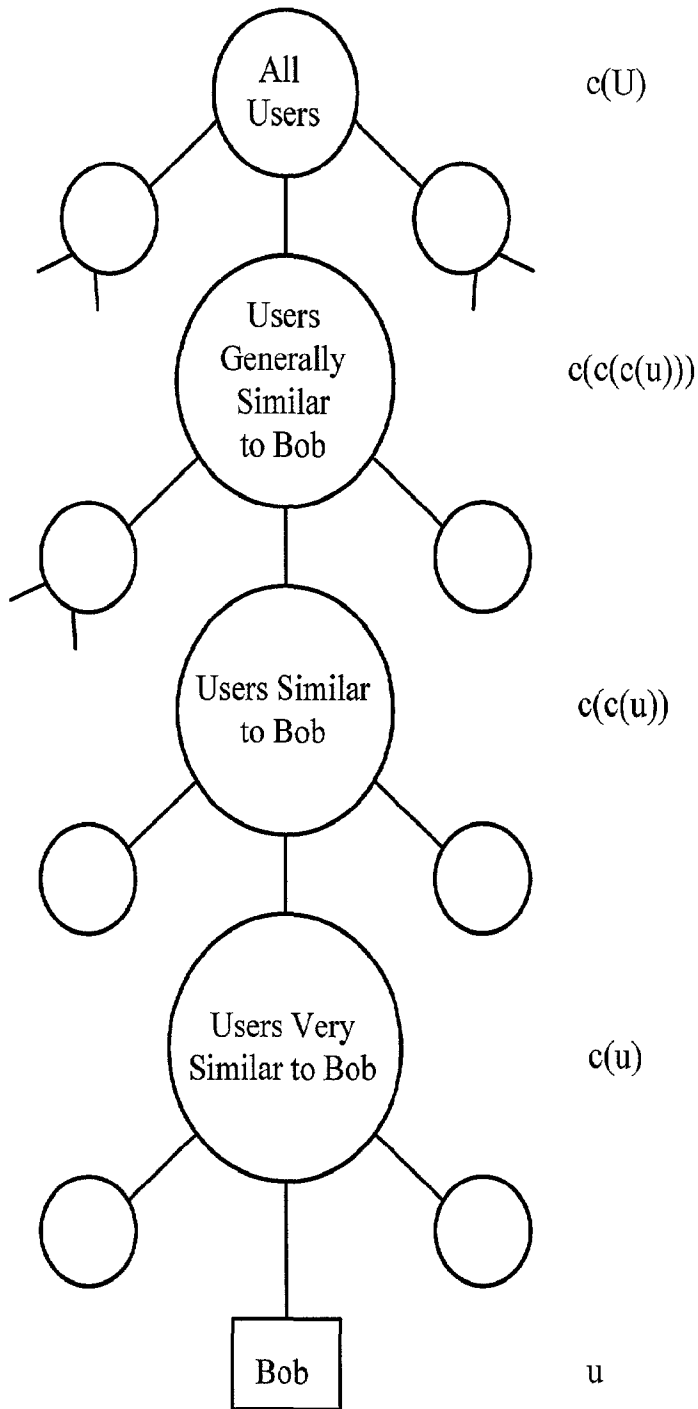| Product ID	Product Parent	Product Probability	Last Purchase Time	Number of Purchases	Last Access Time	Number of Accesses
3Com Palm 3E	Without Keyboards	0.73	12/16/1999 17:21:21	1	5/2/2000 16:01:21	78
Without Keyboards	Handhelds/ PDAs	0.81	12/16/1999 17:21:21	1	3/15/2000 17:21:21	98

Fig. 4D

User Product Feature Distribution

Product ID	Feature ID	Value	Value Probability
Webcams	Interface	PC Card	0.7
Webcams	Interface	Serial	0.2

Fig. 4E

All
Users — c(U)

Users
Generally
Similar
to Bob — c(c(c(u)))

Users Similar
to Bob — c(c(u))

Users Very
Similar to Bob — c(u)

Bob — u

Fig. 5A

User Cluster Tree

Cluster ID	Cluster Parent ID
C123	C3345

Fig. 5B

Fig. 6A

User Fuzzy Cluster Tree

Cluster ID	Cluster Parent ID	Cluster Probability
Bob	C1	0.3
Bob	C2	0.2
Bob	C3	0.1
Bob	C4	0.4
C1	C11	0.2

