Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. 5,282,222

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
1-3, 7-9	transceiver(s)	two-way radio unit(s)	**'222 Patent**: Claims 1,3, and 7 Figures 1a, 1b, 4, 5a, 5b, 5c, and 12 Col. 1, ll. 2-5 Col. 1, ll. 7-11 Col. 1, ll. 27-39 Col. 1, ll. 43-44 Col. 1, ll. 50-62 Col. 2, ll. 3-24 Col. 2, ll. 51-60 Col. 2, l. 64 - Col. 3, l. 8 Col. 3, ll. 7-19 Col. 3, ll. 39-40 Col. 4, ll. 44-63 Col. 5, ll. 1-8 Col. 5, ll. 10-14 Col. 10, ll. 7-13 Col. 12, l. 44 - Col. 13, l. 64 Col. 13, l. 29-44 Col. 13, ll. 45-53 Col. 17, ll. 64-67	*Declaration of Alexander Haimovich, Ph.D.* *The New IEEE Standard Dictionary of Electrical and Electronics Terms*, Fifth Edition (1993), pg. 1392.
1-3	amplitude and phase differential characteristics	amplitude and phase distortions	**'222 Patent**: Claims 1, 4 Figure 10 Col. 2, ll. 13-18 Col. 2, ll. 51-65 Col. 3, ll. 4-6 Col. 3, ll. 23-32 Col. 4, ll. 9-11 Col. 4, l. 64 - Col. 5, l. 9 Col. 6, ll. 34-36 Col. 7, ll. 11-27 Col. 8, ll. 47-49 Col. 9, ll. 43-61 Col. 11, l. 3 - Col. 12, l. 42	*Declaration of Alexander Haimovich, Ph.D.*

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. 5,282,222

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
			Col. 12, l. 68 Col. 13, ll. 61-64 Col. 18, ll. 3-21 Col. 18, ll. 48-50 Col. 18, ll. 60-65 **'222 Patent Prosecution History**: March 31, 1992 Original Application (W0000491-615)	
1-3	wideband frequency division multiplexer for multiplexing information onto wideband frequency channels	a device for placing information onto a number of frequencies (K) having a frequency range between the frequencies (Δf) large enough to be able to achieve a specific throughput and large enough to be able to avoid using either a clock or a carrier recovery device without substantially affecting the BER	**'222 Patent**: Claim 1, 7 Figure 2, 10 Col. 1, ll. 43-44 Col. 2, ll. 3-9 Col. 2, ll. 61-64 Col. 4, ll. 9-11 Col. 5, l. 24 - Col. 7, l. 10 Col. 7, ll. 15-17 Col. 7, ll. 43-45 Col. 8, ll. 8-15 Col. 13, ll. 5-28 Col. 13, ll. 45-53 Col. 20, ll. 21-31 **'222 Patent Prosecution History**: March 31, 1992 Original Application (W0000491-615)	*Declaration of Alexander Haimovich, Ph.D.* *The New IEEE Standard Dictionary of Electrical and Electronics Terms*, Fifth Edition (1993), pp. 174, 531, 829-830.
1-3	a channel estimator for estimating one or both of the amplitude and the phase differential of the received signal to produce as output one or both of an estimated amplitude	**channel estimator**: a device for computing the amplitude and phase distortions of a received signal	**'222 Patent**: Claims 1, 4 Figures 5b, 7a, 7b, and 10 Col. 2, ll. 13-18 Col. 2, ll. 51-65 Col. 3, ll. 4-6 Col. 3, ll. 23-32 Col. 4, ll. 9-11 Col. 4, l. 64 - Col. 5, l. 9	*Declaration of Alexander Haimovich, Ph.D.* *The New IEEE Standard Dictionary of Electrical and Electronics Terms*, Fifth Edition (1993), pp. 174.

