Chart A-1

Claim chart of U.S. Patent Application Publication No. 2002/0147738 to Reader ("Method and Apparatus for Finding Patent-Relevant Web Documents")

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

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Claim 1	
1. A method for automatically generating a query from selected document content, comprising:	READER at para. 1: "Patent professionals often search for publications relevant to patents. Searches typically arise in two contexts: when looking for "prior art" publications that might invalidate a patent and when looking for publications that might disclose an infringement of a patent." READER at para. 2: ("An ever-increasing number of publications are being published on the Internet, for example, "white papers" published on companies' public websites. Thus, the Internet has become a more and more important resource for patent professionals looking for publications relevant to patents." READER at para 2: "However, patent professionals have for the most part relied on general Internet search techniques, such as applying keywords to general-purpose Internet search engines, to discover patent-relevant publications on the Internet." READER at para 4: "The present invention provides a highly automated search technique for discovering patent-relevant publications on the Internet. The high level of automation may be achieved with the expedient of a search client resident on an end-user station that initiates linked searches for patent data and Internet publication data in a manner transparent to a user. From the user's perspective, a patent-identifying attribute, such as an inventor name, assignee name or patent number, input on an end-user station automatically returns Internet publication data, such as Uniform Resource Locators (URLs) of Web documents. The invention thereby allows a user to find patent-relevant publications on the Internet by merely inputting a patent-identifying attribute. A patent-identifying attribute may be a patent family-identifying attribute, such as an inventor name or assignee name. Or a patent identifying-attribute may be a single patent-identifying attribute, such as a patent number. Or a patent identifying-attribute may be a patent claim-

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	identifying attribute, such as a patent claim number. A basic method for finding patent-relevant documents published on the Internet in accordance with the present invention comprises the steps of: inputting a patent-identifying attribute on an end-user station; identifying patent data from the patent-identifying attribute; identifying Internet publication data from the patent data; and outputting the Internet publication data on the end-user station." *See also* Reader at para. 0015, Fig. 4. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	READER at para. 0014: "Patent server 330 has patent database 332 and website database 334 resident thereon. Patent database 332 has entries stored thereon associating patent-identifying attributes, such as inventor names, assignee names and patent numbers, with patent classifications and patent language, such as patent claim text. Entries may include full-text patents. Website database 334 has entries stored thereon associating patent classifications with company website identifiers, such as URLs of company home pages." READER at para. 0015: "The patent classification may be a U.S. or

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	international patent classification." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	READER at para. 0013: "Abstraction of Web document-identifying attributes from the patent language search result may be accomplished by any of numerous algorithms well known in the art. Abstraction may involve, for example, reduction of a full-text patent claim to keywords separated by Boolean operators, which keywords and operators may be selected taking into account the syntactic and lexico-semantic interdependency of the words (i.e,. context) of the full-text claim." READER at para. 0015: "Search client 314 extracts a company website identifier from the CW [Company Website] search result and abstracts Web document-identifying (WDI) attributes from the patent language portion of the PC-PL search result (435)" To the extent this reference does not teach this claim element, this

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	reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	READER at para. 0015: “A user of end-user station 310 inputs at least one patent-identifying (PI) attribute on user interface 312 (405). Search client 314 forms a patent-identifying search query using the one or more patent-identifying attributes (410). In this regard, search client 314 forms a search query targeted, when applied to patent database 332, to retrieve a patent classification/patent language search result that includes pairs of patent classifications and patent language from one or more patents relevant to the one or more patent-identifying attributes. The patent classification may be a U.S. or international patent classification. The patent-identifying search query is transmitted via network interface 316 and network 320 from end-user station 310 to patent server 330. Patent server 330 applies the patent-identifying search query to patent database 332 to generate patent classification/patent language (PC-PL) search result (415). Patent server 330 transmits the patent classification/patent language search result to end-user station 310. End-user station 310, particularly search client 314, extracts a patent classification (PC) attribute from the patent classification portion of the PC-PL search result (420) and forms a company website-identifying (CWI) search query using the patent classification attribute (425).”

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	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	READER at para. 0015: “Patent server 330 transmits the patent classification/patent language search result to end-user station 310. End-user station 310, particularly search client 314, extracts a patent classification attribute (PC) attribute from the patent classification portion of the PC-PL search result (420) and forms a company website-identifying (CWI) search query using the patent classification attribute (425). In this regard, end-user station 310 forms a search query targeted, when applied on patent server 330, to retrieve a company website search result that includes one or more company website identifiers, such as URLs of company home pages, relevant to the patent classification attribute. End-user station 310 transmits the CWI search query to patent server 330. Patent server 330 applies the CWI search query to website database 334 to generate company website (CW) search result (430). The CW search result is transmitted to end-user station 310. Search client 314 extracts a company website identifier from the CW search result and

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	abstracts Web document-identifying (WDI) attributes from the patent language portion of the PC-PL search result (435). Search client 314 passes the company website identifier and WDI attributes to search agent 318 (440). Using the company website identifier and well known DNS addressing, search agent 318 contacts the appropriate one of Web hosts 340 and, using well known "Web crawler" techniques, searches the totality of full-text documents published on the associated company website for Web document language relevant to the WDI attributes (445). Upon completion of the search, search agent 318 generates a Web document (WD) search result including Web document identifiers, such as URLs, of the relevant Web documents (450). Search agent 318 passes the Web document search result to search client 314 (455). Search client 314 extracts Web document identifiers from the Web document search result (460) and outputs the Web document identifiers on user interface 312.” To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
18. An article of manufacture for	READER at para. 0014.

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use in a computer system, comprising: a memory;	*See* claim 1 above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	READER at para. 0014. *See* claim 1 above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17,

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	lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	*See* claim 1[a] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, p. 382 col. 1. Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60

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	Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 6:60-67 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	*See* claim 1[b] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 1:50-57 and 4:58-67 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	*See* claim 1[c] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015 Mase, para. 382 col. 1.

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	Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Donaldson, 7:22-32, 7:34-36, 13:62-14:6 HyPursuit, p. 189 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	*See* claim 1[d] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015, Fig. 4 Mase, p. 382, col. 1 Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Donaldson, 7:22-32, 7:34-36, 13:62-14:6. HyPursuit, p. 189 Finkestein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B

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	Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44

Chart A-2

Claim chart of PCT Application Pub. No. WO 01/44992 to Weiser et al. ("Context Matching System and Method")

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	WIESER
Claim 1	
1. A method for automatically generating a query from selected document content, comprising:	WIESER, p. 5, lines 8-12 (the client 12 generates a query composed of all or a portion of a document (e.g., a web page) and sends the query to a match server 14). WIESER, p. 2, lines 16-19: "Another object of the present invention is to provide a system and method which automatically and contextually matches products, advertisements or other content (hereinafter referred to as 'offers') to the content on a web page that a user has selected in real-time" To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67

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	Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	WIESER, p. 15, lines 8-11: "According to one embodiment, the present invention provides a novel approach to representing textual documents as high dimensional vectors. Such an approach provides an efficient means of indexing document collections, allowing retrieval of document (querying) based on keywords, **grouping related documents (categorization)**. Additionally, this method supports such contextual queries and document groupings" WIESER, p. 17, lines 15-32: "After the vector generations, the document vector, or feature vector, must be compared with database vectors, or feature vectors. A naïve approach to product matching would be to compare the document vector to the vectors for every product in the database. This process becomes burdensome as the number of products in the database grows. Fortunately, the database vectors are not smoothly distributed throughout the vector space, but rather, tend to "clump" together, leaving vast empty spaces between the clumps, or clusters as they are commonly known. For any given cluster, there is a sphere that bounds every point in the cluster. For all the various clusters, one could compute the center point and the radius of the sphere which bounds the cluster. Then, when one wishes to find the products that match a given document vector, one need only compare the document to the products in the cluster whose bounding sphere contains the document vector (or the nearest spheres, if no sphere contains the document vector). Thus, the computation is reduced from comparing the document vector to all product vectors to simply comparing the document vector to the center vectors for the spheres, followed by comparison to the product vectors for the products in the matching spheres." WIESER, p. 18, lines 16-22: "In accordance with an embodiment of the present invention, the query context vector is compared to the center vector of each cluster and the clusters with center vectors closest to the query context vector are selected. It is appreciated that these cluster IDs are then used to narrow the scope of products returned by the original metadata query as issued by the client 12. In other words, this narrowing qualification is added to the original metadata query to form an SQL query." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

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	Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	WIESER, p. 14, line 19 to p. 15, line 5: "the contextual matching engine 210 is composed of three subsystems: (1) the contextual matching server 300 …The contextual matching server 300 generates a query context vector, or feature vector, using a vector generation algorithm. Generally, vector based generation algorithms have certain features in common: (1) they all characterize documents based on the presence of keywords; (2) they all associate vectors with these keywords; and (3) they all form document vectors by combining the vectors of the keywords present in the document" To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35

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	Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	WIESER, p. 17, lines 15-32: “After the vector generations, the document vector, or feature vector, must be compared with database vectors, or feature vectors. A naïve approach to product matching would be to compare the document vector to the vectors for every product in the database. This process becomes burdensome as the number of products in the database grows. Fortunately, the database vectors are not smoothly distributed throughout the vector space, but rather, tend to “clump” together, leaving vast empty spaces between the clumps, or clusters as they are commonly known. For any given cluster, there is a sphere that bounds every point in the cluster. For all the various clusters, one could compute the center point and the radius of the sphere which bounds the cluster. Then, when one wishes to find the products that match a given document vector, one need only compare the document to the products in the cluster whose bounding sphere contains the document vector (or the nearest spheres, if no sphere contains the document vector). Thus, the computation is reduced from comparing the document vector to all product vectors to simply comparing the document vector to the center vectors for the spheres, followed by comparison to the product vectors for the products in the matching spheres.” WIESER, p. 18, lines 16-22: “In accordance with an embodiment of the present invention, the query context vector is compared to the center vector of each cluster and the clusters with center vectors closest to the query context vector are selected. It is appreciated that these cluster IDs are then used to narrow the scope of products returned by the original metadata query as issued by the client 12. In other words, this narrowing qualification is added to the original metadata query to form an SQL query. Preferably, the contextual matching server 300 returns N most relevant to the client or the E-commerce applet 12, along with their associated relevance”

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	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	WIESER, p. 17, lines 15-32: "After the vector generations, the document vector, or feature vector, must be compared with database vectors, or feature vectors. A naïve approach to product matching would be to compare the document vector to the vectors for every product in the database. This process becomes burdensome as the number of products in the database grows. Fortunately, the database vectors are not smoothly distributed throughout the vector space, but rather, tend to "clump" together, leaving vast empty spaces between the clumps, or clusters as they are commonly known. For any given cluster, there is a sphere that bounds every point in the cluster. For all the various clusters, one could compute the center point and the radius of the sphere which bounds the cluster. Then, when one wishes to find the products that match a given document vector, one need only compare the document to the products in the cluster whose bounding sphere contains the document vector (or the nearest

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	spheres, if no sphere contains the document vector). Thus, the computation is reduced from comparing the document vector to all product vectors to simply comparing the document vector to the center vectors for the spheres, followed by comparison to the product vectors for the products in the matching spheres." WIESER, p. 18, lines 14-22: "The contextual matching server 300 then compares the query context vector to pre-determined item context vectors to narrow the search to focus on products that are most likely relevant to the selected text. In accordance with an embodiment of the present invention, the query context vector is compared to the center vector of each cluster and the clusters with center vectors closest to the query context vector are selected. It is appreciated that these cluster IDs are then used to narrow the scope of products returned by the original metadata query as issued by the client 12. In other words, this narrowing qualification is added to the original metadata query to form an SQL query." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52

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	Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
18. An article of manufacture for use in a computer system, comprising: a memory;	WIESER, p. 4, line 26 to p. 5, line 1: describing system “that is readily implemented by presently available communication apparatus and electronic components. The invention finds ready application in virtually all commercial communications and/or computer networks including but not limited to world wide web (Internet), intranet, local area network (LAN), wide area network (WAN), wireless network and wired cable transmission systems.” *See* claim 1 above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22

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instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	*See* claim 1 above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	*See* claim 1[a] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, p. 382 col. 1. Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58

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	HyPursuit, p. 189 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 6:60-67 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	*See* claim 1[b] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 1:50-57 and 4:58-67 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using	*See* claim 1[c] above.

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the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015 Mase, para. 382 col. 1. Rhodes, Table 2, 5:12-28 Donaldson, 7:22-32, 7:34-36, 13:62-14:6 HyPursuit, p. 189 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	*See* claim 1[d] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015, Fig. 4 Mase, p. 382, col. 1 Rhodes, 5:12-28 Donaldson, 7:22-32, 7:34-36, 13:62-14:6.

