

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

COLLISION COMMUNICATIONS INC.,
Plaintiff,

Case No. 2:23-cv-00594-JRG

v.

JURY TRIAL DEMANDED

LENOVO GROUP LTD.,
Defendant.

JOINT CLAIM CONSTRUCTION CHART

'703 Patent and '651 Patent					
No.	Claim(s)	Claim Language	Collision's Proposal	Lenovo's Proposal	Court's Construction
1.	1	1. An apparatus for processing a digital data stream from multiple users, comprising: an initial amplitude estimation unit processing said data stream and producing initial amplitude estimates on a first iteration; a joint amplitude estimator coupled to said data stream and said initial amplitude estimator, wherein said joint amplitude estimator produces updated amplitude estimates; a symbol estimator coupled to said data stream, said initial amplitude estimator, and said joint amplitude estimator, wherein said symbol estimator produces a plurality of symbols estimates for each user; and a bank of decoders coupled to said symbol estimator, producing a	No construction necessary; alternatively, a [digital] data stream from multiple sources of digital data streams.	a [digital] data stream from multiple transmitting devices	

		plurality of symbol likelihood estimates for each user, wherein said symbol likelihood estimates are iteratively fed back to said symbol estimator and said joint amplitude estimator until a final condition is obtained. '703 Patent cl. 1 1. A joint amplitude estimator for a data stream from multiple users, comprising: - a data stream from said multiple users divided into a plurality of observation intervals; - a plurality of processing modules coupled to said observation intervals, wherein said processing modules calculates interference cancellation values for each of said users and computes a filter for each of said observation intervals, said filter being applied to said data within said observation interval to			
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		compute individual amplitude estimates; and an amplitude estimation unit which processes said individual amplitude estimates and calculates new amplitude estimates, wherein said new amplitude estimates are iteratively passed back to said processing modules either a maximum number of iterations or a desired bit error rate have been reached. '651 Patent cl. 1			
2.	1	1. An apparatus for processing a digital data stream from multiple users, comprising: an initial amplitude estimation unit processing said data stream and producing initial amplitude estimates on a first iteration; a joint amplitude estimator coupled to said data stream and said initial amplitude estimator, wherein said joint amplitude estimator produces updated amplitude estimates;	No construction necessary	[fed/passed] back at least once	

		a symbol estimator coupled to said data stream, said initial amplitude estimator, and said joint amplitude estimator, wherein said symbol estimator produces a plurality of symbols estimates for each user; and a bank of decoders coupled to said symbol estimator, producing a plurality of symbol likelihood estimates for each user, wherein said symbol likelihood estimates are iteratively fed back to said symbol estimator and said joint amplitude estimator until a final condition is obtained. '703 Patent cl. 1 1. A joint amplitude estimator for a data stream from multiple users, comprising: a data stream from said multiple users divided into a plurality of observation intervals;			
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		a plurality of processing modules coupled to said observation intervals, wherein said processing modules calculates interference cancellation values for each of said users and computes a filter for each of said observation intervals, said filter being applied to said data within said observation interval to compute individual amplitude estimates; and an amplitude estimation unit which processes said individual amplitude estimates and calculates new amplitude estimates, wherein said new amplitude estimates are iteratively passed back to said processing modules either a maximum number of iterations or a desired bit error rate have been reached. '651 Patent cl. 1			
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3.	1	1. An apparatus for processing a digital data stream from multiple users, comprising: an initial amplitude estimation unit processing said data stream and producing initial amplitude estimates on a first iteration; a joint amplitude estimator coupled to said data stream and said initial amplitude estimator, wherein said joint amplitude estimator produces updated amplitude estimates; a symbol estimator coupled to said data stream, said initial amplitude estimator, and said joint amplitude estimator, wherein said symbol estimator produces a plurality of symbols estimates for each user; and a bank of decoders coupled to said symbol estimator, producing a plurality of symbol likelihood estimates for each user, wherein said symbol likelihood estimates	Not subject to 35 U.S.C 112 ¶ 6; no construction necessary; to the extent this term is subject to 35 U.S.C 112 ¶ 6, (1) the '703 Patent function is "produces updated amplitude estimates" and the structure is an amplitude estimator, and (2) '651 Patent function is "joint amplitude estimation" and the structure is an amplitude estimator.	Subject to 35 U.S.C. § 112 ¶ 6 Function: joint amplitude estimation Structure: MMSE-based joint amplitude estimator 120 (Figs. 2, 4, and corresponding description)	
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		are iteratively fed back to said symbol estimator and said joint amplitude estimator until a final condition is obtained. '703 Patent cl. 1 1. A joint amplitude estimator for a data stream from multiple users, comprising: - a data stream from said multiple users divided into a plurality of observation intervals; - a plurality of processing modules coupled to said observation intervals, wherein said processing modules calculates interference cancellation values for each of said users and computes a filter for each of said observation intervals, said filter being applied to said data within said observation interval to compute individual amplitude estimates; and			
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		an amplitude estimation unit which processes said individual amplitude estimates and calculates new amplitude estimates, wherein said new amplitude estimates are iteratively passed back to said processing modules either a maximum number of iterations or a desired bit error rate have been reached.			
		'651 Patent cl. 1			