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. 5,282,222

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
	and an estimated phase differential respectively		Col. 6, ll. 34-36 Col. 7, ll. 11-27 Col. 8, ll. 47-49 Col. 9, ll. 43-61 Col. 10, l. 58 - Col. 12, l. 21 Col. 11, l. 3 - Col. 12, l. 42 Col. 12, ll. 29-32 Col. 12, l. 68 Col. 13, ll. 61-64 Col. 18, ll. 3-21 Col. 18, ll. 48-50 Col. 18, ll. 60-65 **'222 Patent Prosecution History**: March 31, 1992 Original Application (W0000491-615)	
7-9	points	frequencies	**'222 Patent**: Claim 7 Figures 2 and 10 Col. 5, ll. 26-31 Col. 7, ll. 28-33 Col. 7, ll. 57-60 Col. 8, ll. 8-15 Col. 13, ll. 25-27 Col. 17, ll. 17-20 Col. 18, ll. 51-59 **'222 Patent Prosecution History**: March 31, 1992 Original Application (W0000491-615)	*Declaration of Alexander Haimovich, Ph.D.*
7-9	tail slots	groups of frequencies that act as guard bands to reduce power outside of the frequency band	**'222 Patent**: Claim 7 Figures 2 and 10 Col. 1, ll. 50-56 Col. 5, ll. 29-31 Col. 5, ll. 36-43 Col. 6, ll. 47-48	*Declaration of Alexander Haimovich, Ph.D.*

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. 5,282,222

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
			Col. 7, ll. 28-33 Col. 7, ll. 57-60 Col. 17, ll. 17-27 Col. 18, ll. 51-59 **'222 Patent Prosecution History**: March 31, 1992 Original Application (W0000491-615)	
7-9	the second transceiver has a maximum expected clock error χT, where T is the duration of one time domain sample, the information is multiplexed over a number M of levels, and K1 selected such that $2\pi\chi/K1<\pi/M$	χ: a real value that when multiplied by the duration of one time domain sample (T) provides the maximum expected clock error. **a number M of levels**: a number of distinct phases	**'222 Patent**: Claim 7 Figure 10 Col. 2, ll. 51-64 Col. 3, ll. 23-32 Col. 4, ll. 9-11 Col. 4, l. 64 - Col. 5, l. 2 Col. 5, ll. 31-49 Col. 5, l. 55 - Col. 6, l. 8 Col. 6, ll. 34-46 Col. 6, l. 50 - Col. 7, l. 10 Col. 7, ll. 11-27 Col. 12, l. 68 Col. 18, ll. 60-65 **'222 Patent Prosecution History**: March 31, 1992 Original Application (W0000491-615)	*Declaration of Alexander Haimovich, Ph.D.*
7-9	carrier recovery	synchronizing the local oscillator to the carrier frequency of the received signal	**'222 Patent**: Claims 1,7 Figure 1b Col. 1, ll. 43-44 Col. 2, ll. 7-9 Col. 2, ll. 19-24 Col. 4, ll. 44-63 Col. 5, l. 55 - Col. 7, l. 10 Col. 9, l. 19 - Col. 12, l. 42 Col. 12, ll. 14-21 Col. 12, l. 43 - Col. 13, l. 28	*Declaration of Alexander Haimovich, Ph.D.* *Data Communications Principles*, Richard D. Gitlin, Jeremiah F. Hayes, Stephen B. Weinstein, 1992, pp. 403-408, 422-426, 444-447. *Digital Communications*, Simon Haykin, 1988, pp. 180, 344-357.