‘979 Patent	WIESER
	HyPursuit, p. 189 Finkestein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44

Chart A-3

Claim chart for U.S. Patent No. 6,236,768 to Rhodes et al. ("Method and Apparatus for Automated, Context-Dependent Retrieval of Information")

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**RHODES**
Claim 1	
1. A method for automatically generating a query from selected document content, comprising:	Rhodes, 1:56-2:6: "The RA works in two stages. First, the user's collection of text documents is indexed into a database saved in a vector format. These form the reservoir of documents from which later suggestions of relevance are drawn; that is, stored documents will later be "suggested" as being relevant to a document currently being edited or read. The store documents can be any sort of text document (notes, Usenet entries, webpages, e-mail, etc.). This indexing is usually performed automatically every night, and the index files are stored in a database. After the database is created, the other stage of the RA is run from Emacs, periodically taking a sample of text from the working buffer. The RA finds documents "similar" to the current sample according to word similarities; that is, the more times a word in the current sample is duplicated in a candidate database document, the greater will be assumed the relevance of that database document. The RA displays one-line summaries of the best few documents at the bottom of the Emacs window." Rhodes, 10:42-51: "Analysis module 133 first indexes all the documents in a corpus of data (which, again, are stored as files mass storage device 106, which is assumed for explanatory purposes to be a hard disk), and writes indices to disk. Unlike the RA, the invention preferably keeps several vectors for each document. These include not only the wordvec vector for text (if any) in the document but also vectors for meta-information, e.g., subject, people, time, date, day of week, location, etc." Rhodes, 12:53-57: "4. Determination of relevance

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	For each element of each discrete vector in a query - the generation and vectorization of which is described below - the algorithm used by the RA may be used to determine relevance to documents in the corpus." Rhodes, 13:1-8: "5. Weighted addition of vectors The result of the foregoing operations is a single similarity value for each type of meta-information. These values are associated with each document in the indexed corpus, and are used to compute the overall similarity using bias values for query and document types, by the following formula: Query biases = bq pq sq lq dq etc. (i.e., body_query_bias, person_query_bias, etc.)" Rhodes, 13:15-19: "Each vector similarity is multiplied by its respective bias and the resulting biased similarity is summed, to produce an overall similarity between zero and one." Rhodes, 13:42-47: "Analysis module 133 supplies a ranked list of the most relevant documents, which may be continually, intermittently, or upon request presented to the user over display 126. If desired, or upon user command, the list may be pruned to include only documents whose relevance level exceeds a predetermined threshold." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2

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	Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	Rhodes, Table 2: (int) (width*uns int) (int) (uns int) (uns int) (uns int) NUM_WORDS, WORDCODE-1, NUM_DOCS=N1, DOC-1, DOC-2, . . . , DOC-N1, WORDCODE-2, NUM_DOCS=N2, DOC-1, DOC-2, . . . , DOC-N2, etc. Rhodes, 2:15-24: "Briefly, the concept behind the indexing scheme used in RA is that any given document may be represented by a multidimensional vector, each dimension or entry of which corresponds to a single word and is equal in magnitude to the number of times that word appears in the document. ... The advantages gained by this representation are relatively speedy disk retrieval, and an easily computed quantity indicating similarity between two documents: the dot product of their (normalized) vectors." Rhodes, 4:20-27: "Experience with the RA has shown that actually performing a dot product with each indexed document is prohibitively slow for large databases. In preferred implementations, therefore, document vectors are not stored; instead, word vectors are stored. The "wordvec" file contains each word appearing in the entire indexed corpus of documents followed by a list of each document that contains that particular word." Rhodes, 4:45-55: "Each word in the wordvec is represented by a unique numerical code, the "width" indicating the number of integers in the code (the RA uses two integers per code). The NUM_DOCS field indicates the number of documents containing the word specified by the associated wordcode. The word-count variables DOC-1, DOC-2,..., DOC-N1 each correspond to a document containing the word, and reflect the number of occurrences of the word divided by the total number

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	of words in the document." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	Rhodes, 13:19-34: "Analysis module 133 preferably generates queries autonomously from the current document in document buffer 140 or by reference to a current context. In the former case, analysis module 133 classifies the document either by its header or by reference to a template, and extracts the appropriate meta-information. In the latter case, the user's physical or interpersonal surroundings furnish the meta-information upon which the query is based. It is not necessary for the documents searched or identified to correspond in type to a current document. Furthermore, the query may not be limited to meta-information. Instead, the invention may utilize both a meta-information component (with relevance to candidate documents determined as discussed above) and a

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	text component (with relevance determined in accordance with RA)." Rhodes, 1:56-2:6: "The RA works in two stages. First, the user's collection of text documents is indexed into a database saved in a vector format. These form the reservoir of documents from which later suggestions of relevance are drawn; that is, stored documents will later be "suggested" as being relevant to a document currently being edited or read. The store documents can be any sort of text document (notes, Usenet entries, webpages, e-mail, etc.). This indexing is usually performed automatically every night, and the index files are stored in a database. After the database is created, the other stage of the RA is run from Emacs, periodically taking a sample of text from the working buffer. The RA finds documents "similar" to the current sample according to word similarities; that is, the more times a word in the current sample is duplicated in a candidate database document, the greater will be assumed the relevance of that database document. The RA displays one-line summaries of the best few documents at the bottom of the Emacs window." Rhodes, 2:15-54: "Briefly, the concept behind the indexing scheme used in RA is that any given document may be represented by a multidimensional vector, each dimension or entry of which corresponds to a single word and is equal in magnitude to the number of times that word appears in the document. ... RA creates vectors in three steps: ... Step 1: Remove stop words ... Step 2: Stem words ... Step 3: Make the document vector." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5,

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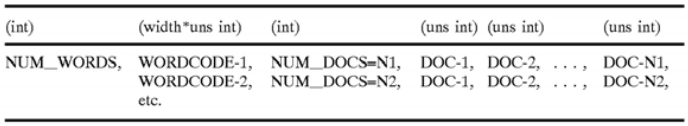
	7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	Rhodes:  (int) (width*uns int) (int) (uns int) (uns int) (uns int) NUM_WORDS, WORDCODE-1, NUM_DOCS=N1, DOC-1, DOC-2, . . . , DOC-N1, WORDCODE-2, NUM_DOCS=N2, DOC-1, DOC-2, . . . , DOC-N2, etc. Rhodes, 5:12-28: "Accordingly, for each word in the query vector, the RA first looks up the word in the word offset file, and from that the word's entry is looked up in the wordvec file. An array of document similarities is used to maintain a running tally of documents and their similarities, in terms of numbers of word matches, to the query vector. The array is sorted by similarity, with the most similar documents at the top of the list. Similarity is computed for each word in the query vector by taking the product of the query-vector entry and the weight of each document in the corresponding wordvec file. To normalize this product, it is then divided by the query-vector magnitude (computed in the same manner as the document magnitude) and also by the document magnitude. The final value is added to the current running-total similarity for that document, and the process is repeated for the next word in the query. In summary, the query vector is analyzed wordcode by wordcode, with the similarities array indicating the relevance to the query of each document." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

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	Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	Rhodes, 5:12-28, "Accordingly, for each word in the query vector, the RA first looks up the word in the word offset file, and from that the word's entry is looked up in the wordvec file. An array of document similarities is used to maintain a running tally of documents and their similarities, in terms of numbers of word matches, to the query vector. The array is sorted by similarity, with the most similar documents at the top of the list. Similarity is computed for each word in the query vector by taking the product of the query-vector entry and the weight of each document in the corresponding wordvec file. To normalize this product, it is then divided by the query-vector magnitude (computed in the same manner as the document magnitude) and also by the document magnitude. The final value is added to the current running-total similarity for that document, and the process is repeated for the next word in the query. In summary, the query vector is analyzed wordcode by wordcode, with the similarities array indicating

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	the relevance to the query of each document." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
18. An article of manufacture for use in a computer system, comprising: a memory;	Rhodes, Fig. 1:

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	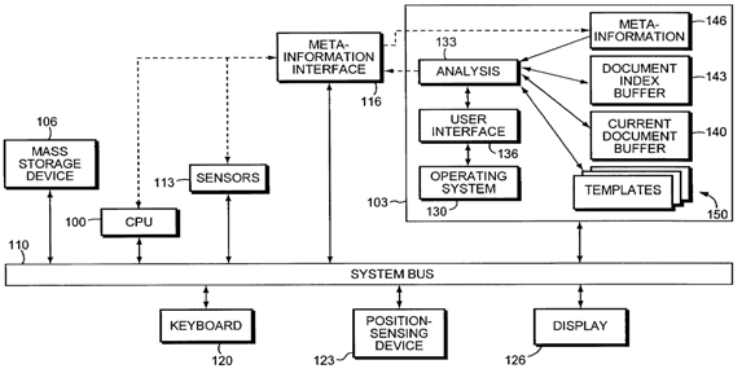 Rhodes, 9:18-34: "Refer now to FIG. 1, which illustrates, in block-diagram form, a hardware platform incorporating a representative, generalized embodiment of the invention. As indicated therein, the system includes a central-processing unit ("CPU") 100, which perform operations on and interacts with a main system memory 103 and components thereof. System memory 103 typically includes volatile or random- access memory ("RAM") for temporary storage of information, including buffers, executing programs, and portions of the computer's basic operating system. The platform typically also includes read-only memory ("ROM") for permanent storage of the computer's configuration and additional portions of the basic operating system, and at least one mass storage device 106, such a hard disk and/or CD-ROM drive. All components of the platform are interconnected by and communicate over, a bidirectional system bus 110." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58

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	HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	Rhodes, 9:18-34: The main system memory 103 stores instructions for operating a method for automatically generating a query from selected document content. Analysis module 133 of the main system memory 103 directs execution of the instructions to automatically generate a query from selected document content. Rhodes, 10:1-17: "The main memory 103 contains a group of modules that control the operation of CPU 100 and its interaction with the other hardware components. These modules are implemented as executable machine instructions, running (by means of CPU 100) as active processes effectively capable of interacting (i.e., exchanging data and control commands) as illustrated. An operating system 130 directs the execution of low-level, basic system functions such as memory allocation, file management, and operation of mass storage devices 106. At a higher level, an analyzer module 133 directs execution of the primary functions performed by the invention, as discussed below; and instructions defining a user interface 136 allow straightforward interaction over display 126. User interface 136 generates words or graphical images on display 126 to facilitate user action and examination of documents, and accepts user commands from keyboard 120 and/or position-sensing device 123." *See* claim 1 above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious.

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	See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	*See* claim 1[a] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, p. 382 col. 1. Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189

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	Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 6:60-67 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	*See* claim 1[b] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Black, 1:50-57 and 4:58-67 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using	*See* claim 1[c] above.

'979 Patent	**RHODES**
the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015 Mase, para. 382 col. 1. Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Donaldson, 7:22-32, 7:34-36, 13:62-14:6 HyPursuit, p. 189 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	*See* claim 1[d] above. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015, Fig. 4 Mase, p. 382, col. 1 Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Donaldson, 7:22-32, 7:34-36, 13:62-14:6.