U.S. Patent No. 6,947,505					
No.	Claim(s)	Claim Language	Collision's Proposal	Lenovo's Proposal	Court's Construction
1.	1, 9	1. In a multi-user detection System in which interfering signals are purposely allowed to exist, a parameter estimation unit for use in conjunction with a signal separation unit, a parameter estimation unit for use in conjunction with a signal separation unit, in which each received signal has associated channel transfer functions, comprising: a signal processor for determining said channel transfer functions for each received signal; and, means coupled to said channel transfer function determining signal processor for providing uninterrupted	This term is governed by 35 U.S.C. sec. 112 para. 6. The claimed function is providing uninterrupted estimates of the channel transfer function parameters on a real-time basis by first deriving the estimated channel transfer function for each of said interfering signals.	This term is governed by 35 U.S.C. sec. 112 para. 6. The claimed function is providing uninterrupted estimates of the channel transfer function parameters on a real-time basis by first deriving the estimated channel transfer function for	

	estimates of the channel transfer function parameters on a real-time basis by first deriving the estimated channel transfer function for each of said interfering signals. 9. In a multi-user detection system in which interfering signals are purposely allowed to exist, a parameter estimation unit for use in conjunction with a signal separation unit for estimating channel transfer function parameters from channel transfer functions, comprising: a signal processor for determining said channel transfer functions for each received signal; and, means coupled to said channel transfer function determining signal processor for providing uninterrupted estimates of the channel transfer function parameters on a real-time basis, said multi-user detection system including a tracking unit for acquired signals, and in the presence of a new signal in an acquisition channel of said parameter estimation unit estimating the channel transfer function prior to signal switching from the acquisition channel to a traffic channel, with said parameter estimation unit parameters being passed to said tracking unit thereafter, all received	The corresponding structure is a parameter tracking unit and equivalents thereof as discussed at fig. 1, 5:20–40, 6:9–23, fig. 3, fig. 4 (item 90, 90', 90'), 7 45–8:40.	each of said interfering signals. The corresponding structure is a parameter tracking unit and equivalents thereof that includes averaging, Training Sequence Recreation Unit 60, Training Sequence Windowing Unit 74, and Summing Junction 72 as discussed at fig. 1, 5:20–40, 6:9–23, fig. 3, fig. 4 (item 90, 90', 90'), 7 45–8:40. For each signal in a channel, the “parameter tracking unit” tracks the signal’s (1) power, (2) timing offset, (3) frequency offset, (4) phase, and (5) multipath structure. Collectively, these parameters are the “channel transfer	
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		signals having training portions, a second interfering signal being and assigned to said traffic channel, said parameter estimation unit recreating the training signal portion of every received signal prior to the last received signal and subtracting the recreated training signals from the training portion of the last received signal to provide an estimate solely due to the last received signal during the training signal portion, thus to allow an estimate of the last signal from which to calculate parameters of the last signal.		function parameters.”	
2.	1, 9	1. In a multi-user detection system in which interfering signals are purposely allowed to exist, a parameter estimation unit for use in conjunction with a signal separation unit, in which each received signal has associated channel transfer functions, comprising: a signal processor for determining said channel transfer functions for each received signal; and, means coupled to said channel transfer function determining signal processor for providing uninterrupted estimates of the channel transfer function parameters on a real-time basis by first deriving the estimated channel	No construction necessary.	uninterrupted estimates obtained by averaging the currently determined parameter estimate with the older parameter estimates	

