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

ADVANCED CODING TECHNOLOGIES, LLC, Plaintiff, v. APPLE INC., Defendant.	§ § § § § § § § § § § § § §	Case No. 2:24-cv-00572-JRG (LEAD CASE) **JURY TRIAL DEMANDED**
ADVANCED CODING TECHNOLOGIES, LLC, Plaintiff, v. APPLE INC., Defendant.	§ § § § § § § § § § § § § §	Case No. 2:24-cv-00687-JRG (MEMBER CASE) **JURY TRIAL DEMANDED**

JOINT CLAIM CONSTRUCTION AND PREHEARING STATEMENT

In accordance with Patent Local Rule 4-3, Plaintiff Advanced Coding Technologies, LLC ("ACT"), and Defendant Apple Inc. ("Apple"), jointly submit this Joint Claim Construction and Prehearing Statement setting forth the parties' proposed constructions for the herein identified terms, phrases, or clauses of United States Patent No. 8,090,025 (the "'025 Patent"), United States Patent No. 9,986,303 (the "'303 Patent"), United States Patent No. 10,218,995 (the "'995 Patent"), United States Patent No. 9,042,448 (the "'448 Patent"), United States Patent No. 8,230,101 (the "'101 Patent"), and United States Patent No. 7,804,891 (the "'891 Patent").

I. Agreed Constructions (P.R. 4-3(a)(1))

The parties have agreed on the construction of the claim terms in the table below.

Claim Term(s), Phrase(s), or Clause(s)	Patent / Claim	Agreed Construction
"border motion-vector data" / "border motion vector data"	'025 Patent Claims 1, 3, 4, 6-10	"data representing the difference in spatial position between a border of the block to be predicted in the picture to be coded and the best-matched border in the reference picture"
"boundary condition"	'025 Patent Claims 1, 3, 4, 6-10	"gradient data pertaining to the pixels at the boundary of a block"
"the input signal being obtained by multiplexing a coded bitstream obtained by predictive coding, border motion-vector data and post-quantization data obtained by quantization in the predictive coding"	'025 Patent Claims 6-8, 10	"the input signal being obtained by multiplexing a coded bitstream, obtained by predictive coding, comprising (1) border motion- vector data and (2) post-quantization data obtained by quantization in the predictive coding"
"standard resolution"	'995 Patent, Claims 1-4, 8-11 '448 Patent, Claims 1-3	"the spatial resolution of a picture input into an encoding system as an encoding target"
"decoding with an extension of the standard resolution"	'995 Patent, Claims 2-4, 11	"decoding with an enhancement layer based on standard resolution reference picture(s)"
"super-resolution enlarged decoded pictures"	'995 Patent, Claims 2-4, 11 '448 Patent, Claims 1-3	"higher than standard resolution enlarged decoded pictures"
"A moving picture encoding system that makes an encoding of a sequence of moving pictures with a resolution higher than a standard resolution using moving pictures contents which include a sequence of moving pictures with the standard resolution and do not include a sequence of moving pictures with a	'448 Patent, Claims 1-3	Preamble is limiting.

Claim Term(s), Phrase(s), or Clause(s)	Patent / Claim	Agreed Construction
resolution higher than the standard resolution, the moving picture encoding system comprising"		

The parties will continue working together to narrow the number of disputed claim terms.

II. Disputed Claim Terms, Phrases, or Clauses (P.R. 4-3(a)(2))

The parties' proposed constructions of each disputed claim term, phrase, or clause of the Asserted Patents are set forth below. ACT's identification of evidence that supports these constructions is attached as Exhibit 1 and Apple's identification of evidence that supports these constructions is attached as Exhibit 2. Each party reserves the right to cite to intrinsic and/or extrinsic evidence cited by the other parties.

