EXHIBIT C: PLAINTIFF'S INTRINSIC AND EXTRINSIC EVIDENCE

<u>U.S. Patent No. 5,544,352</u>

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
26	A non-semantical method	A method reciting steps that analyze or use non-semantical relationships (i.e., citation or hyperlink relationships).	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Fig. 6 Col. 1, ln. 1-Col. 2, ln. 48; Col. 4, ln. 46-56; Col. 5, ln. 1-14; Col. 12, ln. 1-17 Col. 12, ln. 32-52 Col. 12, ln. 52-Col. 14, ln. 16 Col. 13, ln. 57-Col. 14, ln. 4 Col. 14, ln. 4-18 Col. 11, ln. 39-46 Col. 15, ln. 13-Col. 17, ln. 36 Col. 17, ln. 61-Col. 19, ln. 15 Col. 19, ln. 40-52 Col. 28, ln. 53-65 The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3A-5G, 7, 8, 10B, and 14A-14B Col. 46, ln. 3 – Col. 48, ln. 18 Claims 27, 39, 40 and 41 of the '352 patent.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
	Term	Construction	Claims 7, 15, 16, 17, 18 of the '571 patent. The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3, ln. 26-Col. 4, ln. 62 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35 V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim
			element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Abstract Fig. 1 Fig. 3A Fig. 3B Fig. 3D Col. 1, ln. 1-11; Col. 1, ln. 28-Col. 2, ln. 48. Col. 2, ln. 24-43 Col. 3, ln, 1-3 Col. 3, ln, 59-Col. 4, ln. 46 Col. 4, ln. 65-66 Col. 5, ln 19-32 Col. 7, ln. 22-24 Col. 10, ln. 54-Col. 11, ln. 6

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 11, ln. 28-38
			Col. 11, ln. 51-60
			Col. 11, ln. 60-67
			Col. 14, ln. 18-21
			Col. 14, ln. 18-32
			Col. 14, ln. 39-Col. 15, ln. 6
			Col. 15, ln. 18-Col. 16, ln 7
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94
			Amendment and Response dated 3- 23-94 at 25-37
			Examiner Action, dated June 7, 1995 at 2-7.
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
			Abstract
			Claims 14-16 and 18
			Fig. 3A-3H, 14B
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62
			Col. 3 ln, 35-47
			Col. 4, ln. 5-37

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 22, ln. 32-39
			Col. 10, ln. 59-col. 12, ln. 30
			Col. 13, ln. 20-33
			Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
26	objects in a	No construction	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not
	computer database	necessary	limited to:
	*	•	
		Alternatively,	Fig. 1
		Plaintiff offers this	Col. 3, ln. 50-58
		definition:	Col. 1, ln. 58-61
			Col. 4, ln. 22-24
		Any electronic	Col. 4, ln. 51-56
		collection of objects	Col. 4, ln. 67-Col. 5, ln. 4
		stored in computer	Col. 10, ln. 65-Col. 11, L 1

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		media.	Col. 9, In. 37-44
			Col. 9, ln. 45-63
			Col. 22, ln. 31-62
			Col. 11, ln. 61-Col. 12, ln. 31
			Col. 23, ln. 14-24
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94
			Amendment and Response dated 3- 23-94 at 25-37
			Examiner Action, dated June 7, 1995 at 2-7.
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			The claims, specification, and drawings of U.S. Patent No. 5,832,494, including, but not
			limited to:
			Col. 27, ln. 34-61
			Col. 48, ln. 36—Col. 50, ln. 46
			Col. 46, ln. 33-41
			Col. 3, ln. 26-col. 4, ln. 62
			Col. 38, ln. 38-52
			The claims, specification, and drawings of U.S. Patent No. 6,233,571, including, but not
			limited to:
			Claim 4
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Preliminary Amendment, dated 5- 4-98 at 1-29 Response to Restriction, dated 9-20-98 Amendment and Response, dated 6-6-00, at 2-12 Office Action, in response to 6-6-00 communication, at 5 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39. The claims, specification, and drawings of U.S. Patent No. 6,285,999. See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Abstract Claim 8, 41 Fig. 3A-C Fig. 6 Col. 2, ln. 24-43 Col. 4, ln. 26-40 Col. 4, ln. 40-46 Col. 5, ln 19-32 Col. 12, ln. 32-61 Col. 14, ln. 18-32 Col. 14, ln. 39-Col. 15, ln. 6

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Col. 48, ln. 36-Col. 49, ln. 54 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
26	generating a second numerical representation of each object based on the analysis of the first numerical representation	generating a second numerical representation of each identified object within the set of numerically represented objects based on the analysis of the first numerical	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Abstract Fig. 1 Fig. 3A-C Fig. 4C-I Fig. 6 Col. 1, ln. 1-11;

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		representations	Col. 1, In. 28-Col. 2, In. 48.
		•	Col. 2, In. 24-43
			Col. 3, ln. 1-3
			Col. 14, ln. 18-32
			Col. 14, ln. 39-Col. 15, ln. 6
			Col. 15, ln. 18-Col. 16, ln 7
			Col. 16, ln. 731
			Col. 16, ln. 32-42
			Col. 16, ln. 43-61
			Col. 16, ln. 61—Col. 17, ln. 5
			Col. 17, ln. 38-60
			Col. 20, ln. 42-Col. 21, ln. 5
			Col. 21, ln. 21-32
			Col. 4, ln. 40-46
			Col. 21, ln. 6-21
			Col. 21, ln. 50-58
			Col. 22, ln. 15-25
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not
			limited to:
			Fig. 3f and 3g
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 50, ln. 22-45
			Col. 3, In. 25-47
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Amendment and Response dated 3- 23-94 at 25-37; Examiner Action, dated June 7, 1995 at 2-7; Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16; Notice of Allowability, 9-11-95 at 2-4
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
26	identified object	an object identified by a search using a computer and a second numerical representation	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 21 Claim 26 Claim 39 Claim 37 Claim 47 Abstract Claim 1 Fig. 1 Fig. 3A-3C Fig. 4A-4I
			Col. 1, ln. 1-11 Col. 1, ln. 28-Col. 2, ln. 48 Col. 2, ln. 24-43 Col. 5, ln. 5-9 Col. 14, ln. 30-33

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 19, ln. 1-Col. 23 ln. 14
			Col. 4, ln. 40-46
			Col. 5, ln. 32-37
			Col. 24, ln. 24-42
			Col. 28, ln. 13-21
			Col. 28, ln. 53-65
			Col. 29. ln. 33-39
			Col. 30 ln. 52-58
			Col. 30 ln. 59-64
			Col. 3, ln, 1-3
			Col. 14, ln. 18-21
			Col. 14, ln. 18-32
			Col. 14, ln. 39 – Col. 15, ln. 6
			Col. 15, ln. 18 – Col. 16, ln 7
			Col. 16, ln 731
			Col. 16, ln. 32-42
			Col. 16, ln. 43-61
			Col. 16, ln. 61 – Col. 17, ln. 5
			Col. 17, ln. 5-25
			Col. 17, ln. 26-36
			Col. 17, ln. 38-60
			Col. 1, ln. 28-Col. 2, ln. 48.
			Col. 1, ln. 58-61
			Col. 5, ln. 1-14
			Col. 11, ln. 39-46
			Col. 15, ln. 13-17
			Col. 17, ln. 26-36
			Col. 17, ln. 61 – Col. 19, ln. 15
			Col. 19, ln. 40-52
			Col. 28, ln. 53-65
			See also entries for greating a first and second numerical representation shows
			See also entries for creating a first and second numerical representation above.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
			Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
26	analyzing the first	No construction	The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8; and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
20	numerical representations for indirect relationships	necessary	The Claims, drawings and specification of C.S. Fatent No. 3,344,332, including, but not limited to: Abstract Fig. 1 Fig. 3A-C Fig. 4C-I Fig. 6 Col. 1, ln. 1-11; Col. 1, ln. 28-Col. 2, ln. 48. Col. 2, ln. 24-43 Col. 3, ln. 1-3 Col. 14, ln. 18-32 Col. 14, ln. 39-Col. 15, ln. 6

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 15, ln. 18-Col. 16, ln 7
			Col. 16, ln. 731
			Col. 16, ln. 32-42
			Col. 16, ln. 43-61
			Col. 16, ln. 61 – Col. 17, ln. 5
			Col. 17, ln. 38-60
			Col. 20, ln. 42-Col. 21, ln. 5
			Col. 21, ln. 21-32
			Col. 4, ln. 40-46
			Col. 21, ln. 6-21
			Col. 21, ln. 50-58
			Col. 22, ln. 15-25
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not
			limited to:
			Claims 12, 13, 14, 15, 16
			Fig. 3F and 3G
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 50, ln. 22-45
			Col. 3, ln. 25-47
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37; Examiner Action, dated June 7, 1995 at 2-7; Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16; Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
26	searching the objects in the database using a computer and the stored second numerical representations	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Abstract Claim 1 Fig. 1 Fig. 3A-3C Fig. 4A-4I Col. 1, ln. 1-11 Col. 1, ln. 28-Col. 2, ln. 48 Col. 2, ln. 24-43 Col. 5, ln. 5-9

Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		Col. 14, ln. 30-33 Col. 19, ln. 1-Col. 23 ln. 14 Col. 4, ln. 40-46 Col. 5, ln. 32-37 Col. 24, ln. 24-42 Col. 28, ln. 13-21 Col. 28, ln. 53-65 Col. 29. ln. 33-39 Col. 30 ln. 52-58 Col. 30 ln. 59-64 Col. 3, ln, 1-3 Col. 14, ln. 18-21 Col. 14, ln. 18-21 Col. 14, ln. 18-32 Col. 14, ln. 18-32 Col. 14, ln. 39 – Col. 15, ln. 6 Col. 15, ln. 18 – Col. 16, ln 7 Col. 16, ln. 7-31 Col. 16, ln. 43-61 Col. 16, ln. 43-61 Col. 17, ln. 5-25 Col. 17, ln. 5-25 Col. 17, ln. 38-60 Col. 17, ln. 38-60 Col. 17, ln. 39-46 Col. 15, ln. 13 – 17 Col. 15, ln. 13 – 17 Col. 17, ln. 26-36 Col. 17, ln. 40-52 Col. 28, ln. 53-65

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
Ciaini	Term	Construction	The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Col. 3, ln. 35-47
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
26	storing the first	No construction	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
Claim	_		limited to: Claim 41 Col. 4, ln. 40-46 Col. 22, ln. 35-62 Col. 11, ln. 4-10 Col. 10, ln. 53-Col. 11, ln. 3 Col. 5, ln. 5-9 Col. 4, ln. 5-9 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
26	storing the second numerical representation for use in computerized searching	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 41 Col. 4, ln. 40-46 Col. 22, ln. 35-62 Col. 11, ln. 4-10 Col. 10, ln. 53-Col. 11 ln. 3 Col. 4, ln. 5-9 Col. 5, ln. 5-9 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 35-47 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Abstract
			Claims 14-16 and 18
			Fig. 3A-3H, 14B
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62
			Col. 3 ln, 35-47
			Col. 4, ln. 5-37
			Col. 22, ln. 32-39
			Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33
			Col. 15, III. 20-55 Col. 16, In. 30-35
			Coi. 10, iii. 30-33
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 28, 30-33
			1 12, 11, 21 23, 26, 36 33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary
			IDS, dated 1-27-98, at 1-8; and attached docs
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			Amendment after Notice of Allowance, dated 4-10-70, 1-12
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16,
			18-20, 30-33, 36-39
			,,
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the
			extrinsic evidence set forth in the Appendix in support of its proposed construction of this