		transfer function for each of said interfering signals. 9. In a multi-user detection system in which interfering signals are purposely allowed to exist, a parameter estimation unit for use in conjunction with a signal separation unit for estimating channel transfer function parameters from channel transfer functions, comprising: a signal processor for determining said channel transfer functions for each received signal; and, means coupled to said channel transfer function determining signal processor for providing uninterrupted estimates of the channel transfer function parameters on a real-time basis, said multi-user detection system including a tracking unit for acquired signals, and in the presence of a new signal in an acquisition channel of said parameter estimation unit estimating the channel transfer function prior to signal switching from the acquisition channel to a traffic channel, with said parameter estimation unit parameters being passed to said tracking unit thereafter, all received signals having training portions, a second interfering signal being and assigned to said traffic channel, said parameter			
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		estimation unit recreating the training signal portion of every received signal prior to the last received signal and subtracting the recreated training signals from the training portion of the last received signal to provide an estimate solely due to the last received signal during the training signal portion, thus to allow an estimate of the last signal from which to calculate parameters of the last signal.			
3.	3–5, 9	3. The parameter estimation unit of claim 1, wherein the multi-user detection system includes providing an acquisition channel, and wherein the first derived estimated channel transfer function is derived from acquisition channel parameters. 4. The parameter estimation unit of claim 1, wherein said multi-user detection system includes a tracking unit for acquired signals, and wherein in the presence of a new signal in the acquisition channel of said parameter estimation unit estimates the channel transfer function prior to signal switching from an acquisition channel to the traffic channel, with said parameter estimation unit parameters being passed to said tracking unit thereafter.	No construction necessary; alternatively, “physical channel used for initialization.”	control channel that is for only one user	

		5. The parameter estimation unit of claim 1, and further including a traffic channel, and wherein for said traffic channel phase is tracked without utilization of the estimates from the acquisition channel. 9. In a multi-user detection system in which interfering signals are purposely allowed to exist, a parameter estimation unit for use in conjunction with a signal separation unit for estimating channel transfer function parameters from channel transfer functions, comprising: a signal processor for determining said channel transfer functions for each received signal; and, means coupled to said channel transfer function determining signal processor for providing uninterrupted estimates of the channel transfer function parameters on a real-time basis, said multi-user detection system including a tracking unit for acquired signals, and in the presence of a new signal in an acquisition channel of said parameter estimation unit estimating the channel transfer function prior to signal switching from the acquisition channel to a traffic channel, with said parameter estimation unit parameters being passed to said tracking unit			
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		thereafter, all received signals having training portions, a second interfering signal being and assigned to said traffic channel, said parameter estimation unit recreating the training signal portion of every received signal prior to the last received signal and subtracting the recreated training signals from the training portion of the last received signal to provide an estimate solely due to the last received signal during the training signal portion, thus to allow an estimate of the last signal from which to calculate parameters of the last signal.			
4.	1	1. In a multi-user detection system in which interfering signals are purposely allowed to exist, a parameter estimation unit for use in conjunction with a signal separation unit, in which each received signal has associated channel transfer functions, comprising: a signal processor for determining said channel transfer functions for each received signal; and, means coupled to said channel transfer function determining signal processor for providing uninterrupted estimates of the channel transfer function parameters on a real-time basis by first deriving the estimated channel transfer	[AGREED]	[AGREED]	This portion of the preamble is limiting.

		function for each of said interfering signals.			
5.	9	9. In a multi-user detection system in which interfering signals are purposely allowed to exist, a parameter estimation unit for use in conjunction with a signal separation unit for estimating channel transfer function parameters from channel transfer functions, comprising: a signal processor for determining said channel transfer functions for each received signal; and, means coupled to said channel transfer function determining signal processor for providing uninterrupted estimates of the channel transfer function parameters on a real-time basis, said multi-user detection system including a tracking unit for acquired signals, and in the presence of a new signal in an acquisition channel of said parameter estimation unit estimating the channel transfer function prior to signal switching from the acquisition channel to a traffic channel, with said parameter estimation unit parameters being passed to said tracking unit thereafter, all received signals having training portions, a second interfering signal being and assigned to said traffic channel, said parameter estimation unit	[AGREED]	[AGREED]	This portion of the preamble is limiting.