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. 5,282,222

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
			'222 Patent Prosecution History: March 31, 1992 Original Application (W0000491-615) **'222 Patent Cited Prior Art**: *Advanced Groupband Data Modem Using Orthogonally Multiplexed QAM Technique*, Botaro Horosaki, Satoshi Hasegawa, and Akio Sabato, IEEE Transactions on Communications, vol. COM-34, No. 6, Jun. 1986, pp. 587-592.	*Digital Communications*, John G. Proakis, Second Edition (1989), pp. 303-338. *Electronic Communications Systems: Fundamentals Through Advanced*, Wayne Tomasi, 1988, pp. 517-518, 529-532, 688. *Digital Communication*, Edward A. Lee, David G. Messerschmitt, 1988, pp. 548-581. *Communication Systems Engineering*, John G. Proakis, Masoud Salehi, January 14, 1994. *Synchronization in Digital Communication Volume 1, Phase-, Frequency- Locked Loops, and Amplitude Control (Wiley Series in Telecommunications and Signal Processing)*, Heinrich Meyr, Gerd Ascheid, Vol. 1 (1990). *Digital Communications by Satellite: Modulation, Multiple Access and Coding*, V. K. Bhargava, 1981.
7-9	clock recovery	synchronizing the sampling clock to the timing of the received signal	**'222 Patent**: Claims 1,7 Figure 1b Col. 1, ll. 43-44 Col. 2, ll. 7-9 Col. 2, ll. 19-24 Col. 4, ll. 44-63 Col. 5, l. 55 - Col. 7, l. 10 Col. 9, l. 19 - Col. 12, l. 42 Col. 12, ll. 14-21 Col. 12, l. 43 - Col. 13, l. 28	*Declaration of Alexander Haimovich, Ph.D.* *Data Communications Principles*, Richard D. Gitlin, Jeremiah F. Hayes, Stephen B. Weinstein, 1992, pp. 403-408, 422-426, 444-447. *Digital Communications*, Simon Haykin, 1988, pp. 180, 344-357. *Digital Communications*, John G. Proakis,

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. 5,282,222

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
			'222 Patent Prosecution History: March 31, 1992 Original Application (W0000491-615) **'222 Patent Cited Prior Art**: *Advanced Groupband Data Modem Using Orthogonally Multiplexed QAM Technique*, Botaro Horosaki, Satoshi Hasegawa, and Akio Sabato, IEEE Transactions on Communications, vol. COM-34, No. 6, Jun. 1986, pp. 587-592.	Second Edition (1989), pp. 303-338. *Electronic Communications Systems: Fundamentals Through Advanced*, Wayne Tomasi, 1988, pp. 517-518, 529-532, 688. *Digital Communication*, Edward A. Lee, David G. Messerschmitt, 1988, pp. 548-581. *Communication Systems Engineering*, John G. Proakis, Masoud Salehi, January 14, 1994. *Synchronization in Digital Communication Volume 1, Phase-, Frequency- Locked Loops, and Amplitude Control (Wiley Series in Telecommunications and Signal Processing)*, Heinrich Meyr, Gerd Ascheid, Vol. 1 (1990). *Digital Communications by Satellite: Modulation, Multiple Access and Coding*, V. K. Bhargava, 1981.
9	the method of claim 7 in which K2 is selected so that the out of band signal is less than a given level	**out of band signal**: power outside the frequency band	**'222 Patent**: Claims 7,9 Figure 2,10 Col. 1, ll. 50-56 Col. 5, ll. 29-31 Col. 5, ll. 35-43 Col. 5, ll. 44-49 Col. 6, ll. 46-50 Col. 7, ll. 57-60 Col. 18, ll. 51-59 **'222 Patent Prosecution History**: March 31, 1992 Original Application	*Declaration of Alexander Haimovich, Ph.D.*

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. 5,282,222

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
			(W0000491-615)	