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
26	computerized searching	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 27 Claim 28 Claim 41 Fig. 3A-5G Col. 4, ln. 40-46 Col. 22, ln. 35-62 Col. 11, ln. 4-10 Col. 10, ln. 53-Col. 11 ln. 3 Col. 4, ln. 5-9 Col. 5, ln. 5-9 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 35-47 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
			Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33
			Col. 16, ln. 30-35 See citations for "selecting an object" for '494.
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8; and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16,

	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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 searches, which use keywords and operators such as "AND," "OR" and "NOT" to locate documents	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 5 Col. 1, ln. 28 – Col. 2, ln. 48. Col. 1, ln. 58-61 Col. 5, ln. 1-14 Col. 11, ln. 39-46 Col. 15, ln. 13-17 Col. 19, ln. 40-52 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the

Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
emantic indexing echniques	No construction necessary Alternatively, Plaintiff offers this construction for "semantic indexing techniques": methods for creating and using indexes that use text analysis	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 5, 12 Col. 1, ln. 28 – Col. 2, ln. 48. Col. 1, ln. 58-61 Col. 5, ln. 1-14 Col. 11, ln. 39-46 Col. 15, ln. 13-17 Col. 17, ln. 26-36 Col. 17, ln. 61 – Col. 19, ln. 15 Col. 19, ln. 40-52 Col. 28, ln. 53-65 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the
e	Term	Term Construction Emantic indexing chniques No construction necessary Alternatively, Plaintiff offers this construction for "semantic indexing techniques": methods for creating and using indexes

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
33	coefficients of similarity	No construction necessary Alternatively, Plaintiff offers this construction for "coefficients of similarity ": Coefficients of similarity are values indicating similarity.	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Col. 14, ln. 2-17 Col. 16, ln 731 Col. 16, ln. 32-42 Col. 16, ln. 43-61 Col. 16, ln. 61—Col. 17, ln. 5 Col. 17, ln. 38-60 Col. 20, ln. 42-Col. 21, ln. 5 Col. 5, ln. 32-37 Col. 30 ln. 52-58 Col. 20, ln. 45-50 Col. 22, 63-Col. 23, ln. 2 Col. 5, ln. 5-7 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
34	wherein the marking step includes the step of	Marking portions of an object (words, phrases, paragraphs	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to:
	marking subsets of	or other portions of	Col. 11, ln. 61-Col. 12, ln. 31
	objects in the database	an object)	Col. 14, ln. 55-65
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94
			Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7.
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
34	subset	A portion of an object (word, phrase, paragraph, or other portion of an object).	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Col. 11, ln. 61-Col. 12, ln. 31 Col. 14, ln. 55-65 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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 claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 45 Claim 14 Claim 43 Fig. 3A-3C Fig. 4A-4I Col. 4, ln. 25-45

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		the subset numerical	Col. 14, ln. 10-13
		representations	Col. 14, ln. 18-38
			Col. 14, ln. 27-38 and Col. 17, ln. 10-16
			Col. 15, ln. 18-Col. 16, ln 7
			Col. 16, ln 731
			Col. 16, ln. 32-42
			Col. 20, ln. 42-Col. 21, ln. 5
			Col. 22, ln. 35-44
			Col. 17, ln. 6, ln -Col. 18, ln. 11
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not
			limited to:
			Fig. 3F and 3G
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 50, ln. 22-45
			Col. 3, ln. 25-47
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94
			Amendment and Response dated 3- 23-94 at 25-37
			Examiner Action, dated June 7, 1995 at 2-7.
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16
			Notice of Allowability, 9-11-95 at 2-4
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this
			disputed term.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
Claim			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39. The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157 The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
35	section	No construction necessary Alternatively, Plaintiff offers this construction for section: a group of subsets	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Fig. 3A-3C Col. 17, ln. 9-60 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the
			extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
37	graphically displaying one or more of the identified objects	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 1, 12, 20, 21-25 Fig. 5A to 5H, Sheets 19-26 Col. 6, ln. 1-20. Col. 10, ln. 4-8 Col. 11 ln. 4-27 Col. 11, ln. 62-col. 12, ln. 3 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Col. 50, ln. 46-col. 51 ln. 23 Col. 6, ln. 1-44 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Claims 14-16 and 18 Abstract Fig. 3A-3H, 14B Fig. 5A-5H Fig. 8, 10, 13 Col. 50, ln. 46-col. 51, ln. 23 Col. 6, ln. 1-44 Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8, and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 V-Search Manual for Folio Views, including, but not limited to: 1-12, 28, 30 V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 28, 32-35, 44-47, 49-63, 67-78, 97, 102-157

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
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	See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean. The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Fig. 4H Col. 2, ln. 9-18 Col. 21, ln. 21-32 Col. 24, ln. 24-36 Col. 24, ln. 27-42 Col. 28, ln. 13-21 Col. 30, ln. 59-64 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Fig. 4C Fig. 4E Fig. 4F Col. 16, ln. 32-42 Col. 20, ln. 42-Col. 21, ln. 5 Col. 30 ln. 52-58 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
40	identifying a	identifying a pool of	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
	paradigm pool of objects	exemplary, model, or archetypical objects that serve as a reference point for analyzing direct and indirect relationships between objects	limited to: Col. 5, In. 51-67 Fig. 4A-4I The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
41	A method for the non-semantical indexing of objects stored in a computer database, the method for use in searching the database for the objects	A method for the non-semantical 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	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Abstract Fig. 1 Fig. 3A Fig. 3B Fig. 3D Col. 1, ln. 1-11 Col. 1, ln. 28-Col. 2, ln. 48.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 2, ln. 24-43
			Col. 3, ln, 1-3
			Col. 3, ln. 59-Col. 4, ln. 46
			Col. 4, ln. 65-66
			Col. 5, ln 19-32
			Col. 7, ln. 22-24
			Col. 10, ln. 54-Col. 11, ln. 6
			Col. 11, ln. 28-38
			Col. 11, ln. 51-60
			Col. 11, ln. 60-67
			Col. 14, ln. 18-21
			Col. 14, ln. 18-32
			Col. 14, ln. 39-Col. 15, ln. 6
			Col. 15, ln. 18-Col. 16, ln 7
			Col. 16, ln. 43-61
			Col. 16, ln. 61—Col. 17, ln. 5
			Col. 17, ln. 5-25
			Col. 17, ln. 26-36
			Col. 17, ln. 38-60
			Col. 24, ln. 24-36
			Col. 29, ln. 33-39
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not
			limited to:
			Abstract
			Claims 14-16 and 18
			Fig. 3A-3H, 14B
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35 V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
41	objects stored in a computer database	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to:
		Alternatively,	Fig. 1
		Plaintiff offers this	Col. 3, ln. 50-58
		construction for	Col. 1, ln. 58-61
		database:	Col. 4, ln. 22-24
			Col. 4, ln. 51-56
		any electronic	Col. 4, ln. 67-Col. 5, ln. 4
		collection of objects	Col. 10, ln. 65-Col. 11, L 1
		stored in computer	Col. 9, ln. 37-44
		media	Col. 9, ln. 45-63
			Col. 22, ln. 31-62
			Col. 11, ln. 61-Col. 12, ln. 31
			Col. 23, ln. 14-24
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94
			Amendment and Response dated 3- 23-94 at 25-37
			Examiner Action, dated June 7, 1995 at 2-7.
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			Thouse of Thio maching, 7 11 75 at 2 4
			The claims, specification, and drawings of U.S. Patent No. 5,832,494, including, but not
			limited to:
			Col. 27, ln. 34-61
			Col. 48, ln. 36—Col. 50, ln. 46

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 46, ln. 33-41 Col. 3, ln. 26-col. 4, ln. 62 Col. 38, ln. 38-52
			The claims, specification, and drawings of U.S. Patent No. 6,233,571, including, but not limited to:
			Claim 4
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			Preliminary Amendment, dated 5- 4-98 at 1-29
			Response to Restriction, dated 9-20-98 Amendment and Response, dated 6-6-00, at 2-12
			Office Action, in response to 6-6-00 communication, at 5
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39.
			The claims, specification, and drawings of U.S. Patent No. 6,285,999.
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
41	generating a second numerical representation for	generating a second numerical representation for	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to:

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
	each object based on each object's references to other objects	each object within the set of indexed objects based on each object's references to other objects	Abstract Fig. 3A-C Fig. 6 Col. 2, ln. 24-43 Col. 4, ln. 26-40 Col. 4, ln. 40-46 Col. 5, ln 19-32 Col. 12, ln. 32-61 Col. 14, ln. 39-Col. 15, ln. 6 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Col. 48, ln. 36-Col. 49, ln. 54 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3-23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
41	creating a third numerical representation for each object	creating a third numerical representation for each object within the set of indexed objects	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Abstract Fig. 1 Fig. 3A-C Fig. 4C-I Fig. 6 Col. 1, ln. 1-11 Col. 1, ln. 28-Col. 2, ln. 48. Col. 2, ln. 24-43 Col. 3, ln, 1-3 Col. 14, ln. 18-32 Col. 14, ln. 39-Col. 15, ln. 6 Col. 15, ln. 18-Col. 16, ln 7 Col. 16, ln 731 Col. 16, ln. 731 Col. 16, ln. 43-61 Col. 16, ln. 61—Col. 17, ln. 5 Col. 17, ln. 38-60 Col. 20, ln. 42-Col. 21, ln. 5 Col. 21, ln. 21-32 Col. 4, ln. 40-46 Col. 21, ln. 6-21 Col. 21, ln. 50-58 Col. 22, ln. 15-25 Fig. 3F and 3G Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
	Term	Construction	Col. 48, ln. 36-Col. 50, ln. 21 Col. 50, ln. 22-45 Col. 3, ln. 25-47 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln. 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35 V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:1,1, 3-16,
			18-20, 30-33, 36-39 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
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.	IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean. The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Fig. 3A Fig. 3B Fig. 4G-I Col. 5, ln. 51-67 Col. 6, ln. 5-20 Col. 14, ln. 18-32 Col. 14, ln. 18-32 Col. 14, ln. 18-32 Col. 15, ln. 18-Col. 16, ln 7 Col. 16, ln 7-31 Col. 16, ln 7-31 Col. 16, ln. 7-31 Col. 16, ln. 32-42
			Col. 16, ln. 61-Col. 17, ln. 5 Col. 17, ln. 5-25 Col. 17, ln. 38-60

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 21, ln. 6-21 Col. 21, ln. 50-58 Col. 22, ln. 15-25 Col. 30, ln. 52-58 Col. 30, ln. 52-58 Col. 20, ln. 11-13 J.A. Hartigan, Clustering Algorithms (1975) The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
41	determining a fifth numerical representation for each object by processing the fourth numerical	determining a fifth numerical representation for each object within the set of indexed objects by processing the	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Col. 7, ln. 22-24 Col. 16, ln 7-31 Col. 16, ln. 32-42

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
	representations through similarity processing	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.	Col. 16, ln. 61-Col. 17, ln. 5 Col. 17, ln. 5-25 Col. 17, ln. 26-36 Col. 17, ln. 38-60 Col. 20, ln. 42-Col. 21, ln. 5 Col. 5, ln. 32-37 Col. 28, ln. 53-65 Col. 30 ln. 52-58 Col. 14, ln. 2-17 Col. 16, ln. 43-61 Col. 16, ln. 43-61 Col. 16, ln. 42-Col. 21, ln. 5 Col. 20, ln. 42-Col. 21, ln. 5 Col. 20, ln. 42-Col. 21, ln. 5 Col. 30 ln. 52-58 Col. 20, ln. 45-50 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IIDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3-23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
41	storing the fifth numerical representations in the computer database as the index for use in searching for objects in the database	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Fig. 1 Col. 4, In. 5-46 Col. 4, In. 66-Col. 4, In. 4 Col. 10, In. 19-Col. 11, In. 3 Col. 22, In. 35-44 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IIDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
42	clustering objects having similar characteristics	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 14 Claim 43