		recreating the training signal portion of every received signal prior to the last received signal and subtracting the recreated training signals from the training portion of the last received signal to provide an estimate solely due to the last received signal during the training signal portion, thus to allow an estimate of the last signal from which to calculate parameters of the last signal.			
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U.S. Patent No. 7,463,703					
No.	Claim(s)	Claim Language	Collision's Proposal	Lenovo's Proposal	Court's Construction
1.	1	1. An apparatus for processing a digital data stream from multiple users, comprising: an initial amplitude estimation unit processing said data stream and producing initial amplitude estimates on a first iteration; a joint amplitude estimator coupled to said data stream and said initial amplitude estimator, wherein said joint amplitude estimator produces updated amplitude estimates; a symbol estimator coupled to said data stream, said initial amplitude estimator, and said joint amplitude estimator, wherein said symbol estimator	No construction necessary.	soft outputs that indicate both a discrete estimate of a symbol and the probability that the estimate is correct	

		produces a plurality of symbols estimates for each user; and a bank of decoders coupled to said symbol estimator, producing a plurality of symbol likelihood estimates for each user, wherein said symbol likelihood estimates are iteratively fed back to said symbol estimator and said joint amplitude estimator until a final condition is obtained.			
2.	1	1. An apparatus for processing a digital data stream from multiple users, comprising: an initial amplitude estimation unit processing said data stream and producing initial amplitude estimates on a first iteration; a joint amplitude estimator coupled to said data stream and said initial amplitude estimator, wherein said joint amplitude estimator produces updated amplitude estimates; a symbol estimator coupled to said data stream, said initial amplitude estimator, and said joint amplitude estimator, wherein said symbol estimator produces a plurality of symbols estimates for each user; and a bank of decoders coupled to said symbol estimator, producing a plurality of symbol likelihood estimates	Not indefinite; No construction necessary.	the distance from a waveform's midpoint to its crest or trough	

		for each user, wherein said symbol likelihood estimates are iteratively fed back to said symbol estimator and said joint amplitude estimator until a final condition is obtained.			
3.	1	1. An apparatus for processing a digital data stream from multiple users, comprising: an initial amplitude estimation unit processing said data stream and producing initial amplitude estimates on a first iteration; a joint amplitude estimator coupled to said data stream and said initial amplitude estimator, wherein said joint amplitude estimator produces updated amplitude estimates; a symbol estimator coupled to said data stream, said initial amplitude estimator, and said joint amplitude estimator, wherein said symbol estimator produces a plurality of symbols estimates for each user; and a bank of decoders coupled to said symbol estimator, producing a plurality of symbol likelihood estimates for each user, wherein said symbol likelihood estimates are iteratively fed back to said symbol estimator and said joint amplitude estimator until a final condition is obtained.	No construction necessary	decoders for error identification and correction	

4.	1	1. An apparatus for processing a digital data stream from multiple users, comprising: an initial amplitude estimation unit processing said data stream and producing initial amplitude estimates on a first iteration; a joint amplitude estimator coupled to said data stream and said initial amplitude estimator, wherein said joint amplitude estimator produces updated amplitude estimates; a symbol estimator coupled to said data stream, said initial amplitude estimator, and said joint amplitude estimator, wherein said symbol estimator produces a plurality of symbols estimates for each user; and a bank of decoders coupled to said symbol estimator, producing a plurality of symbol likelihood estimates for each user, wherein said symbol likelihood estimates are iteratively fed back to said symbol estimator and said joint amplitude estimator until a final condition is obtained.	[AGREED]	[AGREED]	Preamble is limiting.
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U.S. Patent No. 7,920,651					
No.	Claim(s)	Claim Language	Collision's Proposal	Lenovo's Proposal	Court's Construction
1.	1	1. A joint amplitude estimator for a data stream from multiple users, comprising: a data stream from said multiple users divided into a plurality of observation intervals; a plurality of processing modules coupled to said observation intervals, wherein said processing modules calculates interference cancellation values for each of said users and computes a filter for each of said observation intervals, said filter being applied to said data within said observation interval to compute individual amplitude estimates; and an amplitude estimation unit which processes said individual amplitude estimates and calculates new amplitude estimates, wherein said new amplitude estimates are iteratively passed back to said processing modules either a maximum number of iterations or a desired bit error rate have been reached.	No construction necessary; not subject to 35 U.S.C. 112 ¶ 6. To the extent this term is subject to 35 U.S.C. 112 ¶ 6, the function is “processes said individual amplitude estimates and calculates new amplitude estimates” and the structure is amplitude estimator.	Subject to 35 U.S.C. § 112 ¶ 6 Function: processes said individual amplitude estimates and calculates new amplitude estimates Structure: amplitude estimator 435 (Fig. 4 and corresponding description)	
2.	1	1. A joint amplitude estimator for a data stream from multiple users, comprising: a data stream from said multiple users divided into a plurality of observation intervals;	No construction necessary.	each of a plurality of processing modules coupled to each of said	