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
1, 4-5, 10, 12-14, 17, 20-25, 29-31, 33-34, 36-38	transceiver	a two-way radio unit	**'802 Patent**: Figures 1, 2, 4, 5, 19, and 20 Col. 1, l. 8 - Col. 2, l. 67 Col. 3, ll. 55-60 Col. 5, ll. 7-12 Col. 6, ll. 20-40 **'222 Patent**: Claims 1, 3, 5 and 7 Figures 1a, 1b, 4, 5a, 5b, 5c and 12 Col. 1, ll. 2-5 Col. 1, ll. 7-11 Col. 1, ll. 27-39 Col. 1, ll. 43-44 Col. 1, ll. 50-62 Col. 2, ll. 3-24 Col. 2, ll. 51-60 Col. 2, l. 64 - Col. 3, l. 8 Col. 3, ll. 7-19 Col. 3, ll. 39-40 Col. 4, ll. 44-63 Col. 5, ll. 1-8 Col. 5, ll. 10-14 Col. 10, ll. 7-13 Col. 12, l. 44 - Col. 13, l. 64 Col. 13, ll. 29-53 Col. 17, ll. 64-67	*Newton's Telecom Dictionary*, Ninth Edition 1995, pg. 664. *The New IEEE Standard Dictionary of Electrical and Electronics Terms*, Fifth Edition (1993), pg. 1392.
1, 4-5, 10, 12-14, 17, 20-22	a converter for converting the first stream of data symbols into plural sets of N data symbols each	**converter**: a device that accepts data in one form or mode and changes it to another Alternatively, should the Court construe this element pursuant to 35 U.S.C. § 112(6):	**'802 Patent**: Figures 1 and 4 Col. 2, ll. 36-40 Col. 2, ll. 58-62 Col. 4, ll. 1-2	*Declaration of Richard D. Gitlin, Ph.D.* *Merriam-Webster's Collegiate Dictionary*, Tenth Edition (1994), pg. 254. *The IEEE Standard Dictionary of Electrical and Electronics Terms*, Sixth Edition (1996), pg. 222.

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
		Recited Function: converting the first stream of data symbols into plural sets of N data symbols each **Corresponding Structure**: i) element 10 in Fig. 1 including corresponding descriptions in the specification (col. 4:1-2 and 2:36-40); ii) element 10 in Fig. 4 including corresponding descriptions in the specification (col. 4:1-2 and 2:58-62); and equivalents thereof.		
33-34, 36-38	a converter for converting the first stream of data symbols into plural sets of data symbols each	**converter**: a device that accepts data in one form or mode and changes it to another Alternatively, should the Court construe this element pursuant to 35 U.S.C. § 112(6): **Recited Function**: converting the first stream of data symbols into plural sets of data symbols each **Corresponding Structure**: i) element 10 in Fig. 1 including corresponding descriptions in the specification (col. 4:1-2 and 2:36-40); ii) element 10 in Fig. 4 including corresponding descriptions in the specification (col. 4:1-2 and 2:58-62); and equivalents thereof.	**'802 Patent**: Figures 1 and 4 Col. 2, ll. 36-40 Col. 2, ll. 58-62 Col. 4, ll. 1-2	*Declaration of Richard D. Gitlin, Ph.D.* *Merriam-Webster's Collegiate Dictionary*, Tenth Edition (1994), pg. 254. *The IEEE Standard Dictionary of Electrical and Electronics Terms*, Sixth Edition (1996), pg. 222.
1, 4-5, 10, 12-	first computing means for operating on the plural sets of	Wi-LAN contends that this claim element should be governed by 35	**'802 Patent**: Figures 1 and 4 Col. 2, ll. 6-10	

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
14	N data symbols to produce modulated data symbols corresponding to an invertible randomized spreading of the first stream of data symbols	U.S.C. § 112(6) **Recited Function**: operating on the plural sets of N data symbols to produce modulated data symbols corresponding to an invertible randomized spreading of the first stream of data symbols **Corresponding Structure**: i) element 12 in FIG. 1 including corresponding descriptions in the specification (col. 2:6-10, 2:36-40, 4:2-4:12 and 4:35-38); ii) element 12 in FIG. 4 including corresponding descriptions in the specification (col. 2:6-10, 2:58-62, 4:39-44, and 4:66-5:12); iii) a computing device programmed to perform the algorithms disclosed by the foregoing; and equivalents thereof.	Col. 2, ll. 36-40 Col. 2, ll. 58-62 Col. 4, ll. 2-12 Col. 4, ll. 35-44 Col. 4, l. 66 - Col. 5, l. 12	
17, 20-22	first computing means for operating on the plural sets of N data symbols to produce sets of modulated data symbols corresponding to an invertible randomized spreading of each set of N data symbols over more than one and up to M direct sequence	Wi-LAN contends that this claim element should be governed by 35 U.S.C. § 112(6) **Recited Function**: operating on the plural sets of N data symbols to produce sets of modulated data symbols corresponding to an invertible randomized spreading of each set of N data symbols over more than one and up to M direct sequence spread spectrum codes **Corresponding Structure**: i) element 12 in FIG. 1 including	**'802 Patent**: Figures 1 and 4 Col. 2, ll. 6-10 Col. 2, ll. 36-40 Col. 2, ll. 58-62 Col. 4, ll. 2-12 Col. 4, ll. 35-44 Col. 4, l. 66 - Col. 5, l. 12	

