

EXHIBIT B: THE PARTIES' PROPOSED CONSTRUCTIONS OF DISPUTED CLAIM TERMS, PHRASES, AND CLAUSES

U.S. Patent No. 5,544,352

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
26	A non-semantic method	A method reciting steps that analyze or use non-semantic relationships (<i>i.e.</i> , citation or hyperlink relationships).	A method of analysis that does not account for phrases and words in a textual object and that is based on explicit references to other textual objects
26	A ... method for numerically representing objects in a computer database and for computerized searching of numerically represented objects in the computer database.	A computer-implemented ... method for numerically representing a set of objects in a computer database and for computerized searching of the set of numerically represented objects in the computer database	No construction necessary
26	objects in a computer database	No construction necessary Alternatively, Plaintiff offers this definition: Any electronic collection of objects stored in computer media.	a defined collection of electronic data available for computerized searching
26	creating a first numerical representation for each identified object in the database based upon the object's direct relationship with other objects in the database	creating a first numerical representation for each identified object within the set of numerically represented objects in the database based upon the object's direct relationship with other objects in the database	creating a first numerical representation for each marked object in the database based upon citations determined to be the object's direct citations to other objects in the database
26	generating a second numerical representation	generating a second numerical representation of each identified object within the set of numerically	generating a second numerical representation of each object in the database that describes the indirect

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	of each object based on the analysis of the first numerical representation	represented objects based on the analysis of the first numerical representations	citation relationships found by analyzing the first numerical representation
26	identified object	an object identified by a search using a computer and a second numerical representation	each object that has been marked
26	analyzing the first numerical representations for indirect relationships	No construction necessary	using the first numerical representations to locate and identify the indirect relationships
26	searching the objects in the database using a computer and the stored second numerical representations	No construction necessary	The searching step is performed after the other recited claim steps. construe "searching the objects in the database using a computer" as retrieving objects from a database in response to selection of an object by an end user after the prior recited steps have been completed
26	storing the first numerical representation for use in computerized searching	No construction necessary	See construction for "computerized searching" below.
26	storing the second numerical representation for use in computerized searching	No construction necessary	See construction for "computerized searching" below.
26	computerized searching	No construction necessary	retrieving objects from a database in response to selection of an object by an end user after the prior recited steps have been completed
27	boolean word index	No construction necessary Alternatively, Plaintiff offers this construction: Definition of Boolean Word Index: A word index that is capable of supporting Boolean	a list of core English words and the respective paragraph numbers where those words are located

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		searches, which use keywords and operators such as "AND," "OR" and "NOT" to locate documents	
27	semantic indexing techniques	No construction necessary Alternatively, Plaintiff offers this construction for "semantic indexing techniques": methods for creating and using indexes that use text analysis	creating a word index for text analysis
33	coefficients of similarity	No construction necessary Alternatively, Plaintiff offers this construction for "coefficients of similarity": Coefficients of similarity are values indicating similarity.	a value between 0 and 100% representing the comparative Euclidean distance between two objects in the database
34	wherein the marking step includes the step of marking subsets of objects in the database	Marking portions of an object (words, phrases, paragraphs or other portions of an object)	marking portions (words, phrases, paragraphs, or portions of other full textual objects that are referred to in another full textual object) of an object
34	subset	A portion of an object (word, phrase, paragraph, or other portion of an object).	A portion (words, phrases, paragraphs) of an object or a portion of another object that is referred to in the object
35	clustering the subsets into sections based upon the subset analysis	No construction necessary Alternatively, Plaintiff offers this construction: grouping the subsets into sections based upon an analysis of the subset numerical representations	grouping paragraphs based on weighing their Euclidean distances and contiguity
35	section	No construction necessary Alternatively, Plaintiff offers this construction for	group of contiguous or related paragraphs

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		section: a group of subsets	
37	graphically displaying one or more of the identified objects	No construction necessary	displaying a graphic showing the relations, patterns, and similarity found among one or more of the identified objects
39	pool-importance searching to identify an important pool of textual objects, important in relation to the objects in the selected pool	searching objects to identify a pool of important textual objects from the selected pool by ranking the relative importance of the objects in the selected pool	searching objects to identify a group of important textual objects from the selected pool by ranking the relative importance of the objects in the selected pool
39	pool-similarity searching to identify a similar pool of textual objects, similar in relation to the objects in marked pool	searching objects to identify a pool of similar textual objects to the selected pool by ranking the relative similarity of objects in the marked pool	searching objects to identify a group of similar textual objects to the selected pool by determining the relative similarity of objects in the marked pool
40	identifying a paradigm pool of objects	identifying a pool of exemplary, model, or archetypical objects that serve as a reference point for analyzing direct and indirect relationships between objects	identifying a group of textual objects with a determined geographic center calculated by the mean of the Euclidean distances of all the textual objects in the pool
41	A method for the non-semantic indexing of objects stored in a computer database, the method for use in searching the database for the objects	A method for the non-semantic indexing of a set of objects stored in a computer database, the method for use in searching the database for the objects in the set of indexed objects	A method of analysis and searching that does not account for phrases and words in a textual object and that is based on explicit references to other textual objects
41	objects stored in a computer database	No construction necessary	a defined collection of electronic data available for computerized searching