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Claim 45 Fig. 3A-3C Fig. 4C-4I Col. 4, ln. 25-45 Col. 14, ln. 10-13 Col. 14 ln. 18-38 Col. 14 ln. 18-38 Col. 17, ln. 10-16 Col. 22, ln. 35-44 Col. 17, ln. 6, ln -Col. 18, ln. 11 The claims, drawings, and specification of U.S. Patent No. 5,832,494, including, but not limited to: Fig. 3H Col. 21, ln. 45-Col. 22, ln. 67 Col. 23, ln. 1-67 Col. 23, ln. 1-67 Col. 24, ln. 1-14 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3-23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
43	clustering adjacent paragraphs that have similar characteristics	No construction necessary. Alternatively, plaintiff proposes this construction grouping adjacent paragraphs that have similar characteristics	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 14 Claim 43 Claim 45 Fig. 3A-3C Fig. 4C-4I Col. 4, ln. 25-45 Col. 14, ln. 10-13 Col. 14 ln. 18-38 Col. 14 ln. 27-38 Col. 17, ln. 10-16 Col. 22, ln. 35-44 Col. 17, ln. 6, ln – Col. 18, ln. 11 The claims, drawings, and specification of U.S. Patent No. 5,832,494, including, but not limited to: Fig. 3H Col. 21, ln. 45 – Col. 22, ln. 67 Col. 23, ln. 1-67

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
			Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
44	analyzing the second numerical representation	No construction necessary.	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to:
	against a plurality of empirically defined patterns, wherein certain	Alternatively, Plaintiff offers this construction:	Fig. 3 Fig. 6 Col. 12, ln. 32-37 Col. 13, ln. 34-52
	patterns are more important than others	Empirically defined patterns are patterns of citation	See also citations for generating a second numerical representation above.
		relationships that have been determined to be useful in search. Examples of such	The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94
		patterns include (assuming that a, b,	Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		and c occur before A; A occurs before d, e, and f, which occur	Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
		before B; and B occurs before g, h, and i) the following:	See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
		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 g, and h	To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
		cites B; 11. i cites A, i cites e,	

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		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	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Fig. 6 Col. 12, ln. 32-37 Col. 13, ln. 34-52 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			See also citations for generating a second numerical representation above.
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
45	entering search commands	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to:
			Fig 4A
			Col. 5, ln. 65-col. 6, ln. 5
			Col. 9, ln. 64-col. 10, ln. 8 Col. 14, ln. 30-45
			Col. 14, III. 30-43 Col. 18. In. 33-40
			Col. 22, ln. 10-20
			Col. 6: 30-40
			Col. 16, ln. 4-10
			Abstract Claim 1
			Fig. 1
			Fig. 3A-3C
			Fig. 4A-4I
			Col. 1, ln. 1-11
			Col. 1, ln. 28-Col. 2, ln. 48

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 2, ln. 24-43
			Col. 5, In. 5-9
			Col. 14, ln. 30-33
			Col. 19, ln. 1-Col. 23 ln. 14
			Col. 4, ln. 40-46
			Col. 5, In. 32-37
			Col. 24, ln. 24-42
			Col. 28, ln. 13-21
			Col. 28, ln. 53-65
			Col. 29. Ln. 33-39
			Col. 30 ln. 52-58
			Col. 30 ln. 59-64
			Col. 3, ln, 1-3
			Col. 14, ln. 18-21
			Col. 14, ln. 18-32
			Col. 14, ln. 39-Col. 15, ln. 6
			Col. 15, ln. 18-Col. 16, ln 7
			Col. 16, ln 731
			Col. 16, ln. 32-42
			Col. 16, ln. 43-61
			Col. 16, ln. 61-Col. 17, ln. 5
			Col. 17, ln. 5-25
			Col. 17, ln. 26-36
			Col. 17, ln. 38-60
			Col. 1, ln. 28-Col. 2, ln. 48.
			Col. 1, ln. 58-61
			Col. 5, ln. 1-14
			Col. 11, ln. 39-46
			Col. 15, ln. 13-17
			Col. 17, ln. 26-36
			Col. 17, ln. 61-Col. 19, ln. 15
			Col. 19, ln. 40-52

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 28, ln. 53-65
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37
			Examiner Action, dated June 7, 1995 at 2-7.
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
			Col. 3, ln. 35-47
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94
			Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7.
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
45			The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 7, 19-20, 39, 40 Col. 11, ln. 10-19 Col. 26, ln. 5-18 Col. 28, ln. 13-22 Col. 30, ln. 59 Col. 10, ln. 4-8 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4
			The claims, drawings, and specification of U.S. Patent No. 5,832,494, including, but not limited to: Col. 31, ln. 3-15 Col. 50, ln. 46-50 Col. 51, ln. 1-36 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
45	quantifying the relationship of the selected object to each object in the group of objects	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claims 7, 39, 40 Fig. 4H Col. 2, ln. 9-18 Col. 21, ln. 21-32 Col. 24, ln. 24-36 Col. 24, ln. 27-42 Col. 28, ln. 13-21 Col. 30, ln. 59-64 See generating a second numerical representation of claim 26 The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7. Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art

Claim	Disputed Claim Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			would understand this claim term to mean.

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

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
1	database	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
		Alternatively, Plaintiff offers this definition: Any electronic collection of objects stored in computer media	Col. 48, ln. 36—Col. 50, ln. 46 Col. 46, ln. 33-41 Col. 3, ln. 26-col. 4, ln. 62 Col. 38, ln. 38-52 V-Search Manual for Folio Views, including, but not limited to: 14, 30, 31 V-Search Manual for Toolkit, including, but not limited to: 11, 78-81, 90-93, 148-154 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 The claims, specification, and drawings of U.S. Patent No. 6,285,999. See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
All	Cluster link	A relationship defined by	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		mathematically	
		analyzing direct links	Abstract
		in a set of paths	Claims 14-16 and 18
		between two nodes	Fig. 3A-3H, 14B
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62
			Col. 3 ln, 35-47
			Col. 4, ln. 5-37
			Col. 22, ln. 32-39
			Col. 10, ln. 59-col. 12, ln. 30
			Col. 13, ln. 20-33
			Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8; and attached docs
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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 claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln. 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35 V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8; and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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.	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8; and attached docs
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
1	wherein the step of generating	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
	comprises an analysis of one or		Abstract

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
	more indirect		Claims 14-16 and 18
	relationships in the		Fig. 3A-3H, 14B
	database		Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62
			Col. 3 ln, 35-47
			Col. 4, ln. 5-37
			Col. 22, ln. 32-39
			Col. 10, ln. 59-col. 12, ln. 30
			Col. 13, ln. 20-33
			Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 28, 30-33
			1-12, 14, 21-23, 20, 30-33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary
			IDS, dated 1-27-98, at 1-8; and attached docs
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16,
			18-20, 30-33, 36-39
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic
			evidence set forth in the Appendix in support of its proposed construction of this disputed
			term.

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
cl th	eriving actual luster links from ne candidate luster links	choosing actual cluster links based on the weight of direct links in a set of paths between nodes	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claim 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-col. 4, ln. 62 Col. 3, ln. 26-col. 4, ln. 62 Col. 3, ln. 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10 ln. 59-Col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35 Col. 22, ln. 60-67. V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154 Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8, and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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.	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Fig. 3A-3H, 14B Col. 12, ln. 34-Col. 13, ln 9 Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 46, ln 7-col. 48, ln. 37 V-Search Manual for Folio Views, including, but not limited to: 1-12, 30 V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 78, 97, 102-157 Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			See citations for claim 7. The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Notice of Allowability, dated 1-9-1998 at 3-5 Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8, and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would
1	selecting a node for analysis	No construction necessary	understand this claim term to mean. The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
			Abstract Claims 2, 14-16, and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 10, ln. 59-col. 12, ln. 30 Col. 13, ln. 20-33

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		Construction	Col. 16, ln. 30-35. Col. 22, ln. 32-39 The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary; IDS, dated 1-27-98, at 1-8, and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 See also U.S. Patent No. 6,285,999 and its prosecution history.
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim
			element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16, 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21
		links according to the weight that corresponds to being	V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		most closely linked to	V-Search Manual for Toolkit, including, but not limited to:
		the node under	1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
		analysis	
		·	Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8, and attached docs
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
7	external object	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
		A.1	Claims 7-11
		Alternatively,	
		Plaintiff offers this	Fig. 4A-5H Col. 29, ln. 4 – col. 35, ln. 33.
		construction:	
			Col. 38, ln. 3-col. 39, ln. 5 Col. 39, ln. 6-col. 46, ln. 6.
		An object stored	Col. 39, III. 6-col. 40, III. 6. Col. 46, In. 7 – col. 48, In. 37.
		outside the database.	Col. 40, Ili. 7 – col. 48, Ili. 37. Col. 50, ln. 46 – col. 51, ln. 23.
			Coi. 50, iii. 40 – Coi. 51, iii. 25.
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 30-33

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157 The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Amendment after Notice of Allowance, dated 4-10-98, 1-12 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would
7	activating the desired node	No construction necessary Alternatively, Plaintiff offers the following construction: Initiating a function associated with a desired node.	understand this claim term to mean. The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Claims 7-11 Fig. 4A-5H Col. 29, ln. 4-Col. 35, ln. 33 Col. 38, ln. 3-Col. 39, ln. 5 Col. 39, ln. 6-Col. 46, ln. 6. Col. 28, ln. 58-Col. 29, ln. 25 Col. 32, ln. 36–57 Col. 33, ln. 29–40 Col. 6, ln. 29–44 Col. 29, ln. 4–18 Col. 32, ln. 14–25 Col. 32, ln. 37–57

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 46, ln. 7 – Col. 48, ln. 37 Col. 50, ln. 46 – Col. 51, ln. 23
			The claims, drawings and specification of U.S. Patent No. 6,233,571, including, but not limited to:
			Claims 1-4
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-78, 78-81, 90-93, 97, 102-157
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
8	independent application which can be executed in	an application separate from the database that can run	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
	background	simultaneously with	Claims 7-11
		other programming	Fig. 4A-5H
			Col. 29, ln. 4-Col. 35, ln. 33.
			Col. 38, ln. 3-Col. 39, ln. 5
			Col. 39, ln. 6-Col. 46, ln. 6.
			Col. 6, ln. 29–44
			Col. 29, ln. 4–18
			Col. 32, ln. 14–25
			Col. 32, ln. 37–57
			Col. 46, ln. 7 – col. 48, ln. 37.
			Col. 50, ln. 46 – col. 51, ln. 23.
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 30-33 1
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 11,14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-77, 78-81, 90-93, 97, 102-157
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
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	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Claims 7-11 Fig. 4A-5H Col. 6, ln. 29-44 Col. 29, ln. 4 - Col. 35, ln. 33 Col. 32, ln. 14-25 Col. 32, ln. 37-57 Col. 38, ln. 3-Col. 39, ln. 5 Col. 39, ln. 6-Col. 46, ln. 6. Col. 46, ln. 7 - Col. 48, ln. 37. Col. 50, ln. 46 - Col. 51, ln. 23. V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 30-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-77, 78-81, 90-93, 97, 102-157 Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Amendment after Notice of Allowance, dated 4-10-98, 1-12 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
12	wherein the generating step includes an analysis of one or more indirect relationships in the database	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Claims 14-16 and 18 Abstract Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3, ln. 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-Col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16 ln. 30-35 Col. 22, ln. 32-39, 46-51 Col. 23, ln. 8-25 V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154 Libertech, "Islay" Internet Search Service (Aug. 1996)

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited, to: Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary; IDS, dated 1-27-98, at 1-8; and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claim 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 22, ln. 1-4, ln. 56-67 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-Col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35 Col. 24, ln. 1-4