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
	spread spectrum codes	corresponding descriptions in the specification (col. 2:6-10, 2:36-40, 4:2-4:12 and 4:35-38); ii) element 12 in FIG. 4 including corresponding descriptions in the specification (col. 2:6-10, 2:58-62, 4:39-44, and 4:66-5:12); iii) a computing device programmed to perform the algorithms disclosed by the foregoing; and equivalents thereof.		
33-34, 36-38	first computing means for operating on the plural sets of data symbols to produce modulated data symbols corresponding to an invertible randomized spreading of the first stream of data symbols over more than one and up to M direct sequence spread spectrum codes, where each direct sequence spread spectrum code has M chips	Wi-LAN contends that this claim element should be governed by 35 U.S.C. § 112(6) **Recited Function**: operating on the plural sets of data symbols to produce modulated data symbols corresponding to an invertible randomized spreading of the first stream of data symbols over more than one and up to M direct sequence spread spectrum codes, where each direct sequence spread spectrum code has M chips **Corresponding Structure**: i) element 12 in FIG. 1 including corresponding descriptions in the specification (col. 2:6-10, 2:36-40, 4:2-4:12 and 4:35-38); ii) element 12 in FIG. 4 including corresponding descriptions in the specification (col. 2:6-10, 2:58-62, 4:39-44, and 4:66-5:12); iii) a computing device programmed to perform the algorithms disclosed by the foregoing;	**'802 Patent**: Figures 1 and 4 Col. 2, ll. 6-10 Col. 2, ll. 36-40 Col. 2, ll. 58-62 Col. 4, ll. 2-12 Col. 4, ll. 35-44 Col. 4, l. 66 - Col. 5, l. 12	

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
		and equivalents thereof.		
1, 4-5, 10, 12-14, 17, 20-22, 24-25, 33-34, 36-38	invertible randomized spreading	spreading and applying complex constants chosen randomly, in a manner that is invertible	**'802 Patent**: Figures 1, 2, 3, 4, 5 and 8 Col. 1, ll. 21-32 Col. 3, ll. 12-14 Col. 4, ll. 2-4 Col. 4, ll. 6-12 Col. 4, ll. 29-34 Col. 4, l. 66 - Col. 5, l. 12 **'268 Patent Prosecution History**: February 8, 1996 Response to November 9, 1995 Office Action (W193805 at pp. 2-4 August 23, 1995 Response to March 29, 1995 Office Action (W193806 at pp. 160-175)	*Declaration of Richard D. Gitlin, Ph.D.*
1, 4-5, 10, 12-14, 17, 20-22, 33-34, 36-38	means to combine the modulated data symbols for transmission	Wi-LAN contends that this claim element should be governed by 35 U.S.C. § 112(6) **Recited Function**: combine the modulated data symbols for transmission **Corresponding Structure**: i) element 14 in FIG. 1 including corresponding descriptions in the specification (col. 4:5-7 and 2:36-40); ii) element 14 in FIG. 4 including corresponding descriptions in the specification (col. 4:5-7 and 2:58-62); or iii) element 20 in FIG. 4 including corresponding descriptions in the specification (col. 4:39-44 and 4:66-	**'802 Patent**: Figures 1 and 4 Col. 2, ll. 36-40 Col. 2, ll. 58-62 Col. 4, ll. 5-7 Col. 4, ll. 39-44 Col. 4, l. 66 - Col. 5, l. 12	*Declaration of Richard D. Gitlin, Ph.D.*

