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# Exhibit 3

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INVALIDITY CLAIM CHART FOR U.S. PATENT NO. 5,832,494 BASED ON "COMPARING TWO ALGORITHMS FOR DOCUMENT RETRIEVAL USING CITATION LINKS," JULIE BICHTELER AND EDWARD EATON (1977) ("BICHTELER & EATON, 1977)

<p>1. A method of analyzing a database with indirect relationships, using links and nodes, comprising the steps of:</p>	<p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document.")</p> <p>See also Background.</p>
<p>Selecting a node for analysis;</p>	<p>Bichteler &amp; Eaton, e.g., at 192 ("The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . .").</p> <p>See also Background and Methodology.</p>
<p>Generating candidate cluster links for the selected node, wherein the step of generating comprises an analysis of one or more indirect relationships in the database;</p>	<p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document. . . . The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . . The actual attributes are provided by one or more documents, which can be understood to be an initial seed point or points for the cluster or clusters to be formed. The algorithm can be applied again using the documents in an initial cluster to provide new attributes, if more than one cluster of documents is found initially, the algorithm can be applied to each.")</p> <p>See also Background and Methodology.</p>
<p>Deriving actual cluster links from the candidate cluster links;</p>	<p>Bichteler &amp; Eaton, e.g., at 193 ("Although the Schiminovich algorithm is a successful retrieval procedure, it does seem to require a minimum of two passes through the file representing the document collection, one pass each cycle.")</p>

Claim 1 (from 2947 main)	Blattner & Labs (977)
identifying one or more nodes for display; and	See also Background, Purpose, and Methodology. Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.
displaying the identity of one or more nodes using the actual cluster links.	Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.
2. The method of claim 1 wherein each link is given a length, the step of generating the candidate cluster links comprises the steps of:	Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.
Choosing a number as the maximum number of link lengths that will be examined, and	Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.
examining only those links which are less than the maximum number of link lengths.	Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.
3. The method of claim 1 wherein the step of deriving actual cluster links comprises the step of: 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.	Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.

<p>5. The method of claim 1 wherein the step of generating the candidate cluster links comprises the step of:</p> <p>eliminating candidate cluster links, wherein the number of candidate cluster links is limited and the closest candidate cluster links are chosen over the remaining links.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>7. The method of claim 1, wherein one or more nodes provide external connections to objects external to the database, the method further comprising the steps of:</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>Activating the desired node; and</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>Accessing the external object linked to the node.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>8. The method of claim 7, wherein the external object is an independent application which can be executed in background, the method further comprising the step of:</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>executing the independent application.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>

<p>9. The method of claim 8, wherein one or more nodes provide links to more than one independent application which can be executed as an extension, the method further comprising the steps of:</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>displaying a list of independent applications linked to the node, wherein the step of accessing accesses an independent application.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>10. The method of claim 8, wherein the connection provides the independent application access to the information stored within the database.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>11. The method of claim 7, wherein the external connection is to another computer, wherein information is located that can be accessed, the step of accessing further comprising the step of:</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>accessing the information located within the computer.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>12. A method for determining the proximity of an object in a stored database to another object in the stored database using indirect relationships, links, and a display, comprising:</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p> <p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document.")</p> <p>See also Background.</p>

<p>Selecting an object to determine the proximity of other objects to the selected object;</p>	<p>Bichteler &amp; Eaton, e.g., at 192 ("The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . .").</p> <p>See also Background and Methodology.</p>
<p>generating a candidate cluster link set for the selected object, wherein the generating step includes an analysis of one or more indirect relationships in the database;</p>	<p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document. . . . The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . . The actual attributes are provided by one or more documents, which can be understood to be an initial seed point or points for the cluster or clusters to be formed. The algorithm can be applied again using the documents in an initial cluster to provide new attributes; if more than one cluster of documents is found initially, the algorithm can be applied to each.").</p> <p>See also Background and Methodology.</p>
<p>Deriving an actual cluster link set for the selected object using the generated candidate cluster link set; and</p>	<p>Bichteler &amp; Eaton, e.g., at 193 ("Although the Schiminovich algorithm is a successful retrieval procedure, it does seem to require a minimum of two passes through the file representing the document collection, one pass each cycle.").</p> <p>See also Background, Purpose, and Methodology.</p>
<p>Displaying one or more of the objects in the database, referred to in the actual cluster link set, on a display.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>13. The method of 12 wherein a set of direct links exists for the database, and wherein the step of generating a candidate cluster link set comprises: recursively analyzing portions of the set of direct links for indirect links.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>