		a plurality of processing modules coupled to said observation intervals, wherein said processing modules calculates interference cancellation values for each of said users and computes a filter for each of said observation intervals, said filter being applied to said data within said observation interval to compute individual amplitude estimates; and an amplitude estimation unit which processes said individual amplitude estimates and calculates new amplitude estimates, wherein said new amplitude estimates are iteratively passed back to said processing modules either a maximum number of iterations or a desired bit error rate have been reached.		observation intervals	
3.	1	1. A joint amplitude estimator for a data stream from multiple users, comprising: a data stream from said multiple users divided into a plurality of observation intervals; a plurality of processing modules coupled to said observation intervals, wherein said processing modules calculates interference cancellation values for each of said users and computes a filter for each of said observation intervals, said filter being	Not indefinite; no construction necessary	the distance from a waveform's midpoint to its crest or trough	

		applied to said data within said observation interval to compute individual amplitude estimates; and an amplitude estimation unit which processes said individual amplitude estimates and calculates new amplitude estimates, wherein said new amplitude estimates are iteratively passed back to said processing modules either a maximum number of iterations or a desired bit error rate have been reached.			
4.	1	1. A joint amplitude estimator for a data stream from multiple users, comprising: a data stream from said multiple users divided into a plurality of observation intervals; a plurality of processing modules coupled to said observation intervals, wherein said processing modules calculates interference cancellation values for each of said users and computes a filter for each of said observation intervals, said filter being applied to said data within said observation interval to compute individual amplitude estimates; and an amplitude estimation unit which processes said individual amplitude estimates and calculates new	[AGREED]	[AGREED]	Preamble is limiting.

		amplitude estimates, wherein said new amplitude estimates are iteratively passed back to said processing modules either a maximum number of iterations or a desired bit error rate have been reached.			
5.	1	1. A joint amplitude estimator for a data stream from multiple users, comprising: - a data stream from said multiple users divided into a plurality of observation intervals; - a plurality of processing modules coupled to said observation intervals, wherein said processing modules calculates interference cancellation values for each of said users and computes a filter for each of said observation intervals, said filter being applied to said data within said observation interval to compute individual amplitude estimates; and - an amplitude estimation unit which processes said individual amplitude estimates and calculates new amplitude estimates, wherein said new amplitude estimates are iteratively passed back to said processing modules either a maximum number of iterations or a desired bit error rate have been reached.	[AGREED]	[AGREED]	wherein said new amplitude estimates are iteratively passed back to said processing modules until either a maximum number of iterations or a desired bit error rate has been reached

U.S. Patent No. 7,593,492					
No.	Claim(s)	Claim Language	Collision's Proposal	Lenovo's Proposal	Court's Construction
1.	1	1. A hybrid Multi-User Detector System for processing received signals, comprising: a parameter estimator coupled to said received signals providing received data information; a multi-user detector decision unit coupled to said parameter estimator and said received signals; at least two multi-user detectors coupled to said parameter estimator and said multi-user detector decision unit, said multi-user detector decision unit using decision criteria to determine a selected multi-user detector, wherein said selected multi-user detector outputs a plurality of information streams, one stream corresponding to each of said received signals; and a bank of decoders coupled to said plurality of information streams, wherein said decoders output a plurality of improved information streams.	[AGREED]	[AGREED]	Preamble is limiting.
2.	10	10. A hybrid receiver for processing a plurality of received signals, said receiver comprising: a parameter estimation unit coupled to said received signals,	[AGREED]	[AGREED]	Preamble is limiting.