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 50, ln. 15-21
			Col. 22, ln. 60-67
			V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5
			Notice of references,
			Interview Summary
			IDS, dated 1-27-98, at 1-8, and attached docs
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean
12	selecting an object	No construction	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not
	to determine the	necessary	limited to:
	proximity of other		
	objects to the		Abstract
	selected object		Claims 14-16 and 18

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Fig. 3A-3H, 14B
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62
			Col. 4, ln. 5-37
			Col. 22, ln. 32-39
			Col. 10, ln. 59-Col. 12, ln. 30
			Col. 13, ln. 20-33
			Col. 16, ln. 30-35
			Col. 23, ln. 35-38, ln. 43-49
			V-Search Manual for Folio Views, including, but not limited to:
			21-25, 31-33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5
			Notice of references, Interview Summary
			IDS, dated 1-27-98, at 1-8, and attached docs
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See also U.S. Patent No. 6,285,999 and its prosecution history
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 48, ln. 36-Col. 49, ln. 54 Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 10, ln. 59-Col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35; Col. 22, ln. 32-39, 60-67 Col. 23, ln.8-20, 32-39, 53-67 V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154 Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Notice of Allowability, dated 1-9-1998 at 3-5 Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8, and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39; Col. 10, ln. 59-Col. 12, ln. 30 Col. 13, ln. 20-33 Col. 16, ln. 30-35 Col. 22, ln. 32-39, 46-51, 60-67

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 23, ln. 8-25, 53-67 Col. 48, ln. 36Col. 49, ln. 54
			V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5 Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8, and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
14	initializing a set of candidate cluster links	setting the computer to the starting conditions for the	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		generation of	Abstract
		candidate cluster	Claims 14-16 and 18
		links	Fig. 3A-3H, 14B
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62
			Col. 3 ln, 35-47
			Col. 4, ln. 5-37
			Col. 22, ln. 32-39
			Col. 10, ln. 59-Col. 12, ln. 30
			Col. 13, ln. 20-33
			Col. 16 ln. 30-35
			Col. 48, ln. 36-Col. 49, ln. 54
			Col. 23, ln. 35-38
			V-Search Manual for Folio Views, including, but not limited to:
			21-25, 31-33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary; IDS , dated 1-27-98, at 1-8; and attached docs;
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
15	deriving the actual cluster links	choosing a set of actual cluster links	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
	wherein the actual	based on the weight	
	cluster links are a	of direct links in a set	Abstract
	subset of the	of paths between	Claims 1, 12, 14-16, 18, 22, 23, and 33
	candidate cluster	nodes wherein the	Fig. 3A-3H, 14B
	links	actual cluster links	Col. 13, ln. 13-21
		are a subset of the	Col. 21, ln. 30-Col. 24, ln. 35
		candidate cluster	Col. 48, ln. 36-Col. 50, ln. 21
		links	Col. 3, ln. 26-Col. 4, ln. 62
			Col. 3 ln, 35-47
			Col. 4, ln. 5-37
			Col. 22, ln. 32-39
			Col. 10, ln. 59-Col. 12, ln. 30
			Col. 13, ln. 20-33
			Col. 16, ln. 30-35
			Col. 23, ln. 35-38
			V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8; and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
18	A method of analyzing a database	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36Col. 49, ln. 54 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-col. 4, ln. 62 Col. 3, ln. 26-col. 4, ln. 62 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-col. 12, ln. 30 Col. 12, ln. 4-Col. 20, ln. 7 Col. 13, ln. 20-33 Col. 16, ln. 30-35 Col. 48, ln. 36Col. 49, ln. 54 V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33 V-Search Manual for Toolkit, including, but not limited to:

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
			The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not
			limited to:
			Fig. 6
			Col. 1, ln. 1-Col. 2, ln. 48
			Col. 4, ln. 46-56
			Col. 5, ln. 1-14;
			Col. 12, ln. 1-17
			Col. 12, ln. 32-52
			Col. 12, ln. 52-Col. 14, ln. 16
			Col. 13, ln. 57-Col. 14, ln. 4
			Col. 14, ln. 4-18
			Col. 11, ln. 39-46
			Col. 15, ln. 13-Col. 17, ln. 36
			Col. 17, ln. 61-Col. 19, ln. 15 Col. 19, ln. 40-52
			Col. 19, III. 40-32 Col. 28, In. 53-65
			Coi. 26, iii. 33-63
			The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not
			limited to:
			IDS dated 5-4-94 at 2-7
			Examiner's Action, mailed date 9-23-94
			Amendment and Response dated 3- 23-94 at 25-37
			Examiner Action, dated June 7, 1995 at 2-7
			Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16
			Notice of Allowability, 9-11-95 at 2-4
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-
			20, 30-33, 36-39

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to: Notice of Allowability, dated 1-9-1998 at 3-5 Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8, and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
18	identifying at least one object in the database, wherein the stored numerical representation is used to identify objects	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36Col. 49, ln. 54 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-Col. 12, ln. 30 Col. 12, ln. 4-Col. 20, ln. 7

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 13, ln. 20-33
			Col. 16, ln. 30-35
			Col. 48, ln. 36-Col. 49, ln. 54
			V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8; and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12
			The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to:
			Fig. 6 Col. 1, ln. 1-Col. 2, ln. 48
			Col. 4, ln. 46-56;
			Col. 5, ln. 1-14;
			Col. 12, ln. 1-17
			Col. 12, ln. 32-52
			Col. 12, ln. 52-Col. 14, ln. 16
			Col. 13, ln. 57-Col. 14, ln. 4
			Col. 14, ln. 4-18
			Col. 11, ln. 39-46

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 15, ln. 13-Col. 17, ln. 36 Col. 17, ln. 61-Col. 19, ln. 15 Col. 19, ln. 40-52 Col. 28, ln. 53-65 The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7 Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
23	generating a graphical display for representing an object	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Fig. 5A-5H Fig. 8, 10, 13 Col. 50, ln. 46-Col. 51, ln. 23

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 6, ln. 1-44
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62
			Col. 3 ln, 35-47
			Col. 4, ln. 5-37
			Col. 22, ln. 32-39;
			Col. 10, ln. 59-Col. 12, ln. 30
			Col. 13, ln. 20-33
			Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 28, 30
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-78, 97, 102-147, and 151-154
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to:
			Claim 1, 12, 20, 21-25
			Fig. 5A to 5H
			Col. 6, ln. 1-20.
			Col. 10, ln. 4-8
			Col. 11 ln. 4-27
			Col. 11, ln. 62-Col. 12, ln. 3
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Notice of Allowability, dated 1-9-1998 at 3-5 Notice of references, Interview Summary IDS, dated 1-27-98, at 1-8, and attached docs Amendment after Notice of Allowance, dated 4-10-98, 1-12 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
33	A method of representing data in a computer database	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 49, ln. 54 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3 ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39 Col. 10, ln. 59-Col. 12, ln. 30 Col. 12, ln. 4-Col. 20, ln. 7 Col. 13, ln. 20-33 Col. 16, ln. 30-35

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 48, ln. 36Col. 49, ln. 54
			V-Search Manual for Folio Views, including, but not limited to: 21-25, 31-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 32-35, 44-47, 49-63, 78, 97, 102-147, and 151-154
			The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to:
			Fig. 6 Col. 1, ln. 1-Col. 2, ln. 48; Col. 4, ln. 46-56 Col. 5, ln. 1-14 Col. 12, ln. 32-52 Col. 12, ln. 52-Col. 14, ln. 16 Col. 13, ln. 57-Col. 14, ln. 4 Col. 14, ln. 4-18 Col. 11, ln. 39-46 Col. 15, ln. 13-Col. 17, ln. 36 Col. 17, ln. 61-Col. 19, ln. 15 Col. 19, ln. 40-52 Col. 28, ln. 53-65
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary; IDS , dated 1-27-98, at 1-8; and attached docs; Amendment after Notice of Allowance, dated 4-10-98, 1-12

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 5,544,352, including, but not limited to: IDS dated 5-4-94 at 2-7 Examiner's Action, mailed date 9-23-94 Amendment and Response dated 3- 23-94 at 25-37 Examiner Action, dated June 7, 1995 at 2-7 Request for Reconsideration of Final Rejection as Premature etc., dated 8-14-95 at 13-16 Notice of Allowability, 9-11-95 at 2-4 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B Col. 12, ln. 66 – Col. 13, ln. 1 Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 3, ln. 26-Col. 4, ln. 62 Col. 3, ln, 35-47 Col. 4, ln. 5-37 Col. 22, ln. 32-39; Col. 10, ln. 59-Col. 12, ln. 30

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 13, ln. 20-33 Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-78, 97, 102-157
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5, Notice of references, Interview Summary; IDS, dated 1-27-98, at 1-8; and attached docs; Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
33	searching for node identifications using the stored	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to:
	links		Abstract Claims 14-16 and 18 Fig. 3A-3H, 14B

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 13, ln. 13-21
			Col. 21, ln. 30-Col. 24, ln. 35
			Col. 48, ln. 36-Col. 50, ln. 21
			Col. 3, ln. 26-Col. 4, ln. 62
			Col. 3 ln, 35-47
			Col. 4, ln. 5-37
			Col. 12, ln. 66-Col. 13, ln. 1
			Col. 22, ln. 32-39
			Col. 10, ln. 59-Col. 12, ln. 30
			Col. 13, ln. 20-33
			Col. 16, ln. 30-35
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-78, 97, 102-157, and 151-154
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Notice of Allowability, dated 1-9-1998 at 3-5
			Notice of references, Interview Summary
			IDS, dated 1-27-98, at 1-8, and attached docs
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic
			evidence set forth in the Appendix in support of its proposed construction of this disputed
			term.
			To the extent that Defendants identify any expert testimony with respect to this claim
			element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

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

Claim Disp	uted Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
1, 11, activa 22 repres the so where may h to a no repres	ating a link sented on urce map, sin a user ayperjump		The claims, drawings and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3A-14B, 10B Col. 46, ln. 3 – Col. 51, ln. 18 Col. 42, ln. 36-50 Col. 12, ln. 35-62 Col. 13, ln. 20-27 Col. 31, ln. 20-27 Col. 31, ln. 20-47 Col. 48, ln. 19 – Col. 51, ln. 18 V-Search Manual for Folio Views, including, but not limited to: 1-12, 21-25, 28, 30-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-77, 78-81, 90-93, 97, 102-157 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
1	active links	No construction necessary	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3E-3G Fig. 5B-5G, 8, 10B Col. 46, ln. 3 – Col. 51, ln. 18 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3E-G, 5B-5E, 10B, and 11 Col. 42, ln. 5 – Col. 51, ln. 18 Col. 42, ln. 36-50 Col. 12, ln. 35–62 Col. 13, ln. 20-27 Col. 31, ln. 54 – Col. 32, ln. 9 Col. 47, ln. 1-31 Col. 48, ln. 19 – Col. 51, ln. 18 V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157

Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
		See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
		The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
		IDS, dated 5-4-98, at 2-8
		Preliminary Amendment, dated 5- 4-98 at 1-29
		Response to Restriction, dated 9-20-98
		Office Action Summary (and attached docs), dated 11-22-99, at 1-5
		June 5, 2000 Interview Summary
		Amendment and Response, dated 6-6-00, at 2-12
		Office Action, in response to 6-6-00 communication, at 1-5.
		Amendment After Final, dated 11-20-00, 1-8
		Notice of Allowability dated 12-27-00
		Supplemental Notice of Allowability dated 12-27-00
		To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
activating an	No construction	The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not
embedded icon	necessary	limited to:
	Altomotivaly plaintiff	Claims 7-11
		Fig. 4A-5H
		Col. 29, ln. 4-Col. 35, ln. 33
	construction.	Col. 38, ln. 3-Col. 39, ln. 5
	Initiating a function	Col. 39, ln. 6-Col. 46, ln. 6.
		activating an No construction

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		associated with an icon	Col. 28, ln. 58-Col. 29, ln. 25
			Col. 32, ln. 36–57
			Col. 33, ln. 29–40
			Col. 6, ln. 29–44
			Col. 29, ln. 4–18
			Col. 32, ln. 14–25
			Col. 32, ln. 37–57
			Col. 46, ln. 7 – Col. 48, ln. 37
			Col. 50, ln. 46 – Col. 51, ln. 23
			The claims, drawings and specification of U.S. Patent No. 6,233,571, including, but not limited to:
			Claims 1-4
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-78, 78-81, 90-93, 97, 102-157
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 5,832,494, including, but not limited to:
			Amendment after Notice of Allowance, dated 4-10-98, 1-12
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
5	choosing a node	No construction necessary	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3A-5G, 7, 8, 10B, 14A-14B Col. 12 39-Col. 13, ln. 27 Col. 48, ln. 19-Col. 49, ln. 44 Col. 49, ln. 44-Col. 50, ln. 4 Col. 50, ln. 4-9 Col. 50, ln. 4-9 Col. 50, ln 9-27 Col. 13, ln. 40-Col. 17, ln. 37 Col. 17, ln. 37-Col. 21, ln. 29 Col. 24, ln. 24-Col. 29, ln. 25 Col. 21, ln. 30-Col. 24, ln. 12 Col. 23, ln. 66 - Col. 24, ln. 11 Col. 36, ln. 4-48 Col. 46, ln. 3 - Col. 48, ln. 18 V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, and 102-157, 151-154 Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			See also U.S. Patent No. 6,285,999 and its prosecution history.