Title	Description
14. A method for representing the relationship between nodes using stored direct links, paths, and candidate cluster links, comprising the steps of:	<p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document.")</p> <p>See also Background.</p>
initializing a set of candidate cluster links;	<p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document. . . . The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . . The actual attributes are provided by one or more documents, which can be understood to be an initial seed point or points for the cluster or clusters to be formed. The algorithm can be applied again using the documents in an initial cluster to provide new attributes; if more than one cluster of documents is found initially, the algorithm can be applied to each.")</p> <p>See also Background and Methodology.</p>
Selecting the destination node of a path as the selected node to analyze;	<p>Bichteler &amp; Eaton, e.g., at 192 ("The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . .")</p> <p>See also Background and Methodology.</p>
retrieving the set of direct links from the selected node to any other node in the database;	<p>Bichteler &amp; Eaton, e.g., at 192 ("The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . .")</p> <p>See also Background and Methodology.</p>
Determining the weight of the path using the retrieved direct links;	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references</p>

<p>repeating steps b through d for each path; and</p>	<p>identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>Storing the determined weights as candidate cluster links.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>15. The method of claim 14 further comprising the step of deriving the actual cluster links wherein the actual cluster links are a subset of the candidate cluster links.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>16. The method of claim 15 wherein the step of deriving comprises the step of choosing the top rated candidate cluster links.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>18. A method of analyzing a database having objects and a first numerical representation of direct relationships in the database, comprising the steps of:</p>	<p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document.") See also Background.</p>
<p>generating a second numerical representation using the first numerical representation, wherein the second numerical representation accounts for</p>	<p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must</p>



<p>indirect relationships in the database;</p>	<p>exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document. . . . The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . . The actual attributes are provided by one or more documents, which can be understood to be an initial seed point or points for the cluster or clusters to be formed. The algorithm can be applied again using the documents in an initial cluster to provide new attributes; if more than one cluster of documents is found initially, the algorithm can be applied to each. . . .)</p> <p>See also Background and Methodology.</p>
<p>storing the second numerical representation;</p>	<p>Bichtelet &amp; Eaton, e.g., at abstract ("[S]earches on the AIP SPIN data base were conducted.")</p>
<p>identifying at least one object in the database, wherein the stored numerical representation is used to identify objects; and</p>	<p>Bichtelet &amp; Eaton, e.g., at abstract ("[S]earches on the AIP SPIN data base were conducted.")</p>
<p>displaying one or more identified objects from the database.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>19. The method of claim 18 wherein the step of generating a second numerical representation comprises:</p>	<p>Bichtelet &amp; Eaton, e.g., at 192 ("The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . .")</p> <p>See also Background and Methodology.</p>
<p>selecting an object in the database for analysis;</p>	<p>Bichtelet &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document. . . . The algorithm itself operates only on a link table which indicates for each document whether or not it possesses</p>
<p>analyzing the direct relationships expressed by the first numerical representation for indirect relationships involving the selected object; and</p>	<p>only on a link table which indicates for each document whether or not it possesses</p>
<p>creating a second numerical representation of the direct and indirect relationships involving the selected object.</p>	<p>only on a link table which indicates for each document whether or not it possesses</p>

	<p>each of a set of attributes. The attributes may represent citations . . . . The actual attributes are provided by one or more documents, which can be understood to be an initial seed point or points for the cluster or clusters to be formed. The algorithm can be applied again using the documents in an initial cluster to provide new attributes; if more than one cluster of documents is found initially, the algorithm can be applied to each.”)</p> <p>See also Background and Methodology.</p>
<p>20. The method of 18 wherein the step of identifying at least one object in the database comprises:</p> <p>searching for objects in a database using the stored numerical representation, wherein direct and/or indirect relationships are searched.</p>	<p>Bichteler &amp; Eaton, e.g., at abstract (“[S]earches on the AIP SPIN data base were conducted.”)</p>
<p>21. The method of claim 18 wherein the displaying step comprises:</p> <p>generating a graphical display for representing an object in the database.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants’ P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>23. A method of representing data in a computer database with relationships, comprising the steps of:</p> <p>assigning nodes node identifications;</p>	<p>Bichteler &amp; Eaton, e.g., at 192 (“Schiminovich has proposed a ‘bibliographic pattern discovery algorithm’ which finds clusters of related documents in a collection, where the operational definition of ‘related’ is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document.”).</p> <p>See also Background.</p>
<p>generating links, wherein each link represents a relationship between two nodes and is identified by</p>	<p>Bichteler &amp; Eaton, e.g., at 192 (“The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . .”).</p> <p>See also Background and Methodology.</p>
	<p>Bichteler &amp; Eaton, e.g., at 192 (“Schiminovich has proposed a ‘bibliographic pattern discovery algorithm’ which finds clusters of related documents in a collection, where the operational definition of ‘related’ is that the documents in a cluster must</p>