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		Alternatively, Plaintiff offers this construction for database: any electronic collection of objects stored in computer media	
41	generating a second numerical representation for each object based on each object's references to other objects	generating a second numerical representation for each object within the set of indexed objects based on each object's references to other objects	generating a second numerical representation for each labeled object
41	creating a third numerical representation for each object	creating a third numerical representation for each object within the set of indexed objects	creating a third numerical representation for each labeled object
41	calculating a fourth numerical representation for each object based on the euclidean distances between the third numerical representations	calculating a fourth numerical representation for each object within the set of indexed objects based on the Euclidean distances between the third numerical representations.	calculating a fourth numerical representation for each labeled object based on the euclidean distances between the third numerical representations
41	determining a fifth numerical representation for each object by processing the fourth numerical representations through similarity processing	determining a fifth numerical representation for each object within the set of indexed objects by processing the fourth numerical representations through similarity processing Similarity processing is any processing to determine the similarity of objects. For example, determining if two objects relate to the same topic is similarity processing. Another example would be examining link relationships to determine if two objects are similar.	determining a fifth numerical representation for each labeled object by processing the fourth numerical representations to determine the degree of similarity between each labeled object and the other labeled objects
41	storing the fifth numerical representations in the computer database as the	No construction necessary	The searching is performed after the other recited claim steps. construe "searching for objects in the database " as retrieving objects from a database in response to

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	index for use in searching for objects in the database		selection of an object by an end user after the prior recited steps have been completed
42	clustering objects having similar characteristics	No construction necessary	grouping objects based on weighing their Euclidean distances
43	clustering adjacent paragraphs that have similar characteristics	No construction necessary. Alternatively, plaintiff proposes this construction grouping adjacent paragraphs that have similar characteristics	grouping paragraphs based on weighing their Euclidean distances and contiguity
44	analyzing the second numerical representation against a plurality of empirically defined patterns, wherein certain patterns are more important than others	No construction necessary. Alternatively, Plaintiff offers this construction: Empirically defined patterns are patterns of citation relationships that have been determined to be useful in search. Examples of such patterns include (assuming that a, b, and c occur before A; A occurs before d, e, and f, which occur before B; and B occurs before g, h, and i) the following: 1. B cites A; 2. B cites c, and A cites c; 3. g cites A, and g cites B; 4. B cites f, and f cites A; 5. B cites f, f cites e, and e cites A; 6. B cites f, f cites e, e cites d, and d cites A; 7. g cites A, g cites a, h cites B, and h cites a; 8. i cites B, i cites f (or g), and f (or g) cites A; 9. i cites g, i cites A, and g cites B; 10. i cites g (or d), i cites h, g (or d) cites A, h cites	patterns of citation relationships previously identified as useful in search

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		g, and h cites B; 11. i cites A, i cites e, and B cites e; 12. i cites A, i cites e, and B cites e; 13. g cites A, g cites a, h cites a, and h cites B; 14. i cites a, i cites d, and B cites d; and A cites a; 15. i cites d, i cites B, and d cites a; 16. B cites d, d cites b, and A cites b; 17. B cites d, d cites a, b cites a, and A cites b; 18. B cites a, d cites b, and A cites a	
44	weighing the analyzed second numerical representations according to the importance of the patterns	No construction necessary	assigning a weight to the second numerical representations according to the results of their analysis against the empirical patterns ranked by importance
45	entering search commands	No construction necessary	initiating a search by the end user inputting commands to the computer processor via an input means
45	presenting one or more objects	No construction necessary	presenting a diagram showing an identified object and its connections and interrelations to other identified objects
45	quantifying the relationship of the selected object to each object in the group of objects	No construction necessary	calculating the Euclidean distances from the selected object to each object in the group of identified objects