Fig. 6B

Top
Arts
Health
Science
Society
Business
News
Employment
Investing
Industries
Computers
Healthcare
Publishing
Magazines
Self-Publishing
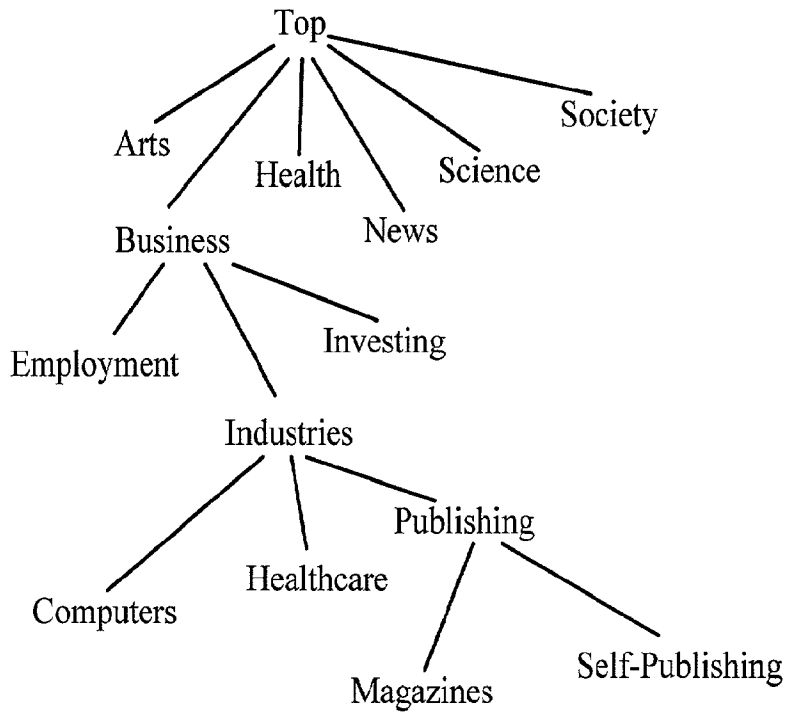
Fig. 7

Topic Tree

Topic ID	Depth Level	Topic Parent ID	Number of Children	Children
Investing	2	Business	3	International, Resources, Socially Responsible
Employment	2	Business	4	Careers, Recruiters, Resumes, Seasonal

Fig. 8

Topic Experts

Topic ID	Topic Parent ID	Cluster 1	Cluster 2	Cluster 2
Investing	Business	C112	C113	C114
Employment	Business	C241	C212	C159

Fig. 9

Top

Consumer
Electronics

Computers

Software

CD Players

Cameras

Personal
Minidiscs

Sony
CDP-
CX350

Harmon
Kardon
CDR2

Digital
Cameras

Webcams

Kodak
DC280
Zoom

Nikon
Coolpix
950

Olympus
D-340R

Fig. 10

Product Tree

Product ID	Depth Level	Product Parent ID	Number of Children	Children
Cameras	3	Consumer Electronics	2	Digital Cameras, Webcams
Consumer Electronics	2	Top	3	CD Players, Cameras, Personal Minidiscs

Fig. 11

Product Feature List

Product ID	Feature	Value
Sony CDP-CX350	Brand	Sony
Sony CDP-CX350	CD Capacity	50 Discs or Greater
Sony CDP-CX350	Digital Output	Optical

Fig. 12A

Product Feature Value List

Feature	Value
Digital Output	Coaxial and Optical
Digital Output	Coaxial
Digital Output	Optical
Digital Output	No