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	HyPursuit, p. 189 Finkestein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44

Chart A-4

Claim chart for U.S. Patent Application Publication No. 2002/0147738 to Reader ("Method and Apparatus for Finding Patent-Relevant Web Documents") taken in view of "Experimental Simulation for Automatic Patent Categorization" by Mase (Advances in Production Management Systems, 1996)

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**READER AND MASE**
Claim 1	
1. A method for automatically generating a query from selected document content, comprising:	Reader, para. 0001: "Patent professionals often search for publications relevant to patents. Searches typically arise in two contexts: when looking for "prior art" publications that might invalidate a patent and when looking for publications that might disclose an infringement of a patent." Reader, para. 0002: "An ever-increasing number of publications are being published on the Internet, for example, "white papers" published on companies' public websites. Thus, the Internet has become a more and more important resource for patent professionals looking for publications relevant to patents." Reader, para. 0002: "However, patent professionals have for the most part relied on general Internet search techniques, such as applying keywords to general-purpose Internet search engines, to discover patent-relevant publications on the Internet." Reader, para. 0004: "The present invention provides a highly automated search technique for discovering patent-relevant publications on the Internet. The high level of automation may be achieved with the expedient of a search client resident on an end-user station that initiates linked searches for patent data and Internet publication data in a manner transparent to a user. From the user's perspective, a patent-identifying attribute, such as an inventor name, assignee name or patent number, input on an end-user station automatically returns Internet publication data, such as Uniform Resource Locators (URLs) of Web documents. The invention thereby allows a user to find patent-relevant publications on the Internet by merely inputting a patent-identifying attribute. A patent-identifying attribute may be a patent family-identifying attribute,

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	such as an inventor name or assignee name. Or a patent identifying-attribute may be a single patent-identifying attribute, such as a patent number. Or a patent identifying-attribute may be a patent claim-identifying attribute, such as a patent claim number. A basic method for finding patent-relevant documents published on the Internet in accordance with the present invention comprises the steps of: inputting a patent-identifying attribute on an end-user station; identifying patent data from the patent-identifying attribute; identifying Internet publication data from the patent data; and outputting the Internet publication data on the end-user station. *See also* Reader, para. 0015 and Fig. 4. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a	Mase, Fig. 1 and p. 378:

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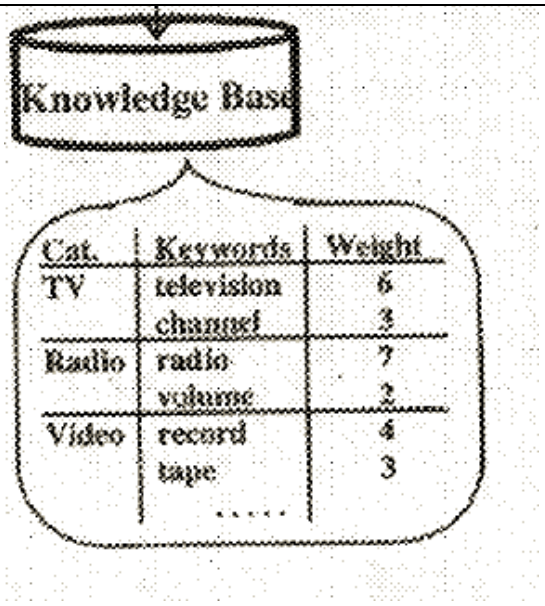
classification label; each classification label corresponding to a category of information in an information retrieval system;	 Mase, Abstract: “This paper describes keywords-based patent categorization using our text classification support tool called FLUTE and discusses a simulation study applied to 154,000 patents. FLUTE automatically generates a classification knowledge base from sample patent texts. Experimental simulation results show that FLUTE is powerful enough to support the patent classification work of indexing experts.” Mase, p. 378, col. 1: “(1) Automatic knowledge base initialization FLUTE is able to obtain word statistics from electronic documents. It first derives keyword candidates for each document. Then, it removes stop-words which are obviously not keywords (“thing”, “is”, etc.) and common words appearing over every category (“invention and “patent” appear in all patent documents). Next, it identifies keywords for each category by applying weights. Finally, it generates classification rules, which include a certain factor. Since the KB structure is simple, a person can verify and modify the knowledge base.” Mase, p. 377 col. 2: “At present most patents are applied electronically. If an intelligent system could read a patent, recognize its purpose, and finally categorize it, the patent management process could be restructured. To classify patents into appropriate categories, the system would have to have a powerful knowledge base, which is difficult to build. We have been researching automatic patent categorization as a submitted research from Industrial Property Cooperation Center.

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	This paper presents our text classification support tool called FLUTE (Mase, et al. 1996a), the customization of FLUTE for patent categorization and its evaluation using 154,000 patents" Mase, p. 377 col. 1: "Obtaining patents is important for any organization that needs to maintain intellectual propery rights. In order to manage the review, search, and citation of patents at the patent office efficiently, patent applications should be appropriately indexed as soon as possible." Mase, p. 378: "(2) Classification certainty FLUTE presents three kinds of classification results according to values corresponding to the degree of confidence (certainty). If one category's certainty is high, FLUTE presents a unique solution. If the certainties of more than two categories are high, FLUTE offers alternatives. Otherwise FLUTE offers no solution and asks an expert to intervene." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of	Reader, para. 0013: "Abstraction of Web document-identifying

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entities in the selected document content for searching additional information related thereto using the information retrieval system;	attributes from the patent language search result may be accomplished by any of numerous algorithms well known in the art. Abstraction may involve, for example, reduction of a full-text patent claim to keywords separated by Boolean operators, which keywords and operators may be selected taking into account the syntactic and lexico-semantic interdependency of the words (i.e,. context) of the full-text claim." Reader, para. 0015: "Search client 314 extracts a company website identifier from the CW [Company Website] search result and abstracts Web document-identifying (WDI) attributes from the patent language portion of the PC-PL search result (435)" To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	Mase, p. 377: "Obtaining patents is important for any organization that needs to maintain intellectual property rights. In order to manage the review, search, and citation of patents at the patent office efficiently, patent applications should be appropriately indexed as soon as possible. However, there are problems, as follows: - There are approximately 3,000 patent categories. This

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	makes it impossible for any indexing expert to perform categorization work over every technical field. – In Japan, there were 370,000 patent applications in 1994. Despite such a large number, it is difficult to increase the number of indexing experts. – Most patents include over 5,000 words. In Japan, patent categorization requires experts to read all documents, which is time consuming work. – To maintain an applicant's proprietary information, only persons entrusted with confidentiality can be assigned to indexing work. At present, most patents are applied electronically. If an intelligent system could read a patent, recognize its purpose, and finally categorize it, the patent management process could be restructured. To classify patents into appropriate categories, the system would have to have a powerful knowledge base, which is difficult to build." Mase, p. 377 col. 2: "We have been researching automatic patent categorization as a submitted research from Industrial Property Cooperation Center. This paper presents our text classification support tool called FLUTE (Mase, et al. 1996a), the customization of FLUTE for patent categorization, and its evaluation using 154,000 patents." Mase, Fig 1:

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	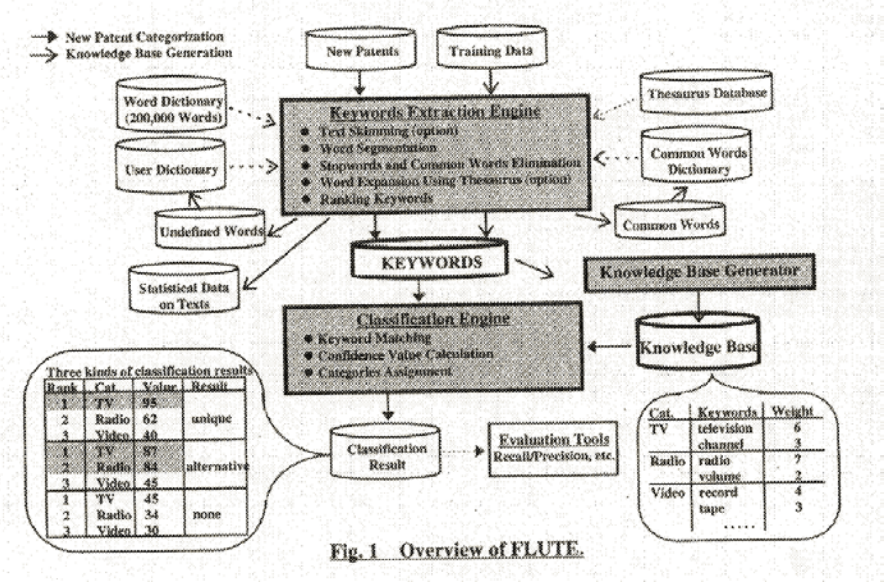 Mase, p. 379 col. 1: “The classification engine calculates the similarity between inputted text and each category by comparing the keywords extracted from the inputted text with those stored in the KB.” Mase, p. 378: “(2) *Classification certainty* FLUTE presents three kinds of classification results according to values corresponding to the degree of confidence (certainty). If one category’s certainty is high, FLUTE presents a unique solution. If the certainties of more than two categories are high, FLUTE offers alternatives. Otherwise FLUTE offers no solution and asks an expert to intervene.” Mase, Fig. 1:

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	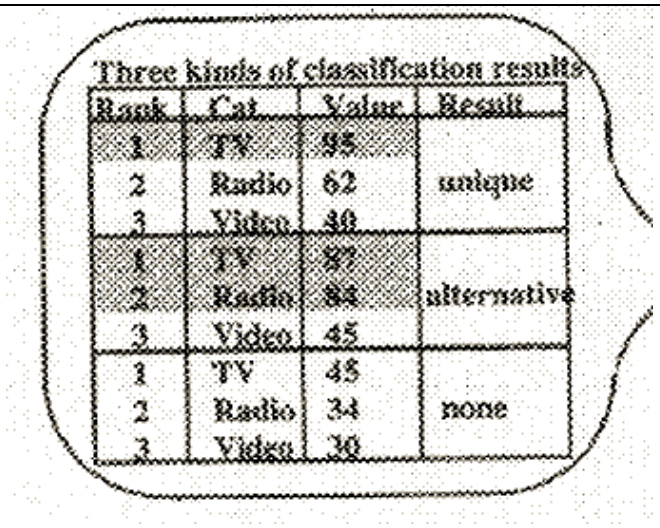 To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A

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automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	Reader, para. 0015: “Patent server 330 transmits the patent classification/patent language search result to end-user station 310. End-user station 310, particularly search client 314, extracts a patent classification attribute (PC) attribute from the patent classification portion of the PC-PL search result (420) and forms a company website-identifying (CWI) search query using the patent classification attribute (425). In this regard, end-user station 310 forms a search query targeted, when applied on patent server 330, to retrieve a company website search result that includes one or more company website identifiers, such as URLs of company home pages, relevant to the patent classification attribute. Enduser station 310 transmits the CWI search query to patent server 330. Patent server 330 applies the CWI search query to website database 334 to generate company website (CW) search result (430). The CW search result is transmitted to end-user station 310. Search client 314 extracts a company website identifier from the CW search result and abstracts Web document-identifying (WDI) attributes from the patent language portion of the PC-PL search result (435). Search client 314 passes the company website identifier and WDI attributes to search agent 318 (440). Using the company website identifier and well known DNS addressing, search agent 318 contacts the appropriate one of Web hosts 340 and, using well known “Web crawler” techniques, searches the totality of full-text documents published on the associated company website for Web document language relevant to the WDI attributes (445). Upon completion of the search, search agent 318 generates a Web document (WD) search result including Web document identifiers, such as URLs, of the relevant Web documents (450). Search agent 318 passes the Web document search result to search client 314 (455). Search client 314 extracts Web document identifiers from the Web document search result (460) and outputs the Web document identifiers on user interface 312.” *See also* Fig. 4. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29

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	HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
18. An article of manufacture for use in a computer system, comprising: a memory;	*See* claim 1 above. Reader, para. 0014. Mase, p. 382 col. 1. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1

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	Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	*See* claim 1 above. Reader, para. 0014. Mase, p. 382 col. 1. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an	*See* claim 1[a] above. Reader, para. 0014. Mase, p. 382 col. 1. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

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information retrieval system;	Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 6:60-67 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	*See* claim 1[b] above. Reader, para. 0014. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 1:50-57 and 4:58-67 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B

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	Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	*See* claim 1[c] above. Reader, para. 0014. Mase, para. 382 col. 1. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Donaldson, 7:22-32, 7:34-36, 13:62-14:6 HyPursuit, p. 189 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for	*See* claim 1[d] above. Reader, para. 0014.