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			IDS, dated 5-4-98, at 2-8
			Preliminary Amendment, dated 5- 4-98 at 1-29
			Response to Restriction, dated 9-20-98
			Office Action Summary (and attached docs), dated 11-22-99, at 1-5
			June 5, 2000 Interview Summary Amendment and Response, dated 6-6-00, at 2-12
			Office Action, in response to 6-6-00 communication, at 1-5.
			Amendment After Final, dated 11-20-00, 1-8
			Notice of Allowability dated 12-27-00
			Supplemental Notice of Allowability dated 12-27-00
			a approximation of a result of the second se
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic
			evidence set forth in the Appendix in support of its proposed construction of this disputed
			term.
			To the extent that Defendants identify any expert testimony with respect to this claim
			element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would
			understand this claim term to mean.
All	hyperjump data	No construction	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not
All	/hyperjump links	necessary	limited to:
	/ityperjump miks	necessary	mined to.
		Hyperjump data is data	Fig. 3A-5G, 7, 8, 10B, and 14A-14B
		related to hypertext	Col. 12, 39-Col. 13, ln. 27
		systems such as web	Col. 48, ln. 19-Col. 49, ln. 44
		pages, websites,	Col. 49, ln. 44-Col. 50, ln. 4
		Universal Resource	Col. 50, ln. 4-9
		Locators, and	Col. 50, ln 9-27
		hyperjump pointers	Col. 50, ln. 28-Col. 51, ln. 18
		-	Col. 23, ln. 66 – Col. 24, ln. 11

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 36, In. 4-48
			Col. 46, ln. 3 – Col. 48, ln. 18
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 28, 30, 31-33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 11, 14-16, 23-24, 28, 32-35, 44-47, 49-63, 67-77, 78-81, 90-93, 97, 102-157
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-
			20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			IDS, dated 5-4-98, at 2-8
			Preliminary Amendment, dated 5- 4-98 at 1-29
			Response to Restriction, dated 9-20-98
			Office Action Summary (and attached docs), dated 11-22-99, at 1-5
			June 5, 2000 Interview Summary
			Amendment and Response, dated 6-6-00, at 2-12
			Office Action, in response to 6-6-00 communication, at 1-5
			Amendment After Final, dated 11-20-00, 1-8
			Notice of Allowability dated 12-27-00
			Supplemental Notice of Allowability dated 12-27-00
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic
			evidence set forth in the Appendix in support of its proposed construction of this disputed
			term.
			To the extent that Defendants identify any expert testimony with respect to this claim
			element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would
			understand this claim term to mean.

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
5	wherein the step	a method of analyzing	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not
	of determining	the identified hyperlink	limited to:
	comprises	data for indirect	
	proximity	relationships to	Fig. 3A-5G, 7, 8, 10B, and 14A-14B
	analyzing the	generate a reference of	Col. 12, 39-Col. 13, ln. 27
	identified	relations, patterns, or	Col. 3, ln 1-Col. 11, ln 1
	hyperjump data	similarity for use in	Col. 11, lns 2-52
		subsequent	Col. 11, ln 60-Col. 21, ln 40
		computerized	Col. 48, ln. 19-Col. 49, ln. 44
		searching	Col. 49, ln. 44-Col. 50, ln. 4
			Col. 50, ln. 4-9
			Col. 50, ln 9-27
			Col. 50, ln. 28-Col. 51, ln. 18
			Col. 13, ln. 40-Col. 17, ln. 37
			Col. 17, ln. 37-Col. 21, ln. 29
			Col. 24, ln. 24-Col. 29, ln. 25
			Col. 21, ln. 30-Col. 24, ln. 22
			Col. 23, ln. 66 – Col. 24, ln. 11
			Col. 36, ln. 4-48
			Col. 46, ln. 3 – Col. 48, ln. 18
			See also U.S. Patent No. 6,285,999 and its prosecution history.
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			IDS, dated 5-4-98, at 2-8
			Preliminary Amendment, dated 5- 4-98 at 1-29
			Response to Restriction, dated 9-20-98
			Office Action Summary (and attached docs), dated 11-22-99, at 1-5

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
10	visually representing more than one	No construction necessary	June 5, 2000 Interview Summary Amendment and Response, dated 6-6-00, at 2-12 Office Action, in response to 6-6-00 communication, at 1-5. Amendment After Final, dated 11-20-00, 1-8 Notice of Allowability dated 12-27-00 Supplemental Notice of Allowability dated 12-27-00 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean. The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3A-5G, 7, 8, 10B, and 14A-14B
			Col. 12, ln. 39-Col. 13, ln. 27 Col. 50, ln. 28-Col. 51, ln. 18 Col. 24, ln. 24-Col. 29, ln. 25 Col. 21, ln. 30-Col. 24 ln. 22 See also U.S. Patent No. 6,285,999 and its prosecution history. Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 The prosecution history of U.S. Patent No. 6,233,571 patent, including, but not limited to: IDS, dated 5-4-98, at 2-8

nt 1-5
nt 1-5
nt 1-5
Plaintiff identifies the extrinsic onstruction of this disputed
th respect to this claim nat one skilled in the art would
233,571, including, but not
Ç
o:
tl 123

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		destination of a link a node	V-Search Manual for Toolkit, including, but not limited to: 1-6, 14-16, 23-24, 28, 32-35, 44-47, 49-63, 67-78, 97, 102 -157
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
12	choosing an identifiable web	No construction necessary	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to:
	page		Fig. 3A-5G, 7, 8, 10B, and 14A-14B
			Col. 12, ln. 39-Col. 13, ln. 27
			Col. 48, ln. 19-Col. 49, ln. 44
			Col. 49, ln. 44-col. 50, ln. 4
			Col. 50, ln. 4-9
			Col. 50, ln 9-27
			Col. 50, ln. 28-Col. 51, ln. 18
			Col. 13, ln. 40-Col. 17, ln. 37 Col. 17, ln. 37-Col. 21, ln. 29
			Col. 24, ln. 24-col. 29, ln. 25
			Col. 21, ln. 30-col. 24, ln. 22
			Col. 23, ln. 66 – Col. 24, ln. 11
			Col. 36, ln. 4-48

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 46, ln. 3 – Col. 48, ln. 18 See also U.S. Patent No. 6,285,999 and its prosecution history. The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to: IDS, dated 5-4-98, at 2-8 Preliminary Amendment, dated 5- 4-98 at 1-29 Response to Restriction, dated 9-20-98 Office Action Summary (and attached docs), dated 11-22-99, at 1-5 June 5, 2000 Interview Summary Amendment and Response, dated 6-6-00, at 2-12 Office Action, in response to 6-6-00 communication, at 1-5. Amendment After Final, dated 11-20-00, 1-8 Notice of Allowability dated 12-27-00 Supplemental Notice of Allowability dated 12-27-00 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3A-5G, 7, 8, 10B, and 14A-14B Col. 12, ln. 39-Col. 13, ln. 27 Col. 48, ln. 19-Col. 49, ln. 44 Col. 49, ln. 44-col. 50, ln. 4

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		weights to the	Col. 50, ln. 28-Col. 51, ln. 18
		candidate cluster links	Col. 24, ln. 24-col. 29, ln. 25
		and deriving actual	Col. 21, ln. 30-col. 24, ln. 22
		cluster links from the	
		set of candidate cluster	See also U.S. Patent No. 6,285,999 and its prosecution history.
		links using the weights	
		of the candidate cluster	The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
		links	
			IDS, dated 5-4-98, at 2-8
			Preliminary Amendment, dated 5- 4-98 at 1-29
			Response to Restriction, dated 9-20-98
			Office Action Summary (and attached docs), dated 11-22-99, at 1-5
			June 5, 2000 Interview Summary
			Amendment and Response, dated 6-6-00, at 2-12
			Office Action, in response to 6-6-00 communication, at 1-5.
			Amendment After Final, dated 11-20-00, 1-8
			Notice of Allowability dated 12-27-00
			Supplemental Notice of Allowability dated 12-27-00
			V-Search Manual for Folio Views, including, but not limited to:
			1-12, 14, 21-25, 28, 30, 31-33
			V-Search Manual for Toolkit, including, but not limited to:
			1-6, 11, 14-16, 23-24, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
15	generate a graphical user display	No construction necessary	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3A-5G, 7, 8, 10B, and 14A-14B Col. 12, ln. 39-Col. 13, ln. 27 Col. 48, ln. 19-Col. 49, ln. 44 Col. 49, ln. 44-col. 50, ln. 4 Col. 50, ln. 4-9 Col. 50, ln. 9-27 Col. 50, ln. 28-Col. 51, ln. 18 Col. 24, ln. 24-Col. 29, ln. 25 Col. 21, ln. 30-Col. 24, ln. 22 Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 See also U.S. Patent No. 6,285,999 and its prosecution history. The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to: IDS, dated 5-4-98, at 2-8 Preliminary Amendment, dated 5- 4-98 at 1-29 Response to Restriction, dated 9-20-98 Office Action Summary (and attached docs), dated 11-22-99, at 1-5 June 5, 2000 Interview Summary Amendment and Response, dated 6-6-00, at 2-12 Office Action, in response to 6-6-00 communication, at 1-5.
			Amendment After Final, dated 11-20-00, 1-8

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Notice of Allowability dated 12-27-00 Supplemental Notice of Allowability dated 12-27-00
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
16	cluster analyzing the Universal Resource	generating the set of candidate cluster links for objects indirectly	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to:
	Locators for	related to the chosen	Fig. 3A-5G, 7, 8, 10B, and 14A-14B
	indirect	document using the	Col. 12, ln. 39-Col. 13, ln. 27
	relationships	Universal Resource	Col. 48, ln. 19-Col. 49, ln. 44 Col. 49, ln. 44-col. 50, ln. 4
		Locators, assigning weights to the	Col. 49, In. 44-col. 50, In. 4 Col. 50, In. 28-Col. 51, In. 18
		candidate cluster links,	Col. 17, ln. 37-Col. 21, ln. 29
		and deriving actual	Col. 24, ln. 24-Col. 29, ln. 25
		cluster links from the	Col. 21, ln. 30-Col. 24, ln. 22
		set of candidate cluster	Col. 23, ln. 66 – Col. 24, ln. 11
		links based on the	Col. 36, ln. 4-48
		assigned weights	Col. 46, ln. 3 – Col. 48, ln. 18
			See also U.S. Patent No. 6,285,999 and its prosecution history.
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			IDS, dated 5-4-98, at 2-8
			Preliminary Amendment, dated 5- 4-98 at 1-29