Fig. 12B
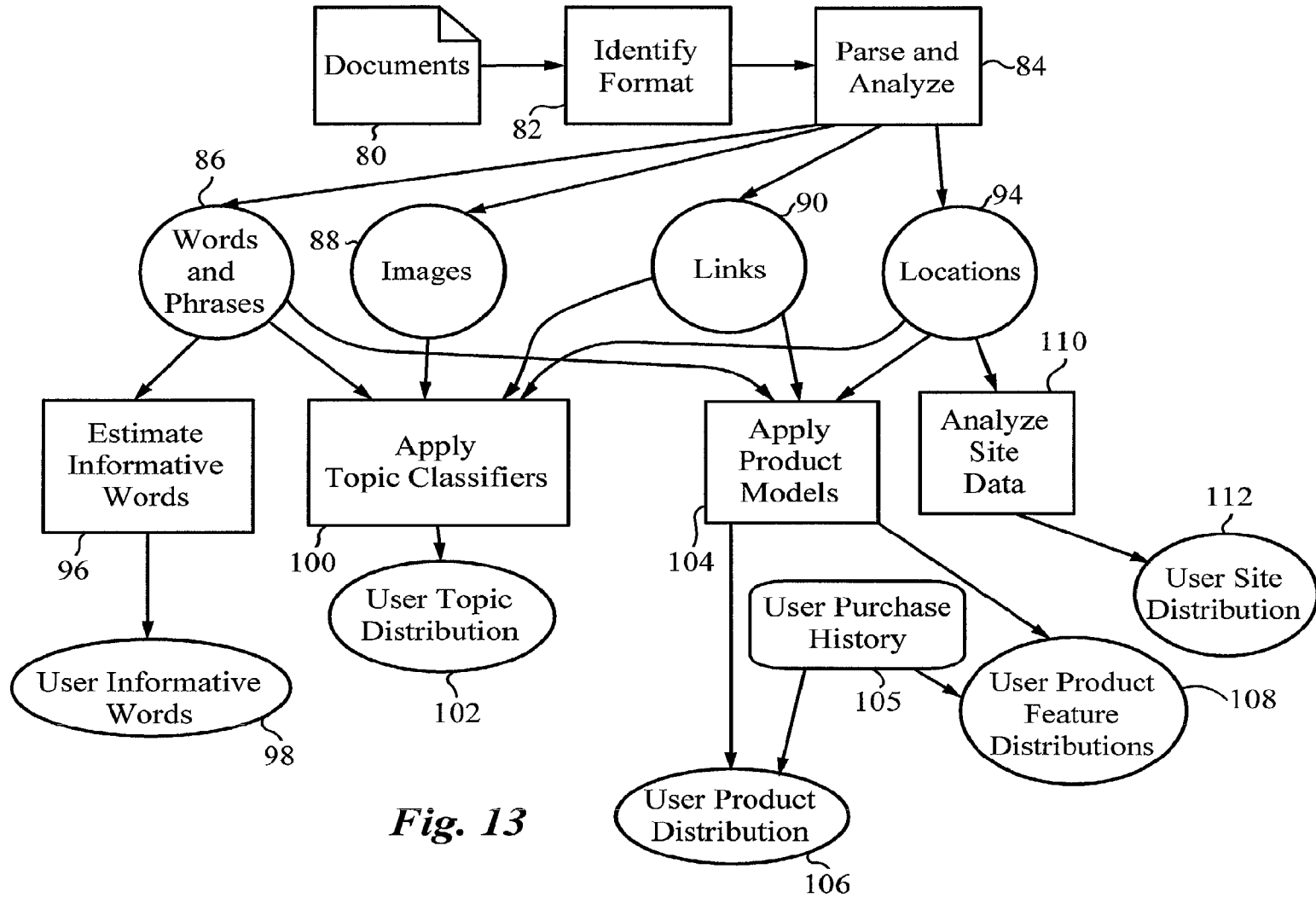
Fig. 13

User Recently Accessed Butter

Document ID	Access Time	Interaction Type	Context	Degree of Interest
www.herring.com/insider	5/12/2000 14:37:21	Navigation	bookmark access	positive, followed 3 links 12 minutes
www.m-w.com	5/12/2000 15:08:21	Search	query "dictionary"	positive, followed 5 links bookmarked, 21 minutes

Fig. 14

User Site Candidate Table

Site Name	Number of Access	Last Access Time
www.herring.com	157	5/12/2000 14:37:21
www.m-w.com	162	5/12/2000 15:08:21

Fig. 15A

User Word Candidate Table

Word ID	Word Spelling	Word Spelling	Word Grade	Last Access Time
Cytochrome	Cytochrome	Cytocrome	0.67	4/16/200 7:10:01
Hyperbilirubinemia	Hyperbilirubinemia	Hyperbilirubenema	0.58	4/27/2000 12:18:42