U.S. Patent No. 5,832,494

Claim	Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
1	database	No construction necessary Alternatively, Plaintiff offers this definition: Any electronic collection of objects stored in computer media..	a defined collection of electronic data stored in a computer device that is connected to a computer processor
All	Cluster link	A relationship defined by mathematically analyzing direct links in a set of paths between two nodes	a relationship between two nodes based upon a statistical analysis of multiple relationships between nodes in a database
All	Candidate cluster links	A set of cluster links from a selected node to other nodes from which actual cluster links may be derived	the set of all possible cluster links between a search node and a target node
All	Actual cluster links	Cluster links that are derived from candidate cluster links for use in the display of nodes and are derived prior to searching.	subset of candidate cluster links for use in display based on weights in relation to the selected node under analysis
1	wherein the step of generating comprises an analysis of one or more indirect relationships in the database	No construction necessary	wherein the step of generating comprises identifying and classifying one or more non-semantical relationships that are characterized by at least one intermediate node between two nodes in the database
1	deriving actual cluster links from the candidate cluster links	choosing actual cluster links based on the weight of direct links in a set of paths between nodes	See separate definition of "actual cluster links " in supplemental terms.
All	node	A node is any entity that can be represented on a display. A node can be an object in a database, a portion of an object in a database, a document, a section of a document, a World Wide Web page, website, or an idea or concept, such as a topic name.	any entity that can be represented by a box on a display, for example, an object in a database, a portion of an object in a database, a document, a section of a document, a World Wide Web page, or an idea or concept, such as a topic name.

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1	selecting a node for analysis	No construction necessary	identifying, by an end user, a node to be non- semantically analyzed
3	selecting the top rated candidate cluster links, wherein the top rated candidate cluster links are those which are most closely linked to the node under analysis*	No construction necessary Plaintiff offers the following alternative construction: Selecting candidate cluster links to be used as actual cluster links according to the weight that corresponds to being most closely linked to the node under analysis	choosing a subset of candidate cluster links whose weights indicate that they are the strongest cluster links for the node under analysis
7	external object	No construction necessary Alternatively, Plaintiff offers this construction: An object stored outside the database.	an object that is not within the database
7	activating the desired node	No construction necessary Alternatively, Plaintiff offers the following construction: Initiating a function associated with a desired node.	Indefinite.
8	independent application which can be executed in background	an application separate from the database that can run simultaneously with other programming	software application that is not within the database and that runs without interaction by the user while the user is working on another task
9	independent application which can be executed as an extension	An application that is separate from the database that connects to another computer or application	software application that is not within the database and that modularly adds functionality to another program
12	wherein the generating step includes an analysis of one or more indirect	No construction necessary	wherein the generating step includes identifying and classifying one or more non-semantical relationships that are characterized by at least one intermediate

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	relationships in the database		node between two nodes in the database
12	deriving an actual cluster link set for the selected object using the generated candidate cluster link set	choosing a set of actual cluster links for the selected object based on the weight of direct links in a set of paths between two nodes	determining the subset of candidate cluster links for use in display based on weights in relation to the selected object under analysis
12	selecting an object to determine the proximity of other objects to the selected object	No construction necessary	inputting, by an end user, an object to non-semantically determine the relations, patterns, and similarity of other objects to the selected object
14	determining the weight of the path	No construction necessary except that Plaintiff offers this construction of "path": A path is a particular sequence of citations that make up a relationship between two nodes	computing the combined weight of direct links in each path of a candidate cluster link and summing those combined weights
14	for each path	No construction necessary except that Plaintiff offers this construction of "path": A path is a particular sequence of citations that make up a relationship between two nodes	for each chain of direct links between two nodes
14	initializing a set of candidate cluster links	setting the computer to the starting conditions for the generation of candidate cluster links	defining the weight of each member of the stored set of candidate cluster links as equal to one path length of zero from the start node
15	deriving the actual cluster links wherein the actual cluster links are a subset of the candidate cluster links	choosing a set of actual cluster links based on the weight of direct links in a set of paths between nodes wherein the actual cluster links are a subset of the candidate cluster links	determining the subset of candidate cluster links for display based on weights in relation to the selected node under analysis
18	A method of analyzing a database	No construction necessary	A non-semantical method of analyzing a database
18	identifying at least one object in the database, wherein the stored	No construction necessary	non-semantically locating at least one object in the database based on end user input

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	numerical representation is used to identify objects		
23	generating a graphical display for representing an object	No construction necessary	displaying a graphic showing the relations, patterns, and similarity found between the object and other objects
33	A method of representing data in a computer database	No construction necessary	A non-semantic method of representing data in a computer database
33	generating node identifications based upon the assigned links, wherein node identifications are generated so that each link represents a relationship between two identified nodes	No construction necessary	identifiers that are unique to each node and that take into account each link associated with each respective node
33	searching for node identifications using the stored links	No construction necessary	using stored links to non-semantically locate node identifications based on end user input