	Construction	Plaintiff's Evidence
		Response to Restriction, dated 9-20-98
		Office Action Summary (and attached docs), dated 11-22-99, at 1-5
		June 5, 2000 Interview Summary
		Amendment and Response, dated 6-6-00, at 2-12
		Office Action, in response to 6-6-00 communication, at 1-5.
		Amendment After Final, dated 11-20-00, 1-8
		Notice of Allowability dated 12-27-00
		Supplemental Notice of Allowability dated 12-27-00
		V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33
		V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, and 102-157
		Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39
		See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
		To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
choosing a document	No construction necessary	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to:
		Fig. 3A-5G, 7, 8, 10B, and 14A-14B
		Col. 12, ln. 39-Col. 13, ln. 27
		Col. 12, III. 39-Col. 13, III. 27 Col. 48, In. 19-Col. 49, In. 44
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Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Col. 49, ln. 44-col. 50, ln. 4
			Col. 50, ln. 4-9
			Col. 50, ln 9-27
			Col. 50, ln. 28-Col. 51, ln. 18
			Col. 13, ln. 40-Col. 17, ln. 37
			Col. 17, ln. 37-Col. 21, ln. 29
			Col. 24, ln. 24-Col. 29, ln. 25
			Col. 21, ln. 30-Col. 24, ln. 22
			Col. 23, ln. 66 – Col. 24, ln. 11
			Col. 36, ln. 4-48
			Col. 46, ln. 3-Col. 48, ln. 18
			See also U.S. Patent No. 6,285,999 and its prosecution history.
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			IDS, dated 5-4-98, at 2-8
			Preliminary Amendment, dated 5- 4-98 at 1-29
			Response to Restriction, dated 9-20-98
			Office Action Summary (and attached docs), dated 11-22-99, at 1-5
			June 5, 2000 Interview Summary
			Amendment and Response, dated 6-6-00, at 2-12
			Office Action, in response to 6-6-00 communication, at 1-5.
			Amendment After Final, dated 11-20-00, 1-8
			Notice of Allowability dated 12-27-00
			Supplemental Notice of Allowability dated 12-27-00
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
18	cluster analyzing the pages	No construction necessary	The claims, drawings and specification of U.S. Patent No. 5,544,352, including, but not limited to: Claim 45 Claim 14 Claim 43 Fig. 3A-3C Fig. 4A-4I Col. 4, ln. 25-45 Col. 14, ln. 10-13 Col. 14, ln. 18-38 Col. 14, ln. 18-38 Col. 14, ln. 18-38 Col. 16, ln 731 Col. 16, ln 731 Col. 16, ln 731 Col. 16, ln. 32-42 Col. 20, ln. 42-Col. 21, ln. 5 Col. 22, ln. 35-44 Col. 17, ln. 6, ln -Col. 18, ln. 11 The claims, drawings and specification of U.S. Patent No. 5,832,494, including, but not limited to: Fig. 3A-5A Col. 13, ln. 13-21 Col. 21, ln. 30-Col. 24, ln. 35 Col. 48, ln. 36-Col. 50, ln. 21 Col. 50, ln. 22-45 Col. 3, ln. 25-47

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			"Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39.
			The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to:
			Fig. 3A-5G, 7, 8, 10B, and 14A-14B
			Col. 12, ln. 39-Col. 13, ln. 27
			Col. 20, ln 11-col. 21, ln 29
			Col. 48, In. 19-Col. 49, In. 44
			Col. 49, ln. 44-col. 50, ln. 4
			Col. 50, ln. 28-Col. 51, ln. 18
			Col. 17, ln. 37-Col. 21, ln. 29
			Col. 24, ln. 24-Col. 29, ln. 25
			Col. 21, ln. 30-Col. 24, ln. 22
			Col. 23, ln. 66 – Col. 24, ln. 11
			Col. 36, ln. 4-48
			Col. 46, ln. 3 – Col. 48, ln. 18
			See also U.S. Patent No. 6,285,999 and its prosecution history.
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			IDS, dated 5-4-98, at 2-8
			Preliminary Amendment, dated 5- 4-98 at 1-29
			Response to Restriction, dated 9-20-98
			Office Action Summary (and attached docs), dated 11-22-99, at 1-5
			June 5, 2000 Interview Summary

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			Amendment and Response, dated 6-6-00, at 2-12 Office Action, in response to 6-6-00 communication, at 1-5. Amendment After Final, dated 11-20-00, 1-8 Notice of Allowability dated 12-27-00 Supplemental Notice of Allowability dated 12-27-00 V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33 V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, and 102-157 Islay "Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
21	choosing a node	[No construction necessary	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3A-5G, 7, 8, 10B, and 14A-14B Col. 12, ln. 39-Col. 13, ln. 27 Col. 48, ln. 19-Col. 49, ln. 44 Col. 49, ln. 44-col. 50, ln. 4

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
		Construction	Col. 50, ln. 4-9
			Col. 50, ln 9-27
			Col. 50, In. 28-Col. 51, In. 18
			Col. 13, ln. 40-Col. 17, ln. 37
			Col. 17, ln. 37-Col. 21, ln. 29
			Col. 24, In. 24-Col. 29, In. 25
			Col. 21, ln. 30-Col. 24, ln. 22
			Col. 23, ln. 66 – Col. 24, ln. 11
			Col. 36, ln. 4-48
			Col. 46, ln. 3 – Col. 48, ln. 18
			See also U.S. Patent No. 6,285,999 and its prosecution history.
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			IDS, dated 5-4-98, at 2-8
			Preliminary Amendment, dated 5- 4-98 at 1-29
			Response to Restriction, dated 9-20-98
			Office Action Summary (and attached docs), dated 11-22-99, at 1-5
			June 5, 2000 Interview Summary
			Amendment and Response, dated 6-6-00, at 2-12
			Office Action, in response to 6-6-00 communication, at 1-5.
			Amendment After Final, dated 11-20-00, 1-8
			Notice of Allowability dated 12-27-00
			Supplemental Notice of Allowability dated 12-27-00
			V-Search Manual for Folio Views, including, but not limited to: 1-12, 14, 21-25, 28, 30-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-154

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3A-5G, 7, 8, 10B, and 14A-14B Col. 12 39-Col. 13, ln. 27 Col. 48, ln. 19-Col. 49, ln. 44 Col. 49, ln. 44-col. 50, ln. 4 Col. 50, ln. 4-9 Col. 50, ln 9-27 Col. 50, ln 9-27 Col. 50, ln 9-27 Col. 50, ln 28-Col. 51, ln. 18 Col. 13, ln. 40-Col. 17, ln. 37 Col. 17, ln. 37-Col. 21, ln. 29 Col. 24, ln. 24-Col. 29, ln. 25 Col. 21, ln. 30-Col. 24, ln. 22 Col. 23, ln. 66 - Col. 24, ln. 11 Col. 36, ln. 4-48 Col. 46, ln. 3 - Col. 48, ln. 18 See also U.S. Patent No. 6,285,999 and its prosecution history The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to: "Islay" Internet Search Service (Egg_0004045-86), including but not limited to:I,1, 3-16, 18-20, 30-33, 36-39

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			IDS, dated 5-4-98, at 2-8 Preliminary Amendment, dated 5- 4-98 at 1-29 Response to Restriction, dated 9-20-98 Office Action Summary (and attached docs), dated 11-22-99, at 1-5 June 5, 2000 Interview Summary Amendment and Response, dated 6-6-00, at 2-12 Office Action, in response to 6-6-00 communication, at 1-5. Amendment After Final, dated 11-20-00, 1-8 Notice of Allowability dated 12-27-00 Supplemental Notice of Allowability dated 12-27-00 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term.
			To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.
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	The claims, drawings, and specification of U.S. Patent No. 6,233,571, including, but not limited to: Fig. 3E–G, 5B-5E, 10B, and 11 Col. 42, ln. 5 – Col. 51, ln. 18 Col. 42, ln. 36-50 Col. 12, ln. 35–62 Col. 13, ln. 20-27 Col. 31, ln. 54 – Col. 32, ln. 9 Col. 47, ln. 1-31 Col. 48, ln. 19 – Col. 51, ln. 18 V-Search Manual for Folio Views, including, but not limited to:

Claim	Disputed Term	Plaintiff's Proposed Construction	Plaintiff's Evidence
			1-12, 14, 21-25, 28, 30, 31-33
			V-Search Manual for Toolkit, including, but not limited to: 1-6, 11, 14-16, 23-24, 28, 32-42, 44-47, 49-63, 67-81, 90-93, 97, 102-157
			The prosecution history of U.S. Patent No. 6,233,571, including, but not limited to:
			IDS, dated 5-4-98, at 2-8 Preliminary Amendment, dated 5- 4-98 at 1-29 Response to Restriction, dated 9-20-98 Office Action Summary (and attached docs), dated 11-22-99, at 1-5 June 5, 2000 Interview Summary Amendment and Response, dated 6-6-00, at 2-12 Office Action, in response to 6-6-00 communication, at 1-5. Amendment After Final, dated 11-20-00, 1-8 Notice of Allowability dated 12-27-00
			Supplemental Notice of Allowability dated 12-27-00 See Appendix. To the extent that a term appears in this chart, Plaintiff identifies the extrinsic evidence set forth in the Appendix in support of its proposed construction of this disputed term. To the extent that Defendants identify any expert testimony with respect to this claim element, Plaintiff designates rebuttal expert testimony as to what one skilled in the art would understand this claim term to mean.

APPENDIX TO PLAINTIFF'S IDENTIFICATIONS OF EXTRINSIC EVIDENCE IN SUPPORT OF PROPOSED CONSTRUCTION(S)

Application

Application: A program or group of programs designed for end users. Software can be divided into two general classes: systems software and applications software (Figure 6). Systems software consists of low-level programs that interact with the computer at a very basic level. This includes operating systems, compilers, and utilities for managing computer resources.

In contrast, applications software (also called end-user programs) includes database programs, word processors, and spreadsheets. Figuratively speaking, applications software sits on top of systems software because it is unable to run without the operating system and system utilities.

Phillip E. Margolis, Personal Computer Dictionary 20-21 (1991).

Application: (1) A specific use of a computer, such as for payroll, inventory and billing.

(2) Same as application program and software package.

<u>Alan Freedman, The Computer Glossary: The Complete Illustrated Dictionary</u> 12 (9th ed. 2001).

Application package: A software package that is created for a specific purpose or industry.

Ibid. at 17.

Application: (4) A software program consisting of one or more processes and supporting functions. (PE/SUB) 1379-1997 (5) A computer program that performs some desired function. (C) 1003.5-1999

<u>IEEE Standards Project, IEEE 100; The Authoritative Dictionary of IEEE Standard Terms</u> 46 (Kim Breitfelder & Don Messina eds., 7th ed. 2000).

Independent entity: An entity for which each instance can be uniquely identified without determining its relationship to another entity. (C/SE) 1320.2-1998

Ibid. at 545.

Boolean

Boolean search: A database search that uses Boolean operators. See also Boolean operator.

Microsoft Press Computer Dictionary 60 (3d ed. 1997).

A Boolean search is one in which the user searches a database with a query that connects words with operators, such as AND, OR, and NOT. Such a search is often called a 'terms and connectors' search, since there is a clear distinction made in the query between content-bearing terms and content-free operators based on logical connectives.

<u>Peter Jackson & Isabelle Moulinier, Natural Language Processing for Online Applications: Text Retrieval 27 (2002).</u>

Boolean search: A search for specific data. It implies that any condition can be searched for using the Boolean operators AND, OR and NOT.