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
		5:12); and equivalents thereof.		
10, 12-13, 34, 36-37	means for receiving a sequence of modulated data symbols, the modulated data symbols having been generated by invertible randomized spreading of a second stream of data symbols	Wi-LAN contends that this claim element should be governed by 35 U.S.C. § 112(6) **Recited Function**: receiving a sequence of modulated data symbols, the modulated data symbols having been generated by invertible randomized spreading of a second stream of data symbols **Corresponding Structure**: i) element 22 in FIG. 2 including corresponding descriptions in the specification (col. 2:41-43 and 4:18-21); ii) the corresponding element in Fig. 5 to element 22 (which includes the serial-to-parallel converter) including corresponding descriptions in the specification (2:63-64 and 4:18-21); iii) FIG. 20 including corresponding descriptions in the specification (3:58-60 and 6:20-35); and equivalents thereof.	**'802 Patent**: Figures 2, 5 and 20 Col. 2, ll. 41-43 Col. 2, ll. 63-64 Col. 3, ll. 58-60 Col. 4, ll. 18-21 Col. 6, ll. 20-35	*Declaration of Richard D. Gitlin, Ph.D.*
17, 20-22	means for receiving a sequence of modulated data symbols, the modulated data symbols having been generated by invertible randomized spreading of a	Wi-LAN contends that this claim element should be governed by 35 U.S.C. § 112(6) **Recited Function**: receiving a sequence of modulated data symbols, the modulated data symbols having been generated by invertible randomized spreading of a second stream of data symbols over more than	**'802 Patent**: Figures 2, 5 and 20 Col. 2, ll. 41-43 Col. 2, ll. 63-64 Col. 3, ll. 58-60 Col. 4, ll. 18-21 Col. 6, ll. 20-35	*Declaration of Richard D. Gitlin, Ph.D.*

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
	second stream of data symbols over more than one and up to M direct sequence spread spectrum codes	one and up to M direct sequence spread spectrum codes **Corresponding Structure**: i) element 22 in FIG. 2 including corresponding descriptions in the specification (col. 2:41-43 and 4:18-21); ii) the corresponding element in Fig. 5 to element 22 (which includes the serial-to-parallel converter) including corresponding descriptions in the specification (2:63-64 and 4:18-21); iii) FIG. 20 including corresponding descriptions in the specification (3:58-60 and 6:20-35); and equivalents thereof.		
12	a correlator for correlating each modulated data symbol from the received sequence of modulated data symbols with a code from a set of more than one and up to M codes, where M is the number of chips per code	a device that measures the degree of similarity between the received signal and each code from a set of more than one and up to M codes, where M is the number of chips per code	**'802 Patent**: Figures 2 and 5 Abstract Col. 2, ll. 3-10 Col. 2, ll. 41-54 Col. 4, ll. 13-28 **'802 Patent Prosecution History**: Combined Declaration and Power of Attorney for Reissue Patent Application (W0000746-749)	*Declaration of Richard D. Gitlin, Ph.D.* *Data Communications Principles*, Richard D. Gitlin, Jeremiah F. Hayes, Stephen B. Weinstein, 1992, pg. 85.
1, 4-5, 10, 12-14, 17, 20-25, 29-31, 33-34,	spreading	modulating data symbols by codes of larger bandwidth	**'802 Patent**: Figures 1 and 4 Abstract Col. 1, ll. 21-32 Col. 2, ll. 3-10 Col. 4, ll. 2-4 Col. 4, ll. 6-12	*Declaration of Richard D. Gitlin, Ph.D.* *Newton's Telecom Dictionary*, Ninth Edition 1995, pg. 1057. *Digital Communications*, John G. Proakis, Second Edition (1989), pg. 800.