Fig. 15B

User Recently Purchased Products

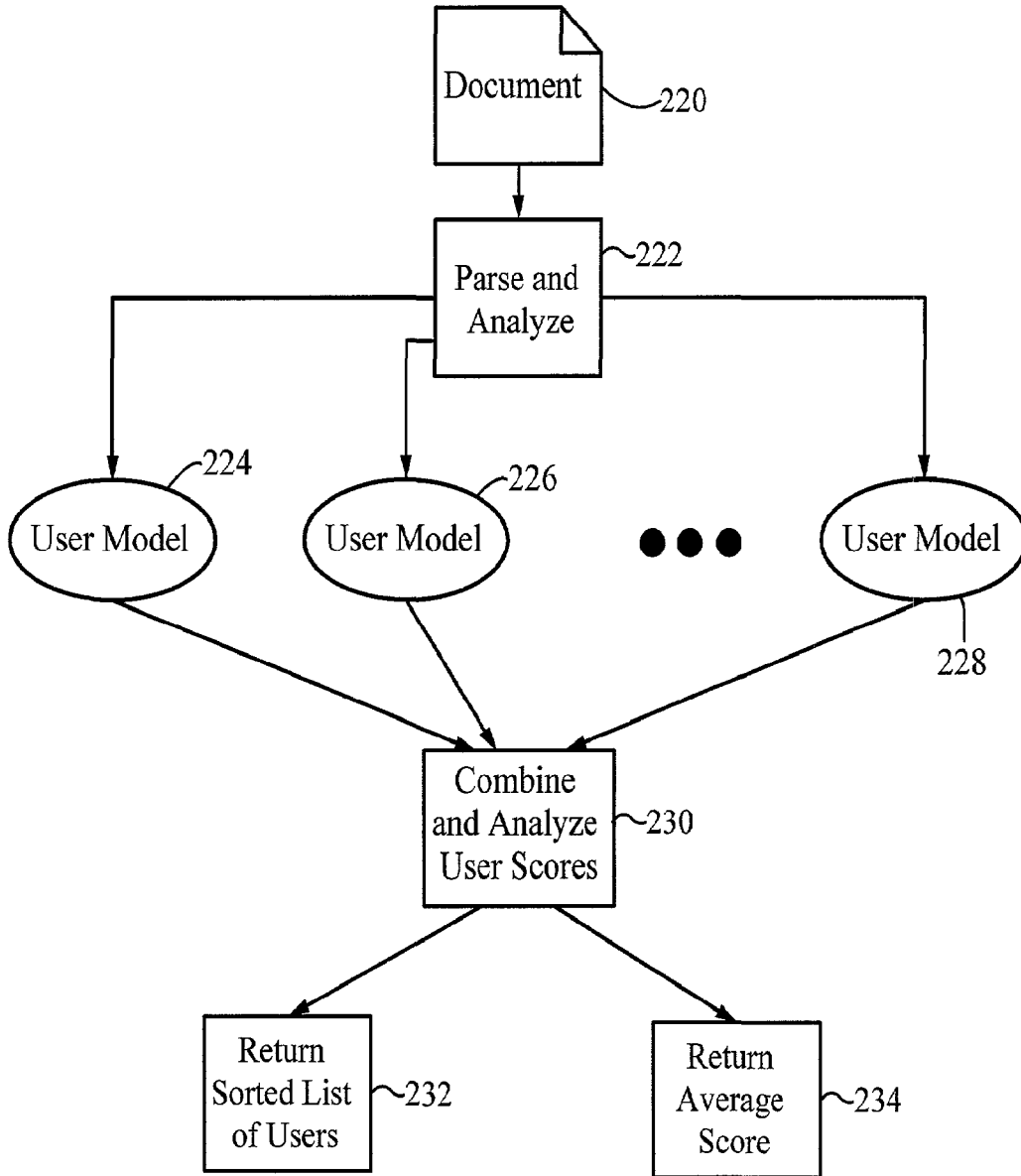| Product ID	Parent Node	Purchase Time	Purchase Source
Panasonic SL-502	Discmans	5/1/2000 16:01:04	ebyweb.com
Hitachi VM6500A	Camcorders	5/3/2000 18:19:21	supremevideo.com