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information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	Mase, p. 382, col. 1 To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4 Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Donaldson, 7:22-32, 7:34-36, 13:62-14:6. HyPursuit, p. 189 Finkestein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44

Chart A-5

Claim chart of U.S. Patent No. 6,546,386 to Black et al. ("Brilliant Query System") taken in view of U.S. Patent No. 7,225,180 to Donaldson et al. ("Filtering Search Results")

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

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Claim 1	
1. A method for automatically generating a query from selected document content, comprising:	Black, 1:64-67. Black , Abstract: "[a] system for conducting queries from any document displayed on any computer device." Black, 2:43, 1:47-48: "automatic ... statistical and empirical analysis" of a body of selected content that may be "text, such as magazine articles, news stories or any other text" where the text can be an online article. *See also id.* Fig. 1, 4:18-20. Black, 1:50-54: "Brilliant queries require a preparation process that analyzes any text to enhance and generate a set of suggested searches based on that analysis and certain pre-set user parameters." Black, 2:10-14: "The hook is the concept, primary subject matter or main topic for a body of text. The hook is used to define a query as narrowly as possible on a particular topic for a selected information source." Black, 2:57-61: "Automatic Generation of the Hook - One embodiment of the brilliant query to enable an automatic process for generating brilliant queries for a body of text, is to determine the hook by extracting the highest frequency proper names from the text body." Black, 2:42-45: "A brilliant query requires a list of keywords that are generated by automatic ... statistical and empirical analysis of the body of content to be enhanced or a comparable body of content." Black, 2:26-29: "Keywords are simply a collection of words, generated automatically..., that are deemed to be indicative of the topic matter or one of the topics for a given content selection." Black, 3:29-35: "Automatic Generation of Keywords - A word frequency analysis is done on all of the text, with stopwords excluded, and the

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	resulting words, by order of frequency are compared to a pre-selected keyword list. Those that match, based upon a desired frequency become keywords to be combined with the hook to form focused, optimal queries." Black, 3:37-45: "Once the keywords have been selected and the hook for a body of text has been determined or automatically generated, the searches are created by generating a link for every keyword extracted from the body of text and combining it with the hook in a search that results in a result set that is the logical intersection of the results generated by the hook and the keyword. Basically, each entry in the list of search results must contain both the hook and the keyword and not just one or the other." Black, 3:55-57: "After the hook and the keywords have been established the query is conducted selecting one of the hook-keyword sets." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content	Donaldson, 15:38-46, 17:17-19, 19:51-56: disclosing categorizing Web pages/Web sites using a categorization scheme. Donaldson, 17:17-19, Fig. 8c: "Each category may include a listing of sub-

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having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	categories 865 and web sites 875 within those categories." Donaldson, 15:38-46: "For example, in one implementation, the hierarchy of category identifiers may include a hierarchy of category names, where groups of the category names are linked together in a hierarchical relationship. In this instance, names in the hierarchy represent categories, the names of which are linked together using sub-categories. The hierarchy of category identifiers also may include other related information, such as a list of web sites that are related to the category by name, description, or otherwise." Donaldson, 19:51-65: "Each electronic information store may contain content that has been classified and stored based on a specified type or types of classification criteria. For instance, the first electronic information store 992 may include content classified as non-offensive and the second electronic information store 994 may include content classified as offensive. Other types of content classification criteria may be implemented in addition to or separate from criteria based on offensive and non-offensive classifications. Other criteria that may be used, for example, include medical and non-medical, legal and non-legal, and sports and non-sports. In one implementation, the first electronic information includes contents relating to non-offensive web sites, and the second electronic information includes contents relating to offensive web sites." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17

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	Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	Black, 2:26-29: "Keywords are simply a collection of words, generated automatically … , that are deemed to be indicative of the topic matter or one of the topics for a given content selection." Black, 2:42-45: “A brilliant query requires a list of keywords that are generated by automatic ... statistical and empirical analysis of the body of content to be enhanced or a comparable body of content." Black, 3:29-35: "Automatic Generation of Keywords - A word frequency analysis is done on all of the text, with stopwords excluded, and the resulting words, by order of frequency are compared to a pre-selected keyword list. Those that match, based upon a desired frequency become keywords to be combined with the hook to form focused, optimal queries." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized	Black, 2:10-18: "The hook is the concept, primary subject matter or main topic for a body of text. The hook is used to define a query as narrowly as possible on a particular topic for a selected information source. To

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classification of document content for assigning the selected document content a classification label from the organized classification of content; and	determine a "hook", a content layer must exist for which a context can be determined. There must be a perceivable structure to the information source and each content entry must have an associated context or place or places within the structure of the information source." Black, 2:57-61: "Automatic Generation of the Hook - One embodiment of the brilliant query to enable an automatic process for generating brilliant queries for a body of text, is to determine the hook by extracting the highest frequency proper names from the text body." Donaldson, Figs. 9b and 9c, 18:47-54: "Classifying the search term (922) generally includes classifying the received search term among one or more categories, with a first category and a second category being described and shown for illustrative purposes. If several search terms are grouped as a single string, the search terms may be collectively classified as a single string based on the grouping of search terms, or they may be classified individually based on each individual search term." Donaldson, 18:55-63: Comparing the search terms (step 924) generally includes comparing the search term to first electronic information within a first electronic information store when the search term is classified within the first category. By contrast, comparing the search term (step 926) generally includes comparing the search term to the second electronic information within the second electronic information store to determine whether matches exist when the search term is classified within the second category." Donaldson, 20:3-18: "The following describes an example applying the described search methods of FIG. 9b to this implementation. A user of a client system enters a search term (step 910). The search term is classified as either being offensive or non-offensive (step 922). If the term is classified as being non-offensive, then only the contents of the first electronic information store are searched (924) and results from the search are communicated for display to the user (step 930). In this example, the first electronic information store only contains contents that previously have been classified as non-offensive. If the search term entered by the user is classified as being offensive, the contents of either the second electronic information store or both the first and second electronic information stores are searched (step 926) and the results are communicated for display to the user (step 930)." Donaldson, 20:19-29: "The described filtering of results between offensive content and non-offensive content based on the classification of the search term may allow a web host to implement a parental type of control in determining what search results are displayed to the user. Because the offensive and non-offensive contents are stored in different electronic

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	information stores, the ability to restrict access is enhanced. For instance, parental control can be exercised by blocking the access of a user to one or more electronic information stores. Other forms of data filtering also are enabled through this process and related techniques." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	Black, 3:37-45: "Once the keywords have been selected and the hook for a body of text has been determined or automatically generated, the searches are created by generating a link for every keyword extracted from the body of text and combining it with the hook in a search that results in a result set that is the logical intersection of the results generated by the hook and the keyword. Basically, each entry in the list of search results must contain both the hook and the keyword and not just one or the other." Black, 3:55-57: "After the hook and the keywords have been established the query is conducted selecting one of the hook-keyword sets." Donaldson, 18:47-54: "Classifying the search term (922) generally includes

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	classifying the received search term among one or more categories, with a first category and a second category being described and shown for illustrative purposes. If several search terms are grouped as a single string, the search terms may be collectively classified as a single string based on the grouping of search terms, or they may be classified individually based on each individual search term." Donaldson, Figs. 9b and 9c, 18:55-63: "Comparing the search terms (step 924) generally includes comparing the search term to first electronic information within a first electronic information store when the search term is classified within the first category. By contrast, comparing the search term (step 926) generally includes comparing the search term to the second electronic information within the second electronic information store to determine whether matches exist when the search term is classified within the second category." Donaldson, 20:3-18: "The following describes an example applying the described search methods of FIG. 9b to this implementation. A user of a client system enters a search term (step 910). The search term is classified as either being offensive or non-offensive (step 922). If the term is classified as being non-offensive, then only the contents of the first electronic information store are searched (924) and results from the search are communicated for display to the user (step 930). In this example, the first electronic information store only contains contents that previously have been classified as non-offensive. If the search term entered by the user is classified as being offensive, the contents of either the second electronic information store or both the first and second electronic information stores are searched (step 926) and the results are communicated for display to the user (step 930)." Donaldson, 20:19-29: "The described filtering of results between offensive content and non-offensive content based on the classification of the search term may allow a web host to implement a parental type of control in determining what search results are displayed to the user. Because the offensive and non-offensive contents are stored in different electronic information stores, the ability to restrict access is enhanced. For instance, parental control can be exercised by blocking the access of a user to one or more electronic information stores. Other forms of data filtering also are enabled through this process and related techniques." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4.

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	Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
18. An article of manufacture for use in a computer system, comprising: a memory;	*See* claim 1 above. Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9

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	Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	*See* claim 1 above. Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document	*See* claim 1[a] above.

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content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, p. 382 col. 1. Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 HyPursuit, p. 189 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 6:60-67 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	*See* claim 1[b] above. Black, 1:50-57 and 4:58-67 To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Finkestein, p. 410, 408

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	Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	*See* claim 1[c] above. Donaldson, 7:22-32, 7:34-36, 13:62-14:6 To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015 Mase, para. 382 col. 1. Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 HyPursuit, p. 189 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a	*See* claim 1[d] above.

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search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	Black, 1:50-57, 4:58-67 Donaldson, 7:22-32, 7:34-36, 13:62-14:6. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015, Fig. 4 Mase, p. 382, col. 1 Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 HyPursuit, p. 189 Finkestein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44

Chart A-6

Claim Chart of U.S. Patent No. 6,546,386 to Black et al. ("Brilliant Query System") taken in view of "HyPursuit: A Hierarchical Network Search Engine that Exploits Content-Link Hypertext Clustering" (Proceedings of 7th ACM conference on Hypertext, Copyright 1996)

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

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Claim 1	
1. A method for automatically generating a query from selected document content, comprising:	Black, 1:64-67. Black , Abstract: "[a] system for conducting queries from any document displayed on any computer device." Black, 2:43, 1:47-48: "automatic ... statistical and empirical analysis" of a body of selected content that may be "text, such as magazine articles, news stories or any other text" where the text can be an online article. *See also id.* Fig. 1, 4:18-20. Black, 1:50-54: "Brilliant queries require a preparation process that analyzes any text to enhance and generate a set of suggested searches based on that analysis and certain pre-set user parameters." Black, 2:10-14: "The hook is the concept, primary subject matter or main topic for a body of text. The hook is used to define a query as narrowly as possible on a particular topic for a selected information source." Black, 2:57-61: "Automatic Generation of the Hook - One embodiment of the brilliant query to enable an automatic process for generating brilliant queries for a body of text, is to determine the hook by extracting the highest frequency proper names from the text body." Black, 2:42-45: "A brilliant query requires a list of keywords that are generated by automatic ... statistical and empirical analysis of the body of content to be enhanced or a comparable body of content." Black, 2:26-29: "Keywords are simply a collection of words, generated automatically..., that are deemed to be indicative of the topic matter or one of the topics for a given content selection."

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	Black, 3:29-35: "Automatic Generation of Keywords - A word frequency analysis is done on all of the text, with stopwords excluded, and the resulting words, by order of frequency are compared to a pre-selected keyword list. Those that match, based upon a desired frequency become keywords to be combined with the hook to form focused, optimal queries." Black, 3:37-45: "Once the keywords have been selected and the hook for a body of text has been determined or automatically generated, the searches are created by generating a link for every keyword extracted from the body of text and combining it with the hook in a search that results in a result set that is the logical intersection of the results generated by the hook and the keyword. Basically, each entry in the list of search results must contain both the hook and the keyword and not just one or the other." Black, 3:55-57: "After the hook and the keywords have been established the query is conducted selecting one of the hook-keyword sets." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content	HyPursuit, Fig. 3. HyPursuit, p. 184 col. 2: "The HyPursuit prototype is a scalable system that uses content-link hypertext clustering, based on document contents and link information, to structure the information space and to support the entire

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having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	range of search activities. Content-link clustering automatically computes sets of related documents called clusters. HyPursuit admits multiple coexisting cluster hierarchies based on different principles of grouping documents, such as the Library of Congress catalog scheme and institutional structures. These hierarchies may be constructed automatically or manually" (emphasis included) HyPursuit, p. 184 col. 1: "For example, documents can be clustered based on institutional boundaries or based on Library of Congress catalog subjects." HyPursuit, p. 181, col. 1: "Clusters also provide convenient units for the partitioning of work and resource allocation among the distributed components of the system. For example, a separate information server on a separate host may represent each individual cluster, performing operations on its local data." *See also* Fig. 3. HyPursuit, p. 184: "Each content router users its abstraction functions to compute a content label that summarizes its associated cluster." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45

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	Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	Black, 2:26-29: "Keywords are simply a collection of words, generated automatically … , that are deemed to be indicative of the topic matter or one of the topics for a given content selection." Black, 2:42-45: "A brilliant query requires a list of keywords that are generated by automatic ... statistical and empirical analysis of the body of content to be enhanced or a comparable body of content." Black, 3:29-35: "Automatic Generation of Keywords - A word frequency analysis is done on all of the text, with stopwords excluded, and the resulting words, by order of frequency are compared to a pre-selected keyword list. Those that match, based upon a desired frequency become keywords to be combined with the hook to form focused, optimal queries." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the	Black, 2:10-18: "The hook is the concept, primary subject matter or main topic for a body of text. The hook is used to define a query as narrowly as possible on a particular topic for a selected information source. To determine a "hook", a content layer must exist for which a context can be determined. There must be a perceivable structure to the information

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selected document content a classification label from the organized classification of content; and	source and each content entry must have an associated context or place or places within the structure of the information source." Black, 2:57-61: "Automatic Generation of the Hook - One embodiment of the brilliant query to enable an automatic process for generating brilliant queries for a body of text, is to determine the hook by extracting the highest frequency proper names from the text body." HyPursuit, p. 182 col. 1: "To support a variety of query processing operations, HyPursuit uses query routing to identify relevant clusters, forward queries to the information servers for those clusters, and merge the results." HyPursuit, p. 186 col. 2: "HyPursuit uses query routing to support the search operations. Query routing uses the content labels stored in the content router to determine which of the child servers are likely to contain documents related to the user query. The query is then forwarded to these servers, and the results from each server are merged into a single result set. Documents returned by more than one child server are displayed only once." HyPursuit, p. 185 col. 1: "The abstraction function for query routing, on the other hand, computes a manageable set of terms that are used for identifying portions of the information space relevant to particular queries." HyPursuit, p. 181 col. 2: "To support operations like query processing in a scalable way, HyPursuit uses manageable summaries of cluster contents, called content labels, to approximate complete knowledge of the information space." HyPursuit, p. 191 col. 2: "To support scalable query processing, HyPursuit uses manageable summaries of cluster contents, called content labels, to approximate complete knowledge of the information space." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28

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	Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	Black, 3:37-45: "Once the keywords have been selected and the hook for a body of text has been determined or automatically generated, the searches are created by generating a link for every keyword extracted from the body of text and combining it with the hook in a search that results in a result set that is the logical intersection of the results generated by the hook and the keyword. Basically, each entry in the list of search results must contain both the hook and the keyword and not just one or the other." Black, 3:55-57: "After the hook and the keywords have been established the query is conducted selecting one of the hook-keyword sets." HyPursuit, p. 182 col. 1:"To support a variety of query processing operations, HyPursuit uses query routing to identify relevant clusters, forward queries to the information servers for those clusters, and merge the results." HyPursuit, p. 186 col. 2: "HyPursuit uses query routing to support the search operations. Query routing uses the content labels stored in the content router to determine which of the child servers are likely to contain documents related to the user query. The query is then forwarded to these servers, and the results from each server are merged into a single result set. Documents returned by more than one child server are displayed only once." HyPursuit, p. 185 col. 1: "The abstraction function for query routing, on the other hand, computes a manageable set of terms that are used for identifying portions of the information space relevant to particular queries."