U.S. Patent No. 6,233,571

Claim	Disputed Term	Plaintiff's Proposed Construction	Defendants' Construction
1, 11, 22	activating a link represented on the source map, wherein a user may hyperjump to a node represented as a node of the link	activating a link represented on the map of source links (<i>i.e.</i> , outbound links), wherein a user may hyperjump to a node represented as a node of the link	“activating a link “: enabling a reference on a source map to a node to be selectable by a user to allow the user to access the node “source map “: see separate definition below
1	active links	No construction necessary	direct links to nodes in a network outside the database and computer that may be accessed
1	generating a source map, wherein the source map represents hyperjump links that identify a chosen node as a destination of a link	generating a map of source links (<i>i.e.</i> , outbound links), wherein the map represents hyperjump links that identify a chosen node as a destination of a link a node	non-semantically evaluating an object in the database to display a map of all of the nodes external to the database and computer that the object directly links to, including the chosen node
2	activating an embedded icon	No construction necessary Alternatively, plaintiff offers this construction: Initiating a function associated with an icon	enabling a small graphical image that represents a minimized, running software application within the source map to be selectable by a user
5	choosing a node	No construction necessary	identifying, by an end user, a node for non-semantic analysis
All	hyperjump data /hyperjump links	No construction necessary Hyperjump data is data related to hypertext systems such as web pages, websites, Universal Resource Locators, and hyperjump pointers	direct links that connect web pages, web sites, and documents outside the database
5	wherein the step of determining comprises proximity analyzing the identified hyperjump	a method of analyzing the identified hyperlink data for indirect relationships to generate a reference of relations, patterns, or similarity for use in subsequent computerized searching	analyzing the identified hyperjump data by using statistical techniques and empirically developed algorithms to non-semantically determine the relations, patterns, and similarity between objects

Claim	Disputed Term	Plaintiff's Proposed Construction	Defendants' Construction
	data		
10	visually representing more than one coordinate plane	No construction necessary	displaying information using more than two axes
11	generating a source map using one or more of the determined hyperjump data, wherein the source map represents hyperjump links that identify the chosen node as a destination of a link	No construction necessary Alternatively, plaintiff offers this definition: generating a map of source links (<i>i.e.</i> , outbound links), wherein the map represents hyperjump links that identify a chosen node as a destination of a link a node	non-semantically evaluating a node by using the determined hyperjump data to display a map of all of the other nodes external to the database and computer that the node directly links to, including the chosen node
12	choosing an identifiable web page	No construction necessary	identifying, by an end user, an identifiable web page for non-semantical cluster analysis
12	cluster analyzing the Universal Resource Locators for indirect relationships	generating a set of candidate cluster links for objects indirectly related to the chosen web page using the Universal Resource Locators, assigning weights to the candidate cluster links and deriving actual cluster links from the set of candidate cluster links using the weights of the candidate cluster links	non-semantically generating the set of candidate cluster links for web pages indirectly related to the chosen web page using the Universal Resource Locators, assigning weights to the candidate cluster links and deriving actual cluster links from the set of candidate cluster links based on the assigned weights
15	generate a graphical user display	No construction necessary	displaying a graphic showing the relations, patterns, and similarity found between the web page and other web pages
16	cluster analyzing the Universal Resource Locators for indirect relationships	generating the set of candidate cluster links for objects indirectly related to the chosen document using the Universal Resource Locators, assigning weights to the candidate cluster links, and deriving actual cluster links from the set of candidate cluster links based on the assigned weights	non-semantically generating the set of candidate cluster links for documents indirectly related to the chosen document using the Universal Resource Locators, assigning weights to the candidate cluster links and deriving actual cluster links from the set of candidate cluster links based on the assigned weights
16	choosing a document	No construction necessary	identifying, by an end user, a document for non-semantical cluster analysis

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18	cluster analyzing the pages	No construction necessary	non-semantically generating the set of candidate cluster links for pages indirectly related to the chosen page using the Universal Resource Locators, assigning weights to the candidate cluster links and deriving actual cluster links from the set of candidate cluster links based on the assigned weights
21	choosing a node	No construction necessary	identifying, by an end user, a node for non-semantical analysis
22	indirect reference	No construction necessary An indirect reference is a relationship where at least one intermediate node exists between two nodes and where the intermediate nodes connect the two nodes through a chain of citations	a reference where at least one intermediate node exists between two nodes and where the intermediate nodes connect the two nodes through a chain of explicit citations
22	generating a source map using one or more of the determined hyperjump data, wherein the source map represents hyperjump links that identify the chosen node as a destination of a link	generating a map of source links (<i>i.e.</i> , outbound links) using one or more of the determined hyperjump data, wherein the source map represents hyperjump links that identify the chosen node as a destination of a link	non-semantically evaluating a node by using the determined hyperjump data to display a map of all of the other nodes that the hyperjump data directly links to, including the chosen node