Fig. 16

Fig. 17

STACK —170

Choose Document From Stack —172

Parse and Analyze Document to Locate Links —174

Evaluate Linked Documents with User Model —176

Add Linked Document to Stack —180

Linked Documents of Interest to User? —178

YES

NO
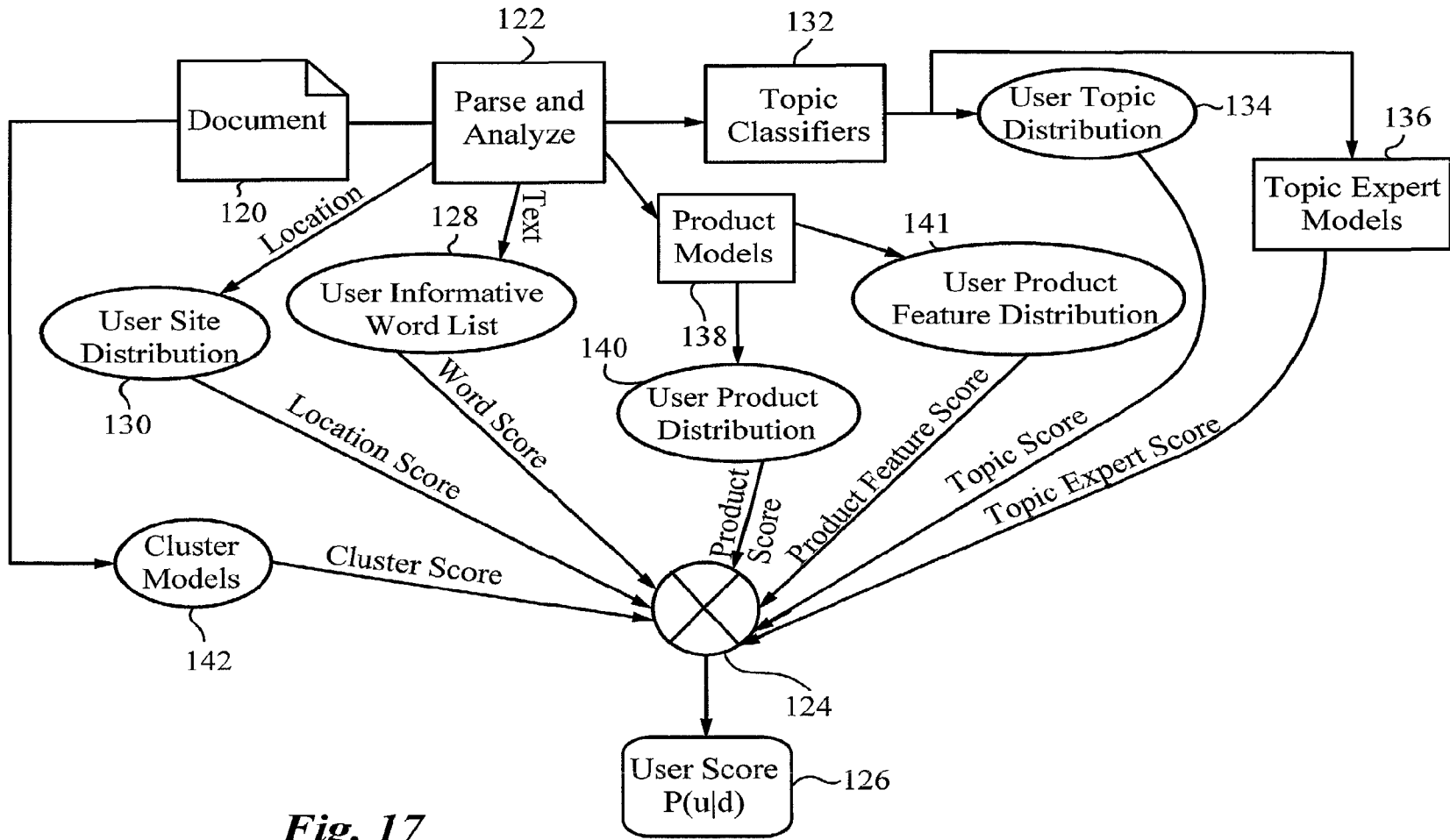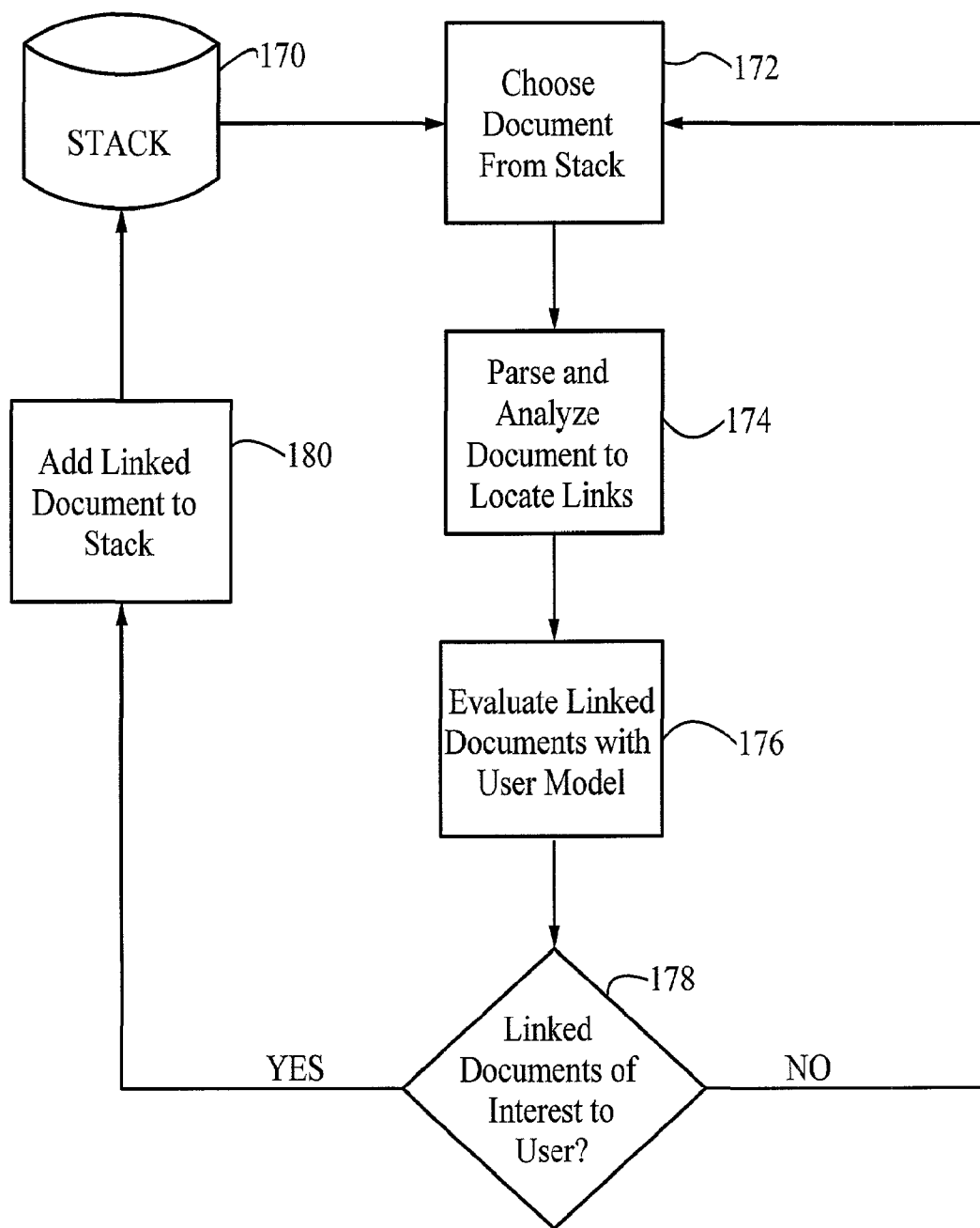
Fig. 18