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
36-38			Col. 4, l. 66 - Col. 5, l. 12 **'222 Patent**: Col. 1, ll. 2-5 Col. 2, ll. 47-50 Col. 18, ll. 51-55 **'268 Patent Prosecution History**: August 23, 1995 Response to March 29, 1995 Office Action (W193806 at pp. 160-175)	*The New IEEE Standard Dictionary of Electrical and Electronics Terms*, Fifth Edition (1993), pp. 1265-1266.
17, 20-25, 29-31, 33-34, 36-38	direct sequence spread spectrum code(s)	codes over which information bits are spread	**'802 Patent**: Figures 1, 3 and 4 Abstract Col. 1, ll. 21-32 Col. 1, l. 66 - Col. 2, l. 34 Col. 4, ll. 6-12 Col. 4, l. 66 - Col. 5, l. 12 **'222 Patent**: Col. 1, ll. 2-5 Col. 2, ll. 47-50 Col. 18, ll. 51-55 **'802 Patent Prosecution History**: Combined Declaration and Power of Attorney for Reissue Patent Application (W0000746-749) **'268 Patent Prosecution History**: August 23, 1995 Response to March 29, 1995 Office Action (W193806 at pp. 160-175)	*Declaration of Richard D. Gitlin, Ph.D.*
4-5	a transformer for operating on each set of N data	a device that performs an N-point transform on each set of N data symbols to generate modulated data	**'802 Patent**: Figures 3, 4 and 5 Abstract	*Declaration of Richard D. Gitlin, Ph.D.*

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
	symbols to generate modulated data symbols as output, the modulated data symbols corresponding to a spreading of each data symbol over a separate code selected from a set of more than one and up to M codes, where M is the number of chips per code	symbols as output, the modulated data symbols corresponding to a spreading of each data symbol over a separate code selected from a set of more than one and up to M codes, where M is the number of chips per code	Col. 2, ll. 3-10 Col. 4, ll. 38-43 Col. 4, l. 66 - Col. 5, l. 12 **'802 Patent Prosecution History**: Combined Declaration and Power of Attorney for Reissue Patent Application (W0000746-749)	
10, 12-13, 17, 20-22, 34, 36-37	second computing means for operating on the sequence of modulated data symbols to produce an estimate of the second stream of data symbols	Wi-LAN contends that this claim element should be governed by 35 U.S.C. § 112(6) **Recited Function**: operating on the sequence of modulated data symbols to produce an estimate of the second stream of data symbols **Corresponding Structure**: i) element 24 in FIG. 2 including corresponding descriptions in the specification (2:41-54 and 4:13-28); ii) the elements of FIG. 5 between the serial-to-parallel and parallel-to-serial converters including corresponding descriptions in the specification (2:63-67 and 4:44-46); or iii) a computing device programmed to perform the algorithms disclosed in the foregoing;	**'802 Patent**: Figures 2 and 5 Col. 2, ll. 41-54 Col. 2, ll. 63-67 Col. 4, ll. 13-28 Col. 4, ll. 44-46	

Plaintiff Wi-LAN, Inc.'s P.R. 4-3 Disclosure for U.S. Patent No. RE37,802

CLAIMS	CLAIM TERM	WI-LAN'S PROPOSED CONSTRUCTION	INTRINSIC SUPPORT	EXTRINSIC SUPPORT
		and equivalents thereof.		
17, 20-22	means to combine output from the second computing means	Wi-LAN contends that this claim element should be governed by 35 U.S.C. § 112(6) **Recited Function**: combine output from the second computing means **Corresponding Structure**: parallel to serial converters in FIGs. 2 and 5 including corresponding descriptions in the specification (2:41-54 and 2:63-67); and equivalents thereof.	**'802 Patent**: Figures 2 and 5 Col. 2, ll. 41-54 Col. 2, ll. 63-67	*Declaration of Richard D. Gitlin, Ph.D.*
23-25, 29-31	combining the modulated data symbols for transmission	No construction is necessary.	**'802 Patent**: Figures 1 and 4 Col. 2, ll. 36-40 Col. 2, ll. 58-62 Col. 4, ll. 5-7 Col. 4, ll. 39-44 Col. 4, l. 66 - Col. 5, l. 12	