Alan Freedman, The Computer Glossary: The Complete Illustrated Dictionary 36 (9th ed. 2001).

Clustering

I.1 CLUSTERING

Clustering is the *grouping of similar objects*.

John A Hartigan, Clustering Algorithms 1 (1975).

Clustering: grouping things with similar characteristics.

Donald D. Spencer, The Illustrated Computer Dictionary 45 (3d ed. 1986).

Cluster: n. ... 1 a number of things of the same sort gathered together or growing together; bunch 2 a number of persons, animals, or things grouped together

Webster's New World Dictionary 266 (3d ed. 1994).

Clustering: the grouping of documents which satisfy a set of common properties. The aim is to assemble together documents which are related among themselves. Clustering can be used, for instance, to expand a user query with new and related index terms.

Ricardo Baeza-Yates and Berthier Nibiero-Neto, Modern Information Retrieval 438 (1999).

Cluster: 7. to gather into a cluster.

Random House Webster's College Dictionary 253 (2d ed. 2001).

Coefficient

Coefficient: a number that serves as a measure of some property (as of a substance or body) or characteristic (as of a device or process) and that is commonly used as a factor in computations

Webster's Third New International Dictionary 438 (1986).

Database/Object

Database: Any electronically stored collection of data.

In re Comiskey, 554 F.3d 967, 981 (Fed. Cir. 2009) (citing <u>Alan Freedman</u>, <u>The Computer Glossary: The Complete Illustrated Dictionary</u> 90 (8th ed. 1998)).

Database: Also data base, data-base ... 7. A structured collection of data held in computer storage; esp. one that incorporates software to make it accessible in a variety of ways; transf., any large collection of information

The Oxford English Dictionary Online (2d ed. 1989), http://www.oed.com.

Database: (1) a collection of information organized in such a way that a computer program can quickly select desired pieced of data. You can think of a database as an electronic filing system.... An alternative concept in database design is known as Hypertext. In a Hypertext database, any object, whether it be a piece of text, a picture, or a film, can be linked to any other object. Hypertext databases are particularly useful for organizing large amounts of disparate information, but they are not designed for numerical analysis.

Phillip E. Margolis, Personal Computer Dictionary 113 (1991).

Button: 2. In a hypertext database, an icon that when selected allows a user to view a particular associated object. Text, pictures, recorded music, and other forms of information are called objects; associated objects are linked together.

(American Heritage) Dictionary of Computer and Internet Words: An A to Z Guide to Hardware, Software, and Cyberspace 37 (3d ed. 2001).

Database: An organized collection of information that can be searched, retrieved, changed, and sorted using a collection of programs known as a database management system. Many databases are organized into records consisting of data that have been input into fields. *See also* **flat-file database**, **hypertext**, **relational database**.

Ibid. at 66-67.

Database, a collection of data, or information, stored in a form that may be accessed by a computer....

Database: Computer science n. also data base A collection of data arranged for ease of retrieval.

The American Heritage Dictionary 301 (4th ed. 2001).

[H]ypermedia information relate multimedia data by linking them together and enable navigation through links. Existing systems do not yet provide all the functionality required by the hypermedia information systems. As an example, it is necessary to support content-based and structure-based retrieval[7] as well as database query mechanisms for hypermedia document management. Moreover, information retrieval issues are a key input for document management as it is mentioned in [12].

Frederic Andres, John Buford, and Kinji Ono, *An Application-Oriented Approach for HyTime Structured Document Management*, in Database and Expert Systems Applications: 9th International Conference, DEXA '98, 260-61 (1998).

Button: 3. Computer Sci. a. A well-defined area within a graphical user interface that is clicked to select a command. b. In a hypertext database, an icon whose selection allows a user to view an associated object.

Webster's II New College Dictionary 155 (3d ed. 2005).

Each

Each: being one of two or more distinct individuals having a similar relation and often constituting an aggregate: this as well as that or the next or any other of two or more separate but similar individuals

Webster's Third New International Dictionary 713 (1986).

Enter

Enter: (1) With respect to a sequence of instructions; to commence execution at some point other than the beginning; to commence execution at an 'entry point'. (2) Also, sometimes, send; transmit. At a terminal; to cause data held in the terminal buffer to be transmitted or moved to main storage.

Entry: (1) An element of a table or dictionary. (2) The commencement of execution at a sequence of instructions. See *entry conditions*; *entry point*. (3) The act of sending a message to a line. See *enter*.

Entry conditions Also *initial conditions*. The values that must be supplied (or defaulted) before commencing execution of a sequence of instructions. In addition to the address of the first instruction (the entry point), they may include initial parameter values.

Entry point (1) An instruction address or label of a place in a sequence of instructions where execution can begin, for example, to selectively perform one of a program's functions.

Dictionary of Computing 88 (Frank J. Galland ed., reprint 1983).

Entry: 1. An input received from a terminal device. On receipt, an entry is placed by a control program in an entry block whose address is inserted in a list of entries awaiting processing.... 3. A statement in a programming system. In general each entry is written on one line of a coding form and punched on one card, although some systems permit a single entry to overflow several cards.

Charles Sippl and Robert Sippl, Computer Dictionary 182 (3d ed. 1984).

Entry instruction: Usually the first instruction to be executed in a subroutine, *i.e.* it may have several different entry points each of which corresponds to a different function of the subroutine.

Ibid.

Input: 1. Information or data transferred or to be transferred from an external storage medium into the internal storage of the computer. 2. Describing the routines with direct input as defined in (1), or the devices from which such information is available to the computer. 3. The device or collective set of devices necessary for input as defined in (1).

Ibid. at 241

Entry point Any location in a routine to which control can be passed by another routine. Also referred to as the transfer address. Often the first instruction to be executed in a program.

Donald D. Spencer, Computer Dictionary 108 (3d ed. 1986).

Enter: 2. To insert data or a command into a communications, computer, data processing, or control system by any means and for any purpose.

Martin H. Weik, 2 Computer Science and Communications Dictionary 525 (2000).

Entry: 1. In a communications, computer, data processing, or control system, any data, instructions, or signals that are entered into any component of the system by any means and for any purpose.

Ibid. at 527.

Euclidean Distance

Euclidean distance: the straight line distance between two points. In a plane with p1 at (x1,y1) and p2 at (x2,y2), it is [the square root of:] $(x1-x2)^2 + (y1-y2)^2$

Phillip A. Laplante, Dictionary of Computer Science, Engineering, and Technology 164 (2001).

Euclidean distance: In one dimension, the distance between two points on the real line is absolute value of their numerical difference

12 The Encyclopedia Americana 479 (1993).

These formulas [for Euclidean distance] implicitly assume numeric attributes. Here, the difference between two values is just the numerical difference between them, and it is this difference that is squared and added to yield the distance function. For nominal attributes that take on values that are symbolic rather than numeric, the difference between two values that are not the same is often taken to be one, whereas if the values are the same the difference is zero. No scaling is required in this case because only the values 0 and 1 are used.

<u>Ian Witten & Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques</u> 129 (2005).

More generally, we have |XY|=|y-x|. This is the Euclidean distance (or simply distance) between X and Y.

Kiyosi Itô, Encyclopedic Dictionary of Mathematics 553 (The MIT Press, 1993).

Definition. The *euclidean distance* between case *I* and case *K* is

$$D(I, K) = (\sum \{1 \le J \le N\} [A(I, J) - A(K, J)]^2)^{1/2}.$$

In one, two, or three dimensions, this is just "straight-line" distance between the vectors corresponding to the *I*th and *K*th cases,

John A. Hartigan, Clustering Algorithms 58 (1975).

In that context, scores have been considered as measurements, and Euclidean distance represents a natural expression of difference between the units.

J.E. Doran & F. R. Hodson, Mathematics and Computers in Archaeology 139 (1975).

Euclidean distance

(definition)

Definition: The straight line distance between two points. In a plane with p_1 at (x_1, y_1) and p_2 at (x_2, y_2) , it is $\sqrt{((x_1 - x_2)^2 + (y_1 - y_2)^2)}$.

See also rectilinear, Manhattan distance, Lm distance.

Note: In N dimensions, the Euclidean distance between two points p and q is $\sqrt{(\sum_{i=1}^{N} (p_i - q_i)^2)}$ where p_i (or q_i) is the coordinate of p (or q) in dimension i.

Paul E. Black, "Euclidean distance," in <u>Dictionary of Algorithms and Data Structures</u> [online], (Paul E. Black, ed., 2004), http://www.itl.nist.gov/div897/sqg/dads/HTML/euclidndstnc.html.

Distance

The distance between two points is the length of the path connecting them. In the plane, the distance between points (x_1, y_1) and (x_2, y_2) is given by the Pythagorean theorem.

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}.$$
 (1)

In Euclidean three-space, the distance between points (x_1, y_1, z_1) and (x_2, y_2, z_2) is

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2 + (z_2 - z_1)^2}.$$
(2)

In general, the distance between points x and y in a Euclidean space \mathbb{R}^n is given by

$$d = |\mathbf{x} - \mathbf{y}| = \sqrt{\sum_{i=1}^{n} |x_i - y_i|^2}$$
. (3)

Eric W. Weisstein, "Distance, " in MathWorld—A Wolfram Web Resource (2010), http://mathworld.wolfram.com/Distance.html. See also Eric W. Weisstein, "Distance, " in CRC Concise Encyclopedia of Mathematics 794 (2d ed. 2002), http://books.google.com/books?id=aFDWuZZslUUC.

Graphical

Graphics: Facilities to provide computer output in the form of displays, drawings, and pictures.

Donald D. Spencer, Computer Dictionary 87 (2d ed. 1979).

Display: A visual representation of data.

Ibid. at 68.

Data: A formalized representation of facts or concepts suitable for communication, interpretation, or processing by people or by automatic means.

<u>Ibid.</u> at 59.

Graphical terminal: Visual display terminal that has a screen to display a drawing as well as textual information.

Donald D. Spencer, Computer Dictionary 130 (3d ed. 1986).

Graphical: 2.

4. Of or pertaining to writing; consisting of letters. (Cf. GRAPHIC 4.) graphical stone, graphic granite (see GRAPHIC 4b).

Oxford English Dictionary Online (2d ed. 1989), http://dictionary.oed.com.

Graphics based: Refers to software and hardware that treat objects on a display screen as bit maps or geometrical shapes rather than as characters. In contrast, character-based systems treat everything as ASCII or extended ASCII characters.

All graphics software is by definition graphics based. Systems that manipulate text can also be graphics based; for example, desktop publishing systems are essentially graphics-based word processors.

Traditionally, most DOS applications—word processors, spreadsheets, and database management systems—have been character based. This enables them to run on any PC, even those with limited CPU, memory, and graphics capabilities....

Because the Macintosh is a graphical computer, all programs that run on a Macintosh computer are graphics based.

Phillip E. Margolis, Random House Personal Computer Dictionary 221-22 (2d ed. 1996).

Graphical User Interface

Graphical user interface (GUI): A program interface that takes advantage of the computer's graphics capabilities to make the program as easy as possible to use (Figure 36). Well-designed graphical user interfaces can free the user from learning complex command languages.... Graphical user interfaces, such as the one used by the Apple Macintosh computer, feature the following basic components:

windows: You can divide the screen into different areas. In each window, you can run a different program or display a different file. You can move windows around the display screen, and change their shape or size at will.

pointer: A symbol that appears on the display screen and that you move to select objects and commands. Usually, the pointer appears as a small angled arrow.

Text-processing applications, however, use an I-beam pointer that is shaped like a capital I.

menus: Most graphical user interfaces let you execute commands by selecting a choice from a menu....

A true graphical user interface, called a *GUI*, includes standard formats for representing text and graphics....

Phillip E. Margolis, The Random House Personal Computer Dictionary 201-4 (1991).