Fig. 19

Fig. 20

Fig. 21

Fig. 22

Attorney Docket: UTO-101
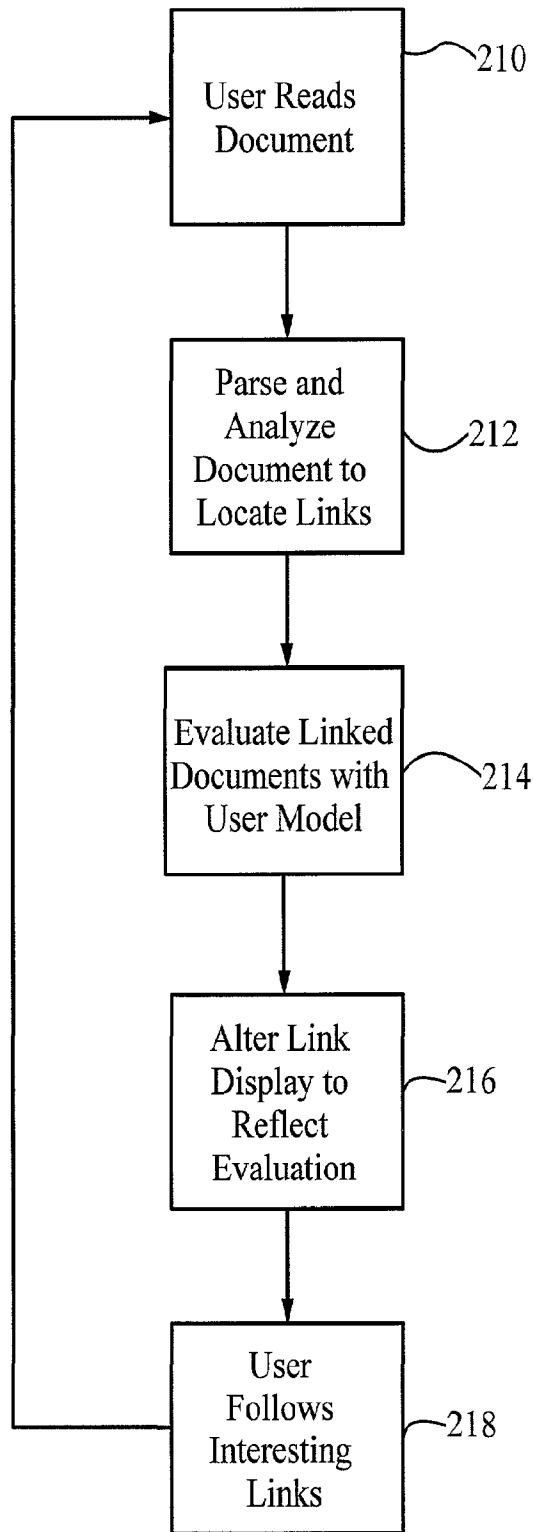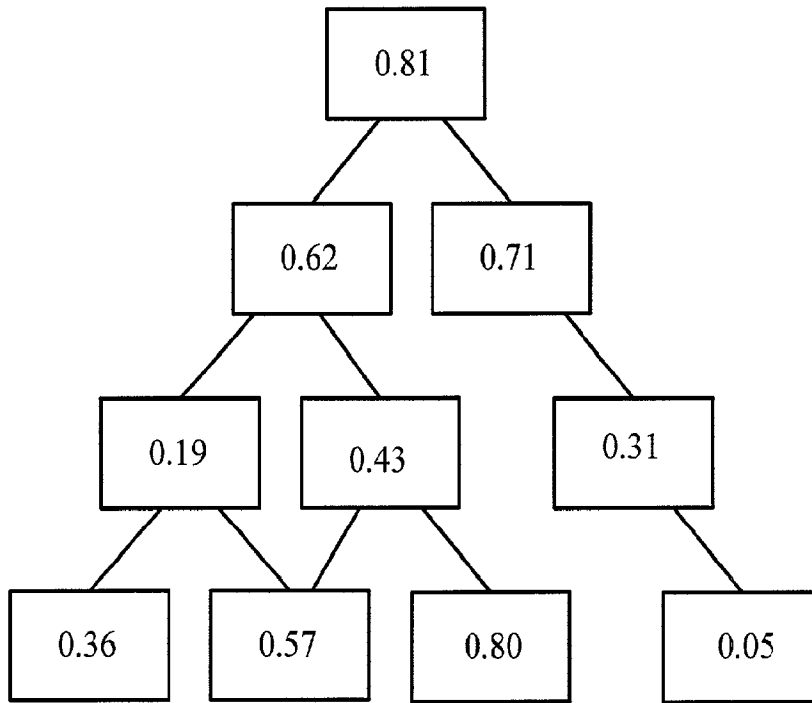
Declaration for Patent Application and Power of Attorney