<p>the two nodes in which the relationship exists;</p>	<p>exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2); two documents have one unit of coupling between them if they each cite a third document. . . . The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . . The actual attributes are provided by one or more documents, which can be understood to be an initial seed point or points for the cluster or clusters to be formed. The algorithm can be applied again using the documents in an initial cluster to provide new attributes; if more than one cluster of documents is found initially, the algorithm can be applied to each. ").</p> <p>See also Background and Methodology.</p>
<p>allocating a weight to each link, wherein the weight signifies the strength of the relationship represented by the link relative to the strength of other relationships represented by other links; and</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>displaying a node identification.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>24. The method of claim 23, wherein the data in the database is objects, wherein the nodes represent objects and each object is assigned a node identification, and wherein the relationships that exist comprise direct relationships between objects, further comprising the step of: searching generated links, wherein nodes are located by searching the generated links.</p>	<p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2); two documents have one unit of coupling between them if they each cite a third document. ").</p> <p>See also Background.</p> <p>Bichteler &amp; Eaton, e.g., at abstract ("[S]earches on the AIP SPIN data base were conducted. ")</p>
<p>25. The method of claim 23 further comprising the step of: generating link sub-types, comprising the</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art</p>

<p>steps of:</p>	<p>at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>identifying each link sub-type with a name; and</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>Providing a comment to one or more link subtypes.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>31. The method of claim 23 wherein attributes are assigned to nodes.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>32. The method of claim 31 further comprising the step of: generating node sub-types wherein the node sub-types are assigned information.</p>	<p>Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants' P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
<p>33. A method of representing data in a computer database and for computerized searching of the data, wherein relationships exist in the database, comprising:</p>	<p>Bichtelev &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document.") See also Background.</p>
<p>assigning links to represent relationships in the database;</p>	<p>Bichtelev &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection,</p>

<p>generating node identifications based upon the assigned links, wherein node identifications are generated so that each link represents a relationship between two identified nodes;</p>	<p>where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document. ")</p> <p>See also Background.</p> <p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document. . . . The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . . The actual attributes are provided by one or more documents, which can be understood to be an initial seed point or points for the cluster or clusters to be formed. The algorithm can be applied again using the documents in an initial cluster to provide new attributes; if more than one cluster of documents is found initially, the algorithm can be applied to each. ")</p> <p>See also Background and Methodology.</p>
<p>storing the links and node identifications, wherein the links and nodes may be retrieved;</p> <p>searching for node identifications using the stored links; and</p>	<p>Bichteler &amp; Eaton, e.g., at abstract ("[S]earches on the AIP SPIN data base were conducted.")</p> <p>Bichteler &amp; Eaton, e.g., at 192 ("Schiminovich has proposed a 'bibliographic pattern discovery algorithm' which finds clusters of related documents in a collection, where the operational definition of 'related' is that the documents in a cluster must exhibit similar citation patterns. Thus, it makes use of the notion of bibliographic coupling, first defined by Kessler (2): two documents have one unit of coupling between them if they each cite a third document. . . . The algorithm itself operates only on a link table which indicates for each document whether or not it possesses each of a set of attributes. The attributes may represent citations . . . . The actual attributes are provided by one or more documents, which can be understood to be an initial seed point or points for the cluster or clusters to be formed. The algorithm can be applied again using the documents in an initial cluster to provide new attributes; if more than one cluster of documents is found initially, the algorithm can be applied</p>

<p>displaying node identifications, wherein the displayed node identifications are located in the searching step.</p>	<p>to each.”)          Bichteler &amp; Eaton, e.g., at abstract (“[S]earches on the AIP SPIN data base were conducted.”)          Disclosed either expressly or inherently in the teachings of the reference and its incorporated disclosures taken as a whole, or in combination with the state of the art at the time of the alleged invention, as evidenced by substantial other references identified in Defendants’ P. R. 3-3 statement and accompanying charts. Rather than repeat those disclosures here, they are incorporated by reference into this chart.</p>
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Defendants reserve the right to revise this contention chart concerning the invalidity of the asserted claims as appropriate, for example, depending upon the Court’s construction of the asserted claims, any findings as to the priority date of the asserted claims, and/or positions that Plaintiff or its expert witness(es) may take concerning claim interpretation, construction, infringement, and/or invalidity issues.

Plaintiff’s Infringement Contentions are based on an apparent construction of the claim terms. Defendants disagree with these apparent constructions. Nothing stated herein shall be treated as an admission or suggestion that Defendants agree with Plaintiff regarding either the scope of any of the asserted claims or the claim constructions advanced by Plaintiff in its Infringement Contentions or anywhere else, or that any of Defendants’ accused technology meets any limitations of the claims. Nothing stated herein shall be construed as an admission or a waiver of any particular construction of any claim term. Defendants also reserve all their rights to challenge any of the claim terms herein under 35 U.S.C. § 112, including by arguing that they are indefinite, not supported by the written description and/or not enabled. Accordingly, nothing stated herein shall be construed as a waiver of any argument available under 35 U.S.C. § 112.