Graphical User Interface: a computer program designed to allow a computer user to interact easily with the computer typically by making choices from menus or groups of icons

Merriam-Webster's Collegiate Dictionary 545 (11th ed. 2003).

Graphical User Interface: n. Computing (a) an interface that allows a user to manipulate graphics on-screen (now rare); (b) an interface in which programs, files, data structures, commands, etc., are represented on screen by graphical symbols (such as icons, menu items, and windows) which can be manipulated or activated directly without the need to learn a command language (cf. WIMP n.3); abbreviated GUI.

Oxford English Dictionary Online (Draft Additions Feb. 2003), http://dictionary.oed.com

Index

Index: (2) Table of reference, held in storage in some sequence, that may be accessed to obtain the addresses of other items of data, such as items in a graphics or data file.

Donald D. Spencer, The Illustrated Computer Dictionary 146 (3d ed. 1986).

Index: A list of values of some particular data item contained in a record, enabling it to be retrieved more rapidly than by simple serial search. For example, a subscript indexes a particular element of an array.

<u>Ibid.</u> at 256.

Initialize

initialize, v.: ... 2. trans. (Computers.) To set to the value, or put in the condition, appropriate to the start of an operation. Const. to. ...

The Oxford English Dictionary Online (2d ed. 1989), http://dictionary.oed.com.

initialize: 1) To preset or establish the basic conditions or startup state, normally by setting certain states or values. Such procedures might be used to set an initial value for the address of an operand, establish the initial control values for a loop, or clear all register locations prior to running. 2) To execute a special software routine to set certain flags states or certain memory locations to zero or some other starting value.

Clarence T. Jones, Patrick Turner's Industrial Automation Dictionary 206 (1st ed. 1996).

initialize: To set a variable, register, or other storage location to a starting value. *See also:* reset; clear.

<u>IEEE Standards Project, IEEE 100; The Authoritative Dictionary of IEEE Standard Terms</u> 555 (Kim Breitfelder & Don Messina eds., 7th ed. 2000).

initialize vb. ... 2. To assign a beginning value to a variable ...

Microsoft Press Computer Dictionary 273 (5th ed. 2002).

initialize: To prepare hardware or software to perform a task. ...

Webster's New World Computer Dictionary 186 (10th ed. 2003).

Map

Site map: A page within a Web site that offers a map of all the Web pages pertaining to the site. Typically, this is an outline of hyperlinks to the other Web pages and remote sites.

Roger T. Stevens, Computer Graphics Dictionary 393 (2002).

Sitemap (or) site map: A Web page included on many Web sites, its purpose is to help users navigate large, complicated sites. The sitemap usually lists text links to the content of a Web site in its entirety, on one page.

Eric Jansen & Vincent James, NetLingo: The Internet Dictionary 349 (2002).

A "site map "can be helpful in making a site user-friendly. In its simplest form, a site map lists everything that is located on the Web site and provides navigational links to get to the information. This is important because it lets the viewer know what is and is not on the Web site.

Margherita Pagani, Encyclopedia of Multimedia Technology and Networking 526 (2008).

Matrix

Numerical representation

Numeric representation: A discrete representation of data by numerals.

IBM Dictionary of Computing 470 (10th ed. 1994).

Numerical: 1 of, or having the nature of, numbers 2 in or by numbers 3 denoting (a) number 4 expressed by numbers, not by letters 5 Math. designating or of value regardless of sign

Webster's New World Dictionary 931 (3d ed. 1994).

Numerical: also numeric, adj. 1. of or pertaining to numbers; of the nature of a number. 2. indicating a number, as a symbol... 4. expressed in numbers: numerical equations.

Random House Webster's College Dictionary 910 (2d ed. 2001).

Object

Object: 7. Computing. A distinct (or discrete) entity, as (a) a package of information (as a data structure definition) together with a description of its manipulation; (b) a single graphic image, or the data that produces such an image.

The Oxford English Dictionary Online (2d ed. 1989), http://dictionary.oed.com.

Hypertext: A special type of database system,in which objects (text, pictures, music, programs, and so on) can be creatively linked to each other. When you select an object, you can see all the other objects that are linked to it. You can move from one object to another even though they might have very different forms.... The icons that you select to view associated objects are called Hypertext links or buttons.

Hypertext systems are particularly useful for organizing and browsing through large databases that consist of disparate types of information. There are several Hypertext systems available for Apple Macintosh computers and IBM PCs that enable you to develop your own databases.

Phillip E. Margolis, Personal Computer Dictionary 227 (1991).

Object: 6. Computers, any item that can be individually selected or manipulated, as a picture, data file, or piece of text.

Random House Webster's College Dictionary 914 (2d ed. 2001).

Button: 2. In a hypertext database, an icon that when selected allows a user to view a particular associated object. Text, pictures, recorded music, and other forms of information are called objects; associated objects are linked together.

(American Heritage) Dictionary of Computer and Internet Words: An A to Z Guide to Hardware, Software, and Cyberspace 37 (3d ed. 2001).

Paradigm

Paradigm: 1: EXAMPLE, PATTERN ...

Webster's Third New International Dictionary 1635 (1986).

Paradigm: 1 a) pattern, example, or model

Webster's New World Dictionary 979 (3d ed. 1994).

Paradigm: An archetypal example or pattern that provides a model for a process or system.

Microsoft Press Computer Dictionary 352 (3d ed. 1997).

Paradigm: n. ... 2. an example serving as a model; pattern: a paradigm of virtue

Random House Webster's College Dictionary 960 (2d ed. 2001).

Paradigm: A model, example or pattern.

Alan Freedman, The Computer Glossary: The Complete Illustrated Dictionary 288 (9th ed. 2001).

Paradigm: A model, pattern, or example, especially one that revolutionizes the standard approach to a subject or conventional modes of thinking in a profession or study.

P.P. Parmar & Javed Khan, Encyclopaedic Dictionary of Computer and Library Science 1152 (2003).

Path

Path: (1) The route used to locate files; the storage location of a file. (2) In a network, any route between two nodes. A path may include more than one branch.

IBM Dictionary of Computing 502 (10th ed. 1994).

Path: 1. In communications, a link between two nodes in a network.

Microsoft Press Computer Dictionary 356 (3d ed. 1997).

Path: (1) In communications, a route between any two nodes. Same as line, channel, link or circuit.

(2) In database management, the route from one set of data to another, for example, from customers to orders.

Alan Freedman, The Computer Glossary: The Complete Illustrated Dictionary 291 (9th ed. 2001).

Recursive

Recursive: 1. reapplying the same formula or algorithm to a number or result in order to generate the next number or result in a series. 2. returning again and again to a point or points already made: a recursive style of writing

Webster's New World College Dictionary (2010), http://www.yourdictionary.com/recursive.

Recursion: [COMPUT SCI] a technique in which an apparently circular process is used to perform an iterative process.

McGraw-Hill Dictionary of Computing & Communications 316 (2003).

Recursion: An algorithmic technique where a function, in order to accomplish a task, calls itself with some part of the task....

Note: Every recursive solution involves two major parts or cases, the second part having three components.

- base case(s), in which the problem is simple enough to be solved directly, and
- recursive case(s). A recursive case has three components:
- 1. divide the problem into one or more simpler or smaller parts of the problem,
- 2. call the function (recursively) on each part, and
- 3. combine the solutions of the parts into a solution for the problem.

Depending on the problem, any of these may be trivial or complex.

Paul E. Black and Patrick Rodgers, "Recursion," in Dictionary of Algorithms and Data Structures (Paul E. Black ed., 2009), http://www.itl.nist.gov/div897/sqg/dads/HTML/recursion.html.

Set

Set: (3) A collection

Donald D. Spencer, Computer Dictionary 167 (2d ed. 1979).

Set: 44 ... b : a collection of things and esp. mathematical elements (as numbers or points)— called also class

Webster's Third New International Dictionary 2279 (1986).

Set: (3) Any collection of related things. (4) In a relational database model, a collection of things. (5) In a network/hierarchical database model, a one-to-many relationship, the path by which one record type is connected to another.

Donald D. Spencer, Computer Dictionary 265 (3d ed. 1986).

Set: Sets may share some or all of their members with other sets. In certain cases, all the members of one set, A, are members of another, B. Sets like A are called **subsets** of sets like B and sets like B are called **supersets** of sets like A.... A more formal definition of the notion of subset and superset is given in (32)

(32) Given two sets A and B, A is a subset of B (A \subset B) if, and only if, every member of A is a member of B, in which case B is a superset of A (B \supset A).

According to (32), the sets {a,b,c} and {c,d,e} are both subsets of {a,b,c,d,e} but {a,b,f} is not a subset of this, because it contains one element, f, that is not in {a,b,c,d,e}. This definition has two important consequences. In the first place, it entails that every set is a subset of itself, because (32) just requires all the members of the subset to be in the superset.

Ronnie Cann, Formal Semantics: An Introduction 45 (1993).

Source Map

The *information source map* describes the databases, their contents, their vocabularies, their level of coverage, and the conditions for access.

Patrice Degoulet & Marius Fieschi, Introduction to Clinical Informatics 78 (1997).

In this chapter, we present a tool for supporting the effective and efficient use of sources — the "source map." In essence, a source map links data classes to sources and contains meta data about these links.

<u>Dirk Jaap Vriens, Information and Communication Technology for Competitive Intelligence</u> 181 (2004).

Subset

Subset: a set (as of data) that is itself an element of a larger set; esp: a mathematical set each of whose elements is also an element of a given set

Webster's Third New International Dictionary 2279 (1986).

Subset: A set contained within a set.

Donald D. Spencer, Computer Dictionary 175 (2d ed. 1979).

Subset Any set contained within a set.

Donald D. Spencer, Computer Dictionary 281 (3d ed. 1986).

Set: Sets may share some or all of their members with other sets. In certain cases, all the members of one set, A, are members of another, B. Sets like A are called **subsets** of sets like B and sets like B are called **supersets** of sets like A.... A more formal definition of the notion of subset and superset is given in (32)

(32) Given two sets A and B, A is a subset of B (A \subset B) if, and only if, every member of A is a member of B, in which case B is a superset of A (B \supset A).

According to (32), the sets {a,b,c} and {c,d,e} are both subsets of {a,b,c,d,e} but {a,b,f} is not a subset of this, because it contains one element, f, that is not in {a,b,c,d,e}. This definition has two important consequences. In the first place, it entails that every set is a subset of itself, because (32) just requires all the members of the subset to be in the superset.

Ronnie Cann, Formal Semantics: An Introduction 45 (1993).

Subset: 1: a set each of whose elements is an element of an inclusive set

Merriam-Webster's Collegiate Dictionary 1245 (2003).

Subset: a mathematical set containing some or all of the elements of a given set

Webster's New World Dictionary 643 (2003) (similar definition in 1982 and 1994 editions).

Textual

Textual: 1 of, in, based on, or conforming to a text 2 literal; word-for-word

Webster's New World Dictionary 1385 (3d ed. 1994).

Text: n. 1. the main body of matter in a manuscript, book, etc., as distinguished from notes, appendixes, illustrations, etc.... 10. Lang., a unit of connected speech or writing that forms a cohesive whole.

Textual: adj. 1. of or pertaining to a text.

Random House Webster's College Dictionary 1354 (2d ed. 2001).

Vector

Vector: (1) a quantity usually characterized by an ordered set of numbers... (4) a onedimensional array

IBM Dictionary of Computing 729 (10th ed. 1994).

Vector: n. 1. In mathematics and physics, a variable that has both distance and direction. Compare scalar.... 3. In data structures, a one-dimensional array—a set of terms arranged in a single column or row.

Microsoft Press Computer Dictionary 492 (3d ed. 1997).

SRA reserves the right to amend or supplement the above list of proposed constructions and identifications of extrinsic evidence upon further investigation and discovery.