As a below named inventor, I hereby declare that my residence, post office address, and citizenship are as stated below next to my name, and that I believe I am the original, first and sole inventor (if only one is listed) or an original, first and joint inventor (if plural names are listed) of the subject matter which is claimed and for which a patent is sought on the invention, filed herewith, entitled **Automatic, Personalized Online Information and Product Services.**

First or Sole Inventor:	Full name:	YOCHAI KONIG	Citizenship:	ISRAEL
	Residence:	491 29TH Street, San Francisco, CA 94131		
	Postal Address:	same as above		
Second Joint Inventor (if any):	Full name:	ROY TWERSKY	Citizenship:	ISRAEL
	Residence:	1040 Dolores St., Suite 202, San Francisco, CA 94110		
	Postal Address:	same as above		
Third Joint Inventor (if any):	Full name:	MICHAEL R. BERTHOLD	Citizenship:	GERMANY
	Residence:	2808 Regent St., Apt. B, Berkeley, CA 94705		
	Postal Address:	Same as above		

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a). I claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

PRIOR FOREIGN APPLICATION(S)

Country	Application Number	Date of Filing	Priority Claimed Under 35 U.S.C. §119
NONE			[ ] Yes [ ] No

I claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

PRIOR U. S. APPLICATION(S)

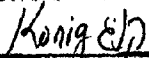| Application No.	Filing Date	Status			
60/173,392	12/28/99	[X] Provisional	[ ] Patented	[ ] Pending	[ ] Provisional

I hereby appoint Thomas J. McFarlane, Reg. No. 39,299, Marek Alboszta, Reg. No. 39,894, and Rena Kaminsky, Reg. No. P-46,818 as my agents with full power of substitution to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith. Direct all correspondence to:

Rena Kaminsky
Lumen
45 Cabot Ave., Suite 110
Santa Clara, CA 95051
Telephone: 408-260-7300
Fax: 408-360-7301

The attorney docket number for this case is: **UTO-101.**

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Title 18, §1001 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

INVENTOR SIGNATURE(S)

YOCHAI KONIG   June 15, 2000   Date

MICHAEL R. BERTHOLD   6-15-2000   Date

ROY TWERSKY   6/15/00   Date

Declaration, page 1 of 1

POWER OF ATTORNEY BY ASSIGNEE

The undersigned assignee of the entire interest in the attached application for Letters Patent for the invention entitled:

Automatic, Personalized Online Information and Product Services

by virtue of Assignment recorded concurrently herewith hereby appoints Thomas J. McFarlane, Reg. No. 39,299, Marek Alboszta, Reg. No. 39,894, and Rena Kaminsky, Reg. No. P-46,818 as its attorneys to prosecute the attached application and to transact all business in the Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventor(s) and their attorney(s) in accordance with the provisions of Rule 32 of the Patent Office Rules of Practice.

Please direct all communication relative to said application to the following correspondence address:

Rena Kaminsky
Lumen
45 Cabot Ave., Suite 110
Santa Clara, California 95051
Telephone: 408-260-7300
Facsimile: 408-260-7301

I am duly authorized to sign this instrument on behalf of assignee corporation. I hereby declare that, to the best of my knowledge and belief, title is in the assignee herein, and I affirm review of the Assignment document concurrently submitted and believe that the attached application has been assigned to assignee herein and that assignee therefore has the right to make this Power of Attorney and Exclusion of Inventor(s).

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

ASSIGNEE:

Utopy, Inc.
330 Fell Street
San Francisco, CA 94102

Official Authorized to Act on Behalf of Assignee:

Signature: _Konig Eli_

Name: _Yochai Konig_

Title: _Director, CTO_

June 15, 00
Date

Power of Attorney by Assignee