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	HyPursuit, p. 184 col. 1: "To support operations like query processing in a scalable way, HyPursuit uses manageable summaries of cluster contents, called content labels, to approximate complete knowledge of the information space" HyPursuit, p. 181 col. 2: "To support scalable query processing, HyPursuit uses manageable summaries of cluster contents, called content labels, to approximate complete knowledge of the information space." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
18. An article of manufacture for use in a computer system, comprising: a memory;	*See* claim 1 above. Black, 4:58-67, 1:50-57, 4:30-43. HyPursuit, p. 189 col. 2. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

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	Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	*See* claim 1 above. Black, 1:50-57, 4:58-67. HyPursuit, p. 189 col. 2. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17

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	Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	*See* claim 1[a] above. HyPursuit, p. 189 col. 2. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, p. 382 col. 1. Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 6:60-67

'979 Patent	BLACK AND HYPURSUIT
	Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	*See* claim 1[b] above. Black, 1:50-57, 4:58-67. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content;	*See* claim 1[c] above. HyPursuit, p. 189 col. 2. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015 Mase, para. 382 col. 1. Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28

‘979 Patent	BLACK AND HYPURSUIT
	Donaldson, 7:22-32, 7:34-36, 13:62-14:6 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	*See* claim 1[d] above. Black, 1:50-57, 4:58-67. HyPursuit, p. 189 col. 2. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014, 0015, Fig. 4 Mase, p. 382, col. 1 Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Donaldson, 7:22-32, 7:34-36, 13:62-14:6. Finkestein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17

‘979 Patent	BLACK AND HYPURSUIT
	Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44

Chart A-7

Claim chart of U.S. Patent No. 6,122,647 to Horowitz

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**U.S. Patent No. 6,122,647**
Claim 1	
A method for automatically generating a query from selected document content, comprising:	"The present invention overcomes the limitations of conventional information retrieval systems generally, and conventional Internet and intranet search engines particularly, by providing a system and method that dynamically generates contextual hypertext links in a source document to other topically relevant documents in response to the content of the source document or user-selected portion thereof. These new links are contextual links because they are generated in specific response to the content of a selected portion of the source document." 2:42-51. "[T]he present invention can treat any document (or portion of a document) a user is viewing as an inquiry and create new links in the source document to other related documents." 3:20-23. See Fig. 3.

	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated	"A knowledge base or other data repository stores information associating individual topics with sets of documents related to the topic, and with terms descriptive of the topic." 3:37-39.

therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	"The knowledge base 130 is a persistent data store that system 100 uses to store topic information. The knowledge base 130 comprises an arbitrary number of topics. Each topic is associated with one or more terms that are synonyms for each other. A term is a word or series of words (e.g., a noun phrase) that refer to a topic. A topic describes a possible subject annotation for documents in the document collection 140." 5:49-56. "Each topic in the knowledge base 130 may have a unique topic ID code for cross-referencing in other tables." 5:60-62. "[E]ach document (and document reference) has an association with at least one topic in the knowledge base 130, and preferably with many topics." 6:28-30. "Also, as a further embodiment, hierarchical topic menus may be created. Here, each menu item may be a topic in the knowledge base 130, with a submenu of related topics, and each related topic may have its own submenu of links to target documents. This hierarchical approach provides the user the ability to explore the entire document collection 140." 11:8-15. "The knowledge base 130 is a persistent data store that system 100 uses to store topic information. The knowledge base 130 comprises an arbitrary number of topics. Each topic is associated with one or more terms that are synonyms for each other. A term is a word or series of words (e.g., a noun phrase) that refer to a topic. A topic describes a possible subject annotation for documents in the document collection 140." 5:49-56. See Fig. 5. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

	Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the	"The tagging module 120 is responsible for analyzing a selected portion of a document, identifying a set of terms and topics that are relevant to the selected portion or about the selected portion, and generating tags in the document which associate the terms and topics. The tagging module 120 may apply a variety of

information retrieval system;	linguistic analysis techniques to identify the relevant topics." 6:49-55. "From the selected portion 304 of the source document 300, a number of new contextual links to target documents 310 relevant to the selected portion 304 are generated 306. These new contextual links are associated with selected terms of the source document, typically, but not necessarily only, in the selected portion 304." 7:19-25. "The terms selected for the links may be any terms of the selected portion, or may be other terms not necessarily appearing in the selected portion 304, but associated with topics that are most relevant to the selected portion 304." 7:46-49. "Referring now to FIG. 7, there is shown a flowgraph of one embodiment of a process for selecting topics and generating tags to such topics, as preferably implemented by the tagging module 120. The input to the process is a selected portion of a source document." 8:40-43. "Referring to the figure, the tagging module 120 tokenizes 702 the selected portion, dividing the selected portion into words and/or word phrases, each of which constitutes a token." 8:50-53. "The tagging module 120 then parses 706 the tokens to recognize groups of grammatical noun phrases." 8:62-63. "The tagging module 120 then selects 712 terms from the set of unified terms, based on threshold parameters for the number of terms to be selected." 9:13-15. "For each selected term, the tagging module 120 looks up 716 the term in the knowledge base 130." 9:27-28. "The contextual links provide the user with access to target documents that are relevant to the selected portion. The contextual links are generated from a linguistic analysis of the selected portion which identifies particular terms or keywords that are relevant to or about the selected portion." 12:27-32. See Figs. 4c-4d, 5, 7.

	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected	"In one embodiment, the present invention provides a computer-implemented process in which a portion of text of a source document is analyzed and a number of topics are determined as being representative of what the selected portion is about. Topic analysis may be determined by various syntactic and semantic processes, such as

document content a classification label from the organized classification of content; and	identification and frequency analysis of terms of the selected portion. For each of the topics, a new tag is added to the source document. A tag includes a term, preferably from the text of the document, and a reference to the topic associated with the term. These tags are preferably stored with the source document." 3:25-35. "The user selects a portion 304 of the source document 300, which may be the entire source document 300, or any lesser portion of it, such as a selected set of words, a sentence, paragraph, or the like. The selected portion 304 is provided to the tagging module 120, which is coupled to the knowledge base 130." 7:59-65. "The tagging module 120 determines the topics in the knowledge base 130 that are about the selected portion 304. Preferably the tagging module 120 applies some type of linguistic analysis to the selected portion, including either syntactic or semantic analysis methods to determine the topics that are most representative or relevant to the selected portion 304." 7:66-8:5. See Figs. 6-8. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28

	Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	"The tagging module receives as input a user selected portion of a source document and determines the topics relevant to the user selected portion, and creates a set of tags, each tag associating a term of the selected portion to one or more topics in the knowledge base. The presentation module receives the document and its set of tags, determines from the knowledge base the topics associated with each tag, and the target documents associated with each topic. The presentation module adds links to these target documents to the source document, either as links in the document body where one or more of the keywords appears, or in a separate navigational component." 3:64-4:8.

	"The presentation module 150 is responsible for determining a set of target documents associated with the generated tags in a document. . . ." 6:56-58. "Preferably the tagging module 120 applies some type of linguistic analysis to the selected portion, including either syntactic or semantic analysis methods to determine the topics that are most representative or relevant to the selected portion 304. The tagging module 120 adds a tag to the source document 300 for each of these topics, the tag specifying the topic in the knowledge base 130 . . . ." 8:1-7. "The presentation module 150 receives a source document including the set of tags in the document, and creates new links in the source document to other target documents. The presentation module 150 uses the knowledge base 130 to access the topics in knowledge base 130 associated with the tags. The presentation module 150 uses the document collection 140 to obtain references to the target documents associated with these topics." 8:17-24. "The presentation module 150 receives the source document 300 and the set of tags created by the tagging module 120. For each tag (802), the presentation module 150 looks up 804 the topic(s) in the knowledge base 130 specified in the tag. For each such topic the presentation module 150 retrieves 806 the documents associated with the topic, or more particularly, retrieves the URL (or other specification of network location) for the document." 10:11-18. See Figs. 5-6, 8. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

	Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
An article of manufacture for use in a computer system, comprising:	"Referring now FIG. 2 there is shown an illustration of the software architecture of an information retrieval system 100 in accordance with the present invention. The information retrieval system 100 includes various functional software modules and

	structures that execute on a conventional computer system." 5:25-30. See Figs. 2, 9.
a memory;	"The computer system includes a processor 105, addressable memory 103, operating system 107, display device 109, and user input device, such as a keyboard 111 or a mouse." 5:30-33. See Fig. 2 at 103. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189

	Finkelstein, p. 406 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	See Chart for Claim 1 (above). "Referring now FIG. 2 there is shown an illustration of the software architecture of an information retrieval system 100 in accordance with the present invention. The information retrieval system 100 includes various functional software modules and structures that execute on a conventional computer system." 5:25-30. See Fig. 2 at 110, 120, 150. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014.

	Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to	See Chart for Claim 1 (above).

a category of information in an information retrieval system;	
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	See Chart for Claim 1 (above).
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	See Chart for Claim 1 (above).
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	See Chart for Claim 1 (above).

Chart A-8

Claim chart for U.S. Patent No. 6,473,752 to Fleming

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**U.S. Patent No. 6,473,752**
Claim 1	
A method for automatically generating a query from selected document content, comprising:	"A system for locating computer documents or data of interest to a user without specification by the user of topics of interest. The system detects the selection of computer documents by the user of the system, and analyzes the contents of the selected computer documents to identify topics to which the contents are related. . . . The system then proceeds without user intervention, using the identified topics . . . to generate topics of interest to the user. . . . The system then uses the prioritized generated topics of user interest to locate documents whose contents are of interest to the user, and makes the located documents available to the user for selection. . . . For example, a computer document search engine can be used to locate additional documents by generating an appropriate search query." Abstract. See Fig. 2. To the extent this reference does not teach this claim element, this reference in

	combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each	"[V]arious companies have developed information search engines which can automatically index and organize information that is accessible from a computer. This accessible information may be located on any networked computer or storage device that the computer can access, or may be located on the computer system itself. After the information is indexed or organized, these search engines can then search the

classification label corresponding to a category of information in an information retrieval system;	indexed or organized information to locate particular information of interest." 1:44-53. "The search engine will analyze the contents of the documents, and create an index of some or all of the terms in the documents. The search engine may also attempt to identify one or more general topics to which the entire document relates. The search engine will next search the documents for references to other computer documents. Upon finding such references, the search engine will access those referenced documents and continue the same process. In this manner, the search engines can eventually traverse and index all computer documents that are interconnected with the first documents given to the search engine. After creating this comprehensive index, the search engine can locate documents by receiving a search query containing terms or topics of interest to a user, and by searching the index to locate documents with corresponding terms or topics." 2:12-26. "After usage information is recorded and relevant terms are extracted, the Document Access Monitor 131 then forwards the recorded usage information and the extracted document terms to the Topic Analyzer 132. The Topic Generator 221 first receives the information from the Document Access Monitor 131, end generates topics related to areas of interest to the computer user. The Topic Generator 221 begins by generating related terms for the extracted terms. . . . Those skilled in the art will appreciate that related terms can be generated in a variety of ways, including the use of a thesaurus or the use of empirical testing to determine how terms are actually used." 6:24-44. "The related terms . . . assist in generating topics that are related to the contents of accessed documents. For example, if an accessed document contained only the term 'bat,' it would be difficult to determine which meaning of 'bat' was of interest to the

	user. However, if other extracted terms from this or other accessed documents included related terms such as 'Count Dracula' or 'a flying mammal' but not terms related to baseball, then it is likely that the user is interested in topics related to the mammal but not to the sport. Therefore, after the related terms are generated, the extracted terms are grouped together and used to determine topics of interest to the user. Those skilled in the art will appreciate that this grouping and determination can be performed in a variety of ways." 6:45-60. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5

	Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	"The system also analyzes the contents of the selected computer documents to identify relevant terms in the contents of the documents, and more generally to identify topics to which the contents are related." 3:5-8. "The system then attempts to locate additional computer documents, on any computer or device that is accessible to the system, whose contents are related to these prioritized generated topics of user interest. One method that the system may use to locate these documents involves identifying a computer document search engine, generating an appropriate search query, and requesting the search engine to perform the search on the generated search query." 3:14-23. "The Document Term Extractor 215 receives the detected document access notifications and extracts relevant terms from the contents of the documents that are accessed. In one embodiment, the detected document access notifications indicate only that a document is being accessed by the user, and the Document Term Extractor 215 accesses the document to ascertain its contents. In another embodiment, the detected document access notifications not only indicate that a document is being accessed, but also include the document contents that are being accessed. Typically, only relevant terms are extracted from the document contents, with relevance measured by the degree of relation between a term and the contents." 5:62- 6:7.