	wherein said parameter estimation unit extracts received signal information; a multi-user detector decision unit coupled to said parameter estimator and said received signals, wherein said multi-user detector decision unit selects a multi-user detector based upon at least one threshold; a low complexity multi-user detector switchably coupled by said multi-user detector decision unit, wherein said low complexity multi-user detector outputs a plurality of low complexity processed information streams; a medium complexity multi-user detector switchably coupled by said multi-user detector decision unit, wherein said medium complexity multi-user detector outputs a plurality of medium complexity processed information streams; a high complexity multi-user detector switchably coupled by said multi-user detector decision unit, wherein said high complexity multi-user detector outputs a plurality of high complexity processed information streams; and a bank of decoders coupled to said plurality of low complexity			
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		processed information streams, said plurality of medium complexity processed information streams, and said plurality of high complexity processed information streams, wherein said decoders output a plurality of refined information streams.			
3.	17	17. A method for processing signals from multiple users with raw digitized data, comprising: - performing parameter estimation of said raw digitized data; - grabbing a window of bits from said raw digitized data; - subtracting any known bits from said window of bits; - selecting a multi-user detector; - estimating unknown bits from said window of bits using said multi-user detector; - incrementing to a next window of bits; - repeating said steps of subtracting, selecting, estimating and incrementing until there are no more windows and outputting a set of symbol estimates.	[AGREED]	[AGREED]	Preamble is limiting.
4.	1	1. A hybrid Multi-User Detector System for processing received signals, comprising:	[AGREED]	[AGREED]	This term is subject to 35 U.S.C. 112 ¶ 6. The claimed function is “using decision criteria

		a parameter estimator coupled to said received signals providing received data information; a multi-user detector decision unit coupled to said parameter estimator and said received signals; at least two multi-user detectors coupled to said parameter estimator and said multi-user detector decision unit, said multi-user detector decision unit using decision criteria to determine a selected multi-user detector, wherein said selected multi-user detector outputs a plurality of information streams, one stream corresponding to each of said received signals; and a bank of decoders coupled to said plurality of information streams, wherein said decoders output a plurality of improved information streams.			to determine a selected multi-user detector,” and the corresponding structure is “MUD decision unit 220 (or decision logic unit 520) configured to perform one or more of the algorithms described at 8:12–18, 13:35–14:40, 15:3–21, 19:43–48, 19:56–62, and 20:41–49; and equivalents thereof.”
5.	10	10. A hybrid receiver for processing a plurality of received signals, said receiver comprising: a parameter estimation unit coupled to said received signals, wherein said parameter estimation unit extracts received signal information; a multi-user detector decision unit coupled to said parameter estimator and said received signals, wherein said multi-user detector decision unit	[AGREED]	[AGREED]	The term “multi-user detector decision unit selects a multi-user detector based upon at least one threshold” is subject to 35 U.S.C. 112 ¶ 6. The claimed function is “selects a multi-user detector based upon at least one threshold,” and the

		selects a multi-user detector based upon at least one threshold; a low complexity multi-user detector switchably coupled by said multi-user detector decision unit, wherein said low complexity multi-user detector outputs a plurality of low complexity processed information streams; a medium complexity multi-user detector switchably coupled by said multi-user detector decision unit, wherein said medium complexity multi-user detector outputs a plurality of medium complexity processed information streams; a high complexity multi-user detector switchably coupled by said multi-user detector decision unit, wherein said high complexity multi-user detector outputs a plurality of high complexity processed information streams; and a bank of decoders coupled to said plurality of low complexity processed information streams, said plurality of medium complexity processed information streams, and said plurality of high complexity processed information streams, wherein said			corresponding structure is “MUD decision unit 220 (or decision logic unit 520) configured to perform one or more of the algorithms described at 8:12–18, 13:35–14:40, 15:3–21, 19:43–48, 19:56–62, and 20:41–49; and equivalents thereof.”
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		decoders output a plurality of refined information streams.			
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DATED: July 1, 2025

Respectfully submitted,

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**ATTORNEYS FOR DEFENDANT
LENOVO GROUP LIMITED**

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As of this date, all counsel of record who have consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system.

DATED: July 1, 2025

/s/ Christopher S. Stewart
Christopher S. Stewart