	"Those skilled in the art will appreciate that relevant terms can be generated in a variety of ways, and can be extracted from the contents of the entire document or only from the content of the portions of the document with which the user interacts." 9:25-29. See Figs. 2, 5, 8, 10B. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36

	Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	"The present invention relates generally to locating computer documents and more particularly to determining topics of interest to a user and locating documents related to those topics." 1:6-9. "The system also analyzes the contents of the selected computer documents to identify relevant terms in the contents of the documents, and more generally to identify topics to which the contents are related." 3:5-8. "Those skilled in the art will appreciate that relevant terms can be generated in a variety of ways, and can be extracted from the contents of the entire document or only from the content of the portions of the document with which the user interacts." 9:25-29. "Those skilled in the art will appreciate that topics of user interest can be generated in a variety of ways, that the importance of a topic can be calculated in a variety of ways (i.e., using of a variety of importance measures), and that the topics can be prioritized in a variety of ways." 9:65-10:2. "Those skilled in the art will appreciate that other methods of generating topics related to document contents are possible. These may include methods that do not use extracted terms . . . or generating a new term that is broad enough to include multiple extracted and related terms." 12:18-24. See Figs. 2, 5, 6, 9.

	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37

	Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	"The New Document Identifier receives the prioritized topics from the Topic Analyzer, generates a search query related to the prioritized topics, performs a search of accessible documents using the search query, and identifies documents that contain terms or topics related to the search query. These identified documents are then made available to the user for selection." 4:23-29. "Those skilled in the art will appreciate that a variety of search queries can be formulated to identify documents related to a given set of topics, and that these different search queries will often identify different groups of documents. For example, a search could be generated to identify only those documents whose contents contain every prioritized generated topic, or instead a search could be generated to identify those documents whose contents contain any prioritized generated topic. The generated search query is forwarded to the Search Engine 233, which uses the search query to perform a search on accessible computer documents. Those skilled in the art will appreciate that a variety of search engines are known in the art, including search engines from companies such as Infoseek, Excite, and Digital Equipment Corporation (DEC). Each search engine has its own rules and syntax for the search queries used by it. Thus, the particular search query that is generated will depend on the search engine to be used and on a determination of which available search query for that engine is most likely to return the desired documents." 7:51-8:4. "Those skilled in the art will appreciate that a search query can be generated in a variety of ways, including varying syntax to reflect a particular search engine and varying the topics in the search query in an attempt to identify different groups of documents." 10:34-38.

	"Generated search query 1050 illustrates that although one preferred embodiment prioritized topics based only on extracted terms, the generated search query includes both extracted terms and related terms." 15:19-23. See Figs. 2, 7, 10B. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Ford, 12:2-7, 11:4-17

	Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
An article of manufacture for use in a computer system, comprising:	See Fig. 1 (depicting system implemented on computer system). "The computer system 110 includes the CPU 120, the memory 130, the input/output devices 140 and the bus 148. The input/output devices 140 include a storage device 141, a display 142, a keyboard 143 and a computer-readable media drive 144. The memory 130 includes the RDS system 135, which comprises the Document Access Monitor component 131, the Topic Analyzer component 132, and the New Document Identifier component 133." 4:34-41.
a memory;	See Fig. 1 at 130. "The computer system 110 includes the CPU 120, the memory 130, the input/output devices 140 and the bus 148. The input/output devices 140 include a storage device 141, a display 142, a keyboard 143 and a computer-readable media drive 144. The memory 130 includes the RDS system 135, which comprises the Document Access Monitor component 131, the Topic Analyzer component 132, and the New Document Identifier component 133." 4:34-41. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

	Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected	See Chart for Claim 1 (above). Instructions for the system are inherently stored in the memory depicted in figure 1.

document content, comprising:	"The computer system 110 includes the CPU 120, the memory 130, the input/output devices 140 and the bus 148. The input/output devices 140 include a storage device 141, a display 142, a keyboard 143 and a computer-readable media drive 144. The memory 130 includes the RDS system 135, which comprises the Document Access Monitor component 131, the Topic Analyzer component 132, and the New Document Identifier component 133." 4:34-41. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406

	Horowitz, 5:30-33, Fig. 2 at 103 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	See Chart for Claim 1 (above).
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	See Chart for Claim 1 (above).
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	See Chart for Claim 1 (above).

automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	See Chart for Claim 1 (above).

Chart A-9

Claim chart for U.S. Patent No. 6,606,644 to Ford

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**U.S. Patent No. 6,606,644**
Claim 1	
A method for automatically generating a query from selected document content, comprising:	"The present invention provides a method and apparatus for automatically gathering, summarizing, and indexing real-time information derived from real-time communication on the Internet, such as Internet chat sessions, and to make that data readily available for immediate analysis and use such as targeted advertising." 5:3-8. "The present invention will give advertisers the ability to dynamically monitor the conversation being held in any given chat room, and be able to display advertising banners that match the theme of the conversation, thus, eliciting greater attention and interest from users. For example, a sudden occurrence of keywords such as 'car', 'automobile', 'drive', 'convertible', 'coupe', etc., may signal to an automobile manufacturer that now is an opportune time to display a banner advertising a special sale on convertible automobiles." 5:30-39. To the extent this reference does not teach this claim element, this reference in

	combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated	"As shown in FIG. 3, this aspect of the present invention [i.e., serving contextually-relevant advertisements] will extract and analyze the summary information generated by LISA 50 and then respond with an appropriate message or advertisement responsive to the subject matter of the summary information. Specifically, based

therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	upon the user's specifications, the present invention will look for the temporally contiguous occurrence of a particular keyword or set of keywords. The appearance of such keywords would be used to infer the general topic or subject matter of the communication or conversation. Once the general subject area of the conversation has been (probabilistically) deduced, the present invention may be used to present advertisements in the chat room that match the theme of the conversation." 11:4-17. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60

	Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	"As shown in FIG. 3, this aspect of the present invention [i.e., serving contextually-relevant advertisements] will extract and analyze the summary information generated by LISA 50 and then respond with an appropriate message or advertisement responsive to the subject matter of the summary information. Specifically, based upon the user's specifications, the present invention will look for the temporally contiguous occurrence of a particular keyword or set of keywords." 11:4-11. "In particular, using the information it has received from database manager 34, client interface 36 can present the advertisement in extremely customized, personalized, and interactive manner. For example, 'Bob' is a participant in a conversation in which the key words 'linux', 'windows', 'operating systems', 'software', and 'application', have been detected by LISA 50. Client interface 36 may now present Bob with a personal message that contains an advertisement for 'red hat linux' products, and which may state something like 'Hi Bob, I felt you might be interested in this !" 12:52-63. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5

	Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	"As shown in FIG. 3, this aspect of the present invention [i.e., serving contextually-relevant advertisements] will extract and analyze the summary information generated by LISA 50 and then respond with an appropriate message or advertisement responsive to the subject matter of the summary information. Specifically, based upon the user's specifications, the present invention will look for the temporally contiguous occurrence of a particular keyword or set of keywords. The appearance of such keywords would be used to infer the general topic or subject matter of the communication or conversation. Once the general subject area of the conversation has been (probabilistically) deduced, the present invention may be used to present advertisements in the chat room that match the theme of the conversation." 11:4-17. To the extent this reference does not teach this claim element, this reference in

	combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A

automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	"As shown in FIG. 3, this aspect of the present invention [i.e., serving contextually-relevant advertisements] will extract and analyze the summary information generated by LISA 50 and then respond with an appropriate message or advertisement responsive to the subject matter of the summary information. Specifically, based upon the user's specifications, the present invention will look for the temporally contiguous occurrence of a particular keyword or set of keywords. The appearance of such keywords would be used to infer the general topic or subject matter of the communication or conversation. Once the general subject area of the conversation has been (probabilistically) deduced, the present invention may be used to present advertisements in the chat room that match the theme of the conversation." 11:4-17. "In a targeted advertising aspect of the present invention, database manager 34 is adapted to be able to determine which advertisement(s) from the database 60 of advertisements should be displayed in response to a particular message being exchanged in real-time between two 'chatters' or clients 70." 12:2-7. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57

	Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
An article of manufacture for use in a computer system, comprising:	"In another aspect, the present invention is directed to an article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing a computer to automatically gather, summarize and index real-time communication on a computer network between at least a first and second user." 3:34-39. See also Fig. 3.
a memory;	"The program storage devices of the present invention may be devised, made and used as a component of a machine utilizing optics, magnetic properties and/or electronics to perform the method steps of the present invention. Program storage

	devices include, but are not limited to, magnetic media such as a diskette or computer hard drive, which is readable and executable by a computer(s), optical disks, Read Only Memory (ROM), floppy disks, and semiconductor chips." 13:11-19. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41

	Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	See Chart for Claim 1 (above). "The program storage devices of the present invention may be devised, made and used as a component of a machine utilizing optics, magnetic properties and/or electronics to perform the method steps of the present invention. Program storage devices include, but are not limited to, magnetic media such as a diskette or computer hard drive, which is readable and executable by a computer(s), optical disks, Read Only Memory (ROM), floppy disks, and semiconductor chips." 13:11-19. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5

	Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	See Chart for Claim 1 (above).
automatically identifying a set of entities in the selected document	See Chart for Claim 1 (above).

content for searching information related thereto using the information retrieval system;	
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	See Chart for Claim 1 (above).
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	See Chart for Claim 1 (above).

Chart A-10

Claim chart of U.S. Patent No. 6,829,780 to Kraft

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**U.S. Patent No. 6,829,780**
Claim 1	
A method for automatically generating a query from selected document content, comprising:	"Transparently to the user, the system continuously operates in the background to adapt banner advertisements based on the detection of competing ads. The system includes a page analyzer that translates the hosted ad's web page into a document that can be analyzed for the presence of competing ads. An ad comparison unit compares the output of the page analyzer with information stored in the competitor ad database to detect competing ads. . . . The ad summary evaluator identifies competing ads and devises a counter strategy for banner ad display." Abstract. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4.

	Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	"In one embodiment, the system 10 operates with a banner display module 200 that displays the content of the adaptive banner ad, a web server 15, and an ad proxy router 205 that provides secure communication link between banner display module and the advertiser's server, and is generally comprised of: . . . a hosted ad database 220 that contains information about each banner ad hosted, including primary competitors; . . .

	a competitor ad database 235 that contains data about competing advertising;" 5:55-6:10. "The competitor ad database 235 contains data about competitors' advertisements that have [been] collected from the various advertisers and entered either manually or automatically. This data comprises a sample of the ad (e.g. an image) along with additional data useful for ad analysis. The system 10 performs database queries utilizing available image/multimedia comparison algorithms to locate a match. For the example of FIG. 4, the ad comparison unit 230 detects a match and the ad for the Mac Store is marked in the summary list as a <MATCHED_COMPETITOR>: <COMPETITOR id=4711> <MEDIA_URL>http://ad.doubleclicknet/ad/buy.prod.sm/homepage;cat=homepage_5;sz=100x60;tile=5;ord=16115127561</MEDIA_URL> <TARGET_URL>http://ad.doubleclick.net/jump/buy.prod.sm/homepage;cat=homepage_5;sz=100x60;ti1e=5;ord=16115127561</TARGET_URL> <title>BUYCOMP.COM - The Computer Superstore</title> <KEYWORDS>macintosh, mac, store</KEYWORDS> <MATCHED_COMPETITOR>Apple Inc.</MATCHED_COMPETITOR> <COMPETITOR>" 11:16-40. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

	Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	"In one embodiment, the system 10 operates with a banner display module 200 that displays the content of the adaptive banner ad, a web server 15, and an ad proxy router 205 that provides secure communication link between banner display module and the advertiser's server, and is generally comprised of: an ad identification manager 215 that performs competitive analysis of all the ads on

	the hosted ad's web page; . . . a page analyzer 225 that translates the hosted ad's web page into a document that can be analyzed for the presence of competing advertising; . . . an ad comparison unit 230 that compares the output of the page analyzer 225 with information stored in the competitor ad database 235 to detect competing advertising;" 5:55-6:14. "As illustrated in the foregoing example, the page analyzer 225 also extracts keywords and alternate representations from the web page and adds them to the page summary." 9:34-36. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7

	Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	"The competitor ad database 235 contains data about competitors' advertisements that have [been] collected from the various advertisers and entered either manually or automatically. This data comprises a sample of the ad (e.g. an image) along with additional data useful for ad analysis. The system 10 performs database queries utilizing available image/multimedia comparison algorithms to locate a match. For the example of FIG. 4, the ad comparison unit 230 detects a match and the ad for the Mac Store is marked in the summary list as a <MATCHED_COMPETITOR>: <COMPETITOR id=4711> <MEDIA_URL>http://ad.doubleclicknet/ad/buy.prod.sm/homepage;cat=homepage_5;sz=100x60;tile=5;ord=16115127561</MEDIA_URL> <TARGET_URL>http://ad.doubleclick.net/jump/buy.prod.sm/homepage;cat=homepage_5;sz=100x60;ti1e=5;ord=16115127561</TARGET_URL> <title>BUYCOMP.COM - The Computer Superstore</title> <KEYWORDS>macintosh, mac, store</KEYWORDS> <MATCHED_COMPETITOR>Apple Inc.</MATCHED_COMPETITOR>

	<COMPETITOR>" 11:16-40. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17

	Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	"The web page summary now contains all the information necessary . . . to define an appropriate ad strategy for the web page: Ad ID used to identify the hosted ad in the hosted ad database 220 and associated information; a list of all potential competitors on the web page including the media URL, target URL and additional metadata gained from document analysis or OCR shown highlighted in bold letters; and a list of competitors clearly identified by the ad comparison unit 230 as <MATCHED COMPETITOR>." 13:40-50. "Method 300 then determines from the hosted ad database 220, at decision step 350, if any of the ads on the web page are key competitors by having the page analyzer 225 pass the web page summary to the ad summary evaluator 255." 13:64-67. "The strategy or strategies used by the ad summary evaluator 255 are implemented as rules that are stored in the ad rules database 260. A rules engine is used to interpret these rules. For the example of FIG. 4, the ad summary evaluator 255 identifies the Mac Store as a key competitor. The ad summary evaluator 255 ignores the other ads because they offer services in different markets and thus are not competitors. From the ad rules database 260, the ad summary evaluator 255 obtains a rule which instructs the system 10 to use a specific Mac-targeted ad instead of the original ad." 14:43-52. To the extent this reference does not teach this claim element, this reference in

	combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
An article of manufacture for use in a	"[T]his invention pertains to a computer software product for dynamically adapting,

computer system, comprising:	enhancing, and optimizing the appearance and content of a banner advertisement based on the automatic detection of competing advertising within a document." 1:23-27. See also Fig. 1.
a memory;	"[T]his invention pertains to a computer software product for dynamically adapting, enhancing, and optimizing the appearance and content of a banner advertisement based on the automatic detection of competing advertising within a document." 1:23-27. A computer software product inherently requires the use of a memory. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58

	HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	See Chart for Claim 1 (above). "[T]his invention pertains to a computer software product for dynamically adapting, enhancing, and optimizing the appearance and content of a banner advertisement based on the automatic detection of competing advertising within a document." 1:23-27. A computer software product inherently requires the use of instructions stored in memory for it to be executable. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014.

	Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each	See Chart for Claim 1 (above).

classification label corresponding to a category of information in an information retrieval system;	
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	See Chart for Claim 1 (above).
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	See Chart for Claim 1 (above).
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	See Chart for Claim 1 (above).

Chart A-11

Claim chart for U.S. Patent No. 7,225,142 to Apte

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**U.S. Patent No. 7,225,142**
Claim 1	
A method for automatically generating a query from selected document content, comprising:	"Because the advertisements are streamed from a server rather than downloaded as a set and played to the user in a loop, the present invention can make choices about which advertisements to display to the user that are responsive to the user's current viewing habits. Thus, if a user is selecting and viewing pages in the browser area 31 concerning outdoor activities, the present invention can select advertisements for camping gear . . . ." 6:60-67. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61,

	2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	"After extracting the keywords, the keywords are compared to a database index, which cross-references keywords with topic names. Thus, in the present example, the keyword 'surfing' matches topics 'outdoor adventure' and 'water sports.' 'Molokai' matches the topic 'Hawaii.' Each topic in the database is correlated with a series of URLs for advertisements that relate to the topic. Thus, the topic 'Hawaii' corresponds advertisements for the 'Airline Deals to Hawaii by TravelNow' and 'Luau Hawaiian Hotels,' which are now streamed to the user and displayed in the advertising area 37. In this way, the user's viewing habits are used to effectively target advertisements to the user that are pertinent to the user's interests." 9:33-45.

	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55

automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	"In one embodiment, the present invention carries out this content-sensitive advertising by conducting a keyword search of a page requested to be displayed on the client computer by the user. Keywords are obtained by noting words that appear between TITLE headers in HTML documents. For example, a page that contains the code: <TITLE>Bill's Favorite Surfing Spots on Molokai</TITLE> the keywords 'surfing' and 'Molokai' would be extracted as keywords." 9:24-32. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B

	Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	"After extracting the keywords, the keywords are compared to a database index, which cross-references keywords with topic names. Thus, in the present example, the keyword 'surfing' matches topics 'outdoor adventure' and 'water sports.' 'Molokai' matches the topic 'Hawaii.'" 9:33-37. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29

	HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	"Advertisements may also be selected by deducing user areas of interest based upon the content of pages on the web selected by the user for viewing." 4:20-22. "Each topic in the database is correlated with a series of URLs for advertisements that relate to the topic. Thus, the topic 'Hawaii' corresponds advertisements for the 'Airline Deals to Hawaii by TravelNow' and 'Luau Hawaiian Hotels,' which are now streamed to the user and displayed in the advertising area 37. In this way, the user's viewing habits are used to effectively target advertisements to the user that are pertinent to the user's interests." 9:38-45. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4.

	Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Henkin, 27:46-28:5, 28:30-44
An article of manufacture for use in a computer system, comprising:	See Figs. 3, 4; Claim 33. “A client computer for presenting advertising to a user, comprising:. . . [A] memory that stores browser software adapted to be executed . . . .” Claim 33.

a memory;	See Figs. 3, 4. The computers, which are used to carry out the advertising selection processes disclosed in the patent, inherently include memory. "A client computer for presenting advertising to a user, comprising: . . . [A] memory that stores browser software adapted to be executed . . . ." Claim 33. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9

	Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Henkin, 45:37-38, Fig. 22
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	See Chart for Claim 1 (above). See Figs. 3, 4. The advertising selection process inherently requires the storage of instructions in memory that are executed on the computer. "A client computer for presenting advertising to a user, comprising: . . . [A] memory that stores browser software adapted to be executed . . . ." Claim 33. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5

	Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	See Chart for Claim 1 (above).
automatically identifying a set of	See Chart for Claim 1 (above).

entities in the selected document content for searching information related thereto using the information retrieval system;	
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	See Chart for Claim 1 (above).
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	See Chart for Claim 1 (above).

Chart A-12

Claim chart for U.S. Patent No. 7,451,099 to Henkin

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**U.S. Patent No. 7,451,099**
Claim 1	
A method for automatically generating a query from selected document content, comprising:	"When a new document (e.g. a web page) is displayed on the client system to an end user, selected context associated from the document is analyzed for selected keywords. Specific context in the document may then be identified using the selected keyword information. Based upon the identified context in the document, a selected pop-up advertisement may be automatically displayed on the client system." 2:42-49. "It will be appreciated that the technique of the present invention enables businesses and advertisers to proactively interact with existing and potential on-line customers by marking up (e.g. underlining, highlighting, displaying additional text, graphics, and/or sound) selected keywords or phrases on any document, web page or web page which is currently being displayed on the user's computer system. In this way, static HTML pages may be converted at the user's computer system into customized, dynamic information which provides the ability for businesses and advertisers to proactively deliver dynamic, targeted and customized service to the end users via additional information." 44:8-19.

	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Finkelstein, p. 406 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	"Briefly, the contextual inventory is organized and categorized into Super Categories 302, Sub-Categories 304, and Keywords 306, as shown in FIG. 3. In accordance with one specific embodiment, this organizational tree is applied to organize the Keywords and/or phrases under their appropriate product Categories." 14:4-9. "The EZ Gateway 204 also performs category management tasks such as permitting the Ad Campaign Provider to enhance their ontology (the database of categories and keywords) on an ongoing basis, in

	real time." 9:20-25. "According to a specific embodiment, the contextual pop-ups media feature is based on the ability to identify keywords on the page, classify them into categories, and using the category assign a matching category to a given page. In order to illustrate this aspect of the present invention, an example will now be described in which it is assumed that a document (e.g. web page) is displayed on the user's computer system which includes the following text: truck, car, vehicle, SUV, sport car. In this particular example, the document may be classified as a page corresponding to the category name 'Auto'. Accordingly, in one implementation, it will be appropriate to display information from the 'Auto' category to the end user. In this way, the technique in the present invention provides a benefit of automatically displaying advertisements which match specific context of the page or documents displayed to the end user." 27:14-29. "According to a specific embodiment, the Category ID field 802 may be used to identify a specific category (e.g. 304 of FIG. 3) associated with specific keywords, key phrases, or titles. In one implementation, the Category ID value may be represented as a 4-byte integer." 29:25-29. See Figs. 3, 8, 23, 25C; 13:25-55. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184

	Finkelstein, p. 410 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40 Apte, 9:33-45
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	"According to a specific embodiment, the search engine is designed to support different business requirements. It may operate in a variety of search modes, including an exact search mode and a fuzzy search mode. The search engine may search the document text, WEB PAGE, title, Meta tags, or any other property of the selected document for selected key words or phrases. In one embodiment, a search is conducted by analyzing words in the text of a selected document to see if it includes specified keywords or phrases." 4:56-64. "Accordingly, when one of the Clients 110 is surfing the Internet, regardless of what web page they are viewing, the Client Application scans the text of the web page, analyzes the context, and marks up keywords and/or phrases." 7:22-25. "According to a specific embodiment, the contextual pop-ups media feature is based on the ability to identify keywords on the page, classify them into categories, and using the category assign a matching category to a given page. In order to illustrate this aspect of the present invention, an example will now be described in which it is assumed that a document (e.g. web page) is displayed on the user's computer system which includes the following text: truck, car, vehicle, SUV, sport car. In this particular example, the document may be classified as a page corresponding to the category name 'Auto'. Accordingly, in one implementation, it will be appropriate to display information from the 'Auto' category to the end user. In this way, the technique in the present invention provides a benefit of automatically displaying advertisements which match specific context of the page or documents displayed to the end user." 27:14-29.

	"Further, according to one implementation, different types of context within the document (e.g. document title, Meta keywords, Meta information, document text, etc.) may be weighted differently to emphasize each type's particular relevance. If more than one advertisement is associated with a particular campaign, selection of the appropriate advertisement may be based upon different mechanisms such as, for example, assigned priority, round robin, relative age, etc." 27:65-28:5. See Figs. 16A, 16B. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35 Finkestein, p. 410, 408 Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32
automatically categorizing the selected	"In a specific embodiment, the MAIN application 520 may be configured to analyze a selected

document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	document for keywords, categories and/or super categories in order to find a match for an appropriate pop-up advertisement or window to be displayed." 27:30-34. "According to a specific embodiment, the contextual pop-ups media feature is based on the ability to identify keywords on the page, classify them into categories, and using the category assign a matching category to a given page. In order to illustrate this aspect of the present invention, an example will now be described in which it is assumed that a document (e.g. web page) is displayed on the user's computer system which includes the following text: truck, car, vehicle, SUV, sport car. In this particular example, the document may be classified as a page corresponding to the category name 'Auto'. Accordingly, in one implementation, it will be appropriate to display information from the 'Auto' category to the end user. In this way, the technique in the present invention provides a benefit of automatically displaying advertisements which match specific context of the page or documents displayed to the end user." 27:14-29. "According to a specific embodiment, one or more algorithms may be used for determining the most appropriate matching category for the selected document being analyzed. For example, in one algorithm, a variety of different parameters relating to the current document may be analyzed in order to determine the most appropriate matching category." 27:46-51. See Fig. 16A. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61

	Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Finkestein, p. 410, 408 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	"According to a specific embodiment, one or more algorithms may be used for determining the most appropriate matching category for the selected document being analyzed. For example, in one algorithm, a variety of different parameters relating to the current document may be analyzed in order to determine the most appropriate matching category. For example, the current document may be analyzed and assigned a specific context score (CS) that is then compared with specific campaign requirement included in the campaign update files. If the context score is greater than or equal to a predetermined threshold value TH, then a pop-up ad (or other media type ads) may be displayed. According to one implementation, keywords which are identified in different elements of the document may be scored appropriately. The cumulative score of all the keywords that are found may be used to determine the CS value. If the identified keywords match a specific category of an ad campaign, and the cumulative CS value is above the threshold for that campaign, then a pop-up advertisement for that campaign may be displayed. Further, according to one implementation, different types of context within the document (e.g. document title, Meta keywords, Meta information, document text, etc.) may be weighted differently to emphasize each type's particular relevance. If more than one advertisement is associated with a particular campaign, selection of the appropriate advertisement may be based upon different mechanisms such as, for example, assigned priority, round robin, relative age, etc." 27:46-28:5.

	"FIG. 7 shows a specific embodiment of a flow diagram illustrating how various information flows are passed between the client system and the server system of the present invention. Initially, at (30) it is assumed that the user has clicked or selected a particular portion of text which has been marked up in accordance with the technique of the present invention. According to at least one embodiment, when the user clicks on a particular portion of marked up text, a pop-up layer (e.g. dynamic browser control layer) may be displayed (31) to the user providing the user with additional information relating to the topic of the marked up text portion. An example of one type of pop-up layer is illustrated in FIG. 21 of the drawings. According to specific embodiments, the pop-up layer may include, for example, one or more links, audio information, video information, and/or textual information." 28:30-44. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Finkelstein, p. 410 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8 Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17

	Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45
Claim 18	
An article of manufacture for use in a computer system, comprising:	"Generally, the various techniques of the present invention may be implemented on software and/or hardware." 45:37-38. See Fig. 22.
a memory;	"A software or software/hardware hybrid implementation of the various technique of this invention may be implemented on a general-purpose programmable machine selectively activated or reconfigured by a computer program stored in memory." 45:46-50. See Fig. 22. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189

	Finkelstein, p. 406 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33
instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	See Chart for Claim 1 (above). "A software or software/hardware hybrid implementation of the various technique of this invention may be implemented on a general-purpose programmable machine selectively activated or reconfigured by a computer program stored in memory." 45:46-50. See Fig. 22. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58

	HyPursuit, p. 189 col. 2. Finkelstein, p. 406 Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	See Chart for Claim 1 (above).
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	See Chart for Claim 1 (above).
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	See Chart for Claim 1 (above).
automatically formulating the query to restrict a search at the information retrieval	See Chart for Claim 1 (above).

system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	

Chart A-13

Claim chart for Finkelstein et al., *Placing Search in Context: The Concept Revisited*, Proc. of the 10th International World Wide Web Conference (May 1-5, 2001)

as prior art to

U.S. Patent No. 6,778,979

This chart is based upon Xerox's apparent construction of the claims, and is not an admission that those constructions are correct or appropriate.

'979 Patent	**Finkelstein et al., *Placing Search in Context: The Concept Revisited*, Proc. of the 10th International World Wide Web Conference (May 1-5, 2001)**
Claim 1	
A method for automatically generating a query from selected document content, comprising:	"In the IntelliZap system we developed, search is initiated from a text query marked by the user in a document she views, and is guided by the text surrounding the marked query in that document ('the context'). The context-guided information retrieval process involves semantic keyword extraction and clustering to automatically generate new, augmented queries. The latter are submitted to a host of general and domain-specific search engines." Page 406. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim

	element obvious. See, e.g.: Reader, para. 0001, 0002, 0004, 0015, Fig. 4. Black, Abstract, 1:64-67, 2:43, 1:47-48, Fig. 1, 4:18-20, 1:50-54, 2:10-14, 2:57-61, 2:42-45, 2:26-29, 3:29-35, 3:37-45, 3:55-57 Wieser, p. 5, lines 8-12, p. 2 lines 16-19 Rhodes, 1:56-2:6, 10:42-51, 12:53-57, 13:1-8, 13:15-19, 13:42-47 Horowitz, 2:42-51, 3:20-23 Fleming, Abstract, Fig. 2 Ford, 5:38, 5:30-39 Kraft, Abstract Apte, 6:60-67 Henkin, 2:42-49, 44:8-19
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to	"The classification algorithm classifies the context to a limited number of high-level domains[11] (e.g., medicine or law). A probabilistic analysis determines the amount of similarity between the domain signatures and the query context. The *a priori* assignment of search engines to domains is performed offline. Some of the search engines (such as AltaVista) allow limiting the search to a specific category. In such cases, categorizing the query in order to further constrain

a category of information in an information retrieval system;	the search usually yields superior results." Page 410. FN 11: "Currently, nine domains are defined, each of which is mapped to two or three search engines." To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0014, 0015 Mase, Abstract, Fig. 1, p. 377-378 Wieser, p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 2:15-24, 4:20-27, 4:45-55 Donaldson, 15:38-46, 17:17-19, 19:51-56, Fig. 8c HyPursuit, Fig. 3, p. 181, 184 Horowitz, 3:37-39, 5:60-62, 6:28-30, 11:8-15, 5:49-56, Fig. 5 Fleming, 1:44-53, 2:12-26, 6:24-44, 6:45-60 Ford, 11:4-17 Kraft, 5:55-6:10, 11:16-40

	Apte, 9:33-45 Henkin, 14:4-9, 9:20-25, 27:14-29, 29:25-29, Figs 3, 8, 23, 25C 13:25-55
automatically identifying a set of entities in the selected document content for searching additional information related thereto using the information retrieval system;	"The algorithm utilizes the semantic network to extract keywords from the context surrounding the user-selected text. These keywords are added to the text to form an augmented query. . . ." Page 410 "The IntelliZap system has three main components based on the semantic network: 1. Extracting keywords from the captured text and context. …" Page 410. "The context may include the sentence containing the query word or phrase, a few sentences surrounding the query term, the paragraph in which it resides, or even the whole document." Page 408. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0013, 0015 Wieser, p. 14, line 19 to p. 15 line 5 Rhodes, 13:19-34, 1:56-2:6, 2:15-54 Black, 2:26-29, 2:42-45, 3:29-35

	Horowitz, 6:49-55, 7:46-49, 9:27-28, 12:27-32, Figs. 4c-4d, 5, 7 Fleming, 3:5-8, 3:14-23, 5:62-6:7, 9:26-29, Figs. 2, 5, 8, 10B Ford, 11:4-11, 12:52-63 Kraft, 5:55-6:14, 9:34-36 Apte, 9:24-32 Henkin, 4:56-64, 7:22-25, 27:14-29, 27:65-28:5, Figs. 16A, 16B
automatically categorizing the selected document content using the organized classification of document content for assigning the selected document content a classification label from the organized classification of content; and	"[W]e attempt to classify the captured context in order to select domain-specific search engines that stand a good chance of providing more specialized results. The classification algorithm classifies the context to a limited number of high-level domains (e.g., medicine or law). A probabilistic analysis determines the amount of similarity between the domain signatures and the query context." Page 410 (footnote omitted). "The IntelliZap system has three main components based on the semantic network: … 2. High-level classification of the query to a small set of predefined domains. …" Page 410. "The context may include the sentence containing the query word or phrase, a few sentences surrounding the query term, the paragraph in which it resides, or even the whole document." Page 408.

	To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015 Mase, p. 377-379, Fig. 1 Wieser, p. 17, lines 15-32; p. 18, lines 16-22 Rhodes, Table 2, 5:12-28 Black, 2:10-18, 2:57-61 Donaldson, Figs. 9b and 9c, 18:47-63, 20:3-18, 20:19-29 HyPursuit, p. 181, 182, 185, 186, 191 Horowitz, 3:25-35, 7:66-8:5, Figs. 6-8 Fleming, 1:6-9, 3:5-8, 9:26-29, 9:65-10:2, 12:18-24 Ford, 11:4-17 Kraft, 11:16-40 Apte, 9:33-37 Henkin, 27:30-34, 27:14-29, 27:46-51, Fig 16A

automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	"The algorithm utilizes the semantic network to extract keywords from the context surrounding the user-selected text. These keywords are added to the text to form an augmented query. . . ." Page 410 "[W]e attempt to classify the captured context in order to select domain-specific search engines that stand a good chance of providing more specialized results. . . . Some of the search engines (such as AltaVista) allow limiting the search to a specific category. In such cases, categorizing the query in order to further constrain the search usually yields superior results." Page 410. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0015, Fig. 4. Wieser, p. 17, lines 15-32; p. 18, lines 14-22 Rhodes, 5:12-28 Black, 3:37-45, 3:55-57 Donaldson, 18:47-54, Figs. 9b and 9c, 18:55-63, 20:3-29 HyPursuit, p. 181, 182, 184, 185, 186 Horowitz, 3:64-4:8, 6:56-57, 8:1-7, 8:20-24, 10:13-18, Figs. 5-6, 8

	Fleming, 4:23-29, 7:51-8:4, 10:34-38, 15:19-23, Figs. 2, 7, 10B Ford, 12:2-7, 11:4-17 Kraft, 13:40-50, 13:64-67, 14:43-52 Apte, 4:20-22, 9:38-45 Henkin, 27:46-28:5, 28:30-44
Claim 18	
An article of manufacture for use in a computer system, comprising:	"Our system (named IntelliZap) is based on the client-server paradigm, where a client application running on user's computer captures the context around the text highlighted by the user. The server-based algorithms analyze the context, selecting most important context words and performing word sense disambiguation, and then prepare a set of augmented queries for subsequent search." Page 406.
a memory;	"Our system (named IntelliZap) is based on the client-server paradigm, where a client application running on user's computer captures the context around the text highlighted by the user. The server-based algorithms analyze the context, selecting most important context words and performing word sense disambiguation, and then prepare a set of augmented queries for subsequent search." Page 406. The client and server computers inherently include a memory. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.:

	Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 4, line 26 to p. 5 line 1 Rhodes, Fig. 1, 9:18-34 Black, 4:58-67, 1:50-57, 4:30-43. Donaldson, Fig. 4, 13:62-14:6, 6:53-7:10, 3:45-58 HyPursuit, p. 189 Horowitz, 5:25-30, Figs. 2, 9 Fleming, Fig. 1, 4:34-41 Ford, 3:34-39, Fig. 3 Kraft, 1:23-27, Fig. 1 Apte, Figs. 3, 4, claim 33 Henkin, 45:37-38, Fig. 22

instructions stored in the memory for operating a method for automatically generating a query from selected document content, comprising:	See Chart for Claim 1 (above). "Our system (named IntelliZap) is based on the client-server paradigm, where a client application running on user's computer captures the context around the text highlighted by the user. The server-based algorithms analyze the context, selecting most important context words and performing word sense disambiguation, and then prepare a set of augmented queries for subsequent search." Page 406. The client and server computers inherently store the IntelliZap software in memory in order to make it executable. To the extent this reference does not teach this claim element, this reference in combination with the knowledge of one of ordinary skill in the art renders this claim element obvious. See, e.g.: Reader, para. 0014. Mase, p. 382 col. 1. Wieser, p. 5, lines 8-12, p. 2 lines 16-19; p. 15, lines 8-11; p. 17, lines 15-32; p. 18, lines 16-22; p. 14, line 19 to p. 15 line 5 Rhodes, 9:18-34, 10:1-17 Black, 4:58-67, 1L50-57 Donaldson, Fig. 4 and 13:62-14:6, 6:53-7:10, 3:45-58

	HyPursuit, p. 189 col. 2. Horowitz, 5:30-33, Fig. 2 at 103 Fleming, 4:34-41 Ford, 13:10-19 Kraft, 1:23-27 Henkin, 45:46-50, Fig. 22
defining an organized classification of document content with each class in the organized classification of document content having associated therewith a classification label; each classification label corresponding to a category of information in an information retrieval system;	See Chart for Claim 1 (above).
automatically identifying a set of entities in the selected document content for searching information related thereto using the information retrieval system;	See Chart for Claim 1 (above).
automatically categorizing the selected document content using the organized classification of document content for assigning the selected	See Chart for Claim 1 (above).

document content a classification label from the organized classification of content; and	
automatically formulating the query to restrict a search at the information retrieval system for information concerning the set of entities to the category of information in the information retrieval system identified by the assigned classification label.	See Chart for Claim 1 (above).