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
1.	"an estimated video signal"	'025 Patent Claims 1, 4, 6-7, 9-10	Plain and ordinary meaning	"a predictive signal generated based on boundary conditions"
2.	"[an estimated video signal…] satisfies Poisson's equation"	'025 Patent Claims 1, 4, 6-7, 9-10	"[an estimated video signal] for which Poisson's Equation is true"	"[an estimated video signal] generated by applying Poisson's Equation"
3.	"a selector to select either the first predictive picture or the second predictive picture and supply the predictive picture thus selected to the combiner;" / "a selection program code to select either the first predictive picture or the second predictive picture and supply the predictive picture thus selected to the combiner;"	'025 Patent Claims 6-8	Plain and ordinary meaning	"a selector to select between the first predictive picture or the second predictive picture that have already been generated and supply the predictive picture thus selected to the combiner; / a selection program code to select between the first predictive picture or the second predictive picture that have already been generated and supply the predictive picture thus selected to the combiner"
4.	"basic video image coding data"	'303 Patent, Claims 1-2	"overview video image coding data"	"video image coding data containing an overview video image"
5.	"supplementary video image coding data"	'303 Patent, Claims 1-2	"extension of the basic video image coding data"	"video image coding data containing an extension of the overview video image"
6.	"coding order and display order are earlier by a factor of a group of pictures" / "coding order and display order are earlier by a factor of the	'303 Patent, Claims 1-2	"coding order and display order are earlier by one or more groups of pictures"	Indefinite

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
	group of pictures"			
7.	"the basic video image coding data and the supplementary video image coding data"	'303 Patent, Claims 1-2	Plain and ordinary meaning	Indefinite
8.	"transfer" / "transferring"	'101 Patent, Claims 1, 4, 7	Plain and ordinary meaning	"to move data from one place to another"
9.	"a transfer control unit adapted to transfer and store part of held digital contents in the internal storage device to a network storage device, wherein the network storage device is connected to the network and is capable of storing data, and wherein said transfer control unit does not transfer, from the internal storage device to the network storage device, the digital contents that cannot be recovered if a network failure occurs during the transferring of the digital contents from the internal storage device to the network storage	'101 Patent, Claim 1	Subject to 112 p. 6 Structure: Software algorithm that performs the steps of: • Selecting the digital contents from the held digital contents in the internal storage device according to any criteria; and • Transferring part of the held digital contents from the internal storage device to the network storage device for any reason; as set forth in 6:57-7:12, and equivalents thereof. Function: transfer and store part of held digital contents in the internal storage device to a network storage device, and does not transfer, from the internal storage device to the network storage device, the digital	Indefinite under 35 § 112(6). Function: transfer and store part of held digital contents in the internal storage device to a network storage device, and does not transfer, from the internal storage device to the network storage device, the digital contents that cannot be recovered if a network failure occurs during the transferring of the digital contents from the internal storage device to the network storage device Structure: Not disclosed

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
	device"		contents that cannot be recovered if a network failure occurs during the transferring of the digital contents from the internal storage device to the network storage device	
10.	"a list information transmission unit adapted to respond to a list presentation request for the held digital contents of the server device for media from the network player by transmitting list information to the network player, wherein the list information lists the digital contents left in the internal storage device and the digital contents transferred from the internal storage device to the network storage device and stored in the network storage device, and wherein the list information maintains a tree structure of the digital contents in the internal storage device	'101 Patent, Claim 1	Subject to 112 p. 6 Structure: Software algorithm, program, or routine that performs the steps of: • Receive a list presentation request; • Transmitting list information to the network player in response to the list presentation request; • If the network storage device is not connected to the network, making the list information for the network player include predetermined information for allowing the network player to perform a process for expressing the non-connection on its display list; and • Excluding the digital	Indefinite under 35 § 112(6). Function: respond to a list presentation request for the held digital contents of the server device for media from the network player by transmitting list information to the network player, wherein the list information lists the digital contents left in the internal storage device and the digital contents transferred from the internal storage device to the network storage device and stored in the network storage device, and wherein the list information maintains a tree structure of the digital contents in the internal storage device before transferring the digital contents to the network storage device Structure: Not disclosed

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
	before transferring the digital contents to the network storage device"		contents that cannot be played in response to an instruction to play issued from the network player from the list information to be transmitted from the server device for media to the network player so that the digital contents are not shown on the display list of the network player; as set forth in 8:25-9:25, and equivalents thereof Function: respond to a list presentation request for the held digital contents of the server device for media from the network player by transmitting list information to the network player	
11.	"said list information transmission unit makes the list information to be transmitted to the network player include information for identifying whether each digital content is currently stored in the internal storage device	'101 Patent Claim 5	Subject to 112 p. 6 Structure: Software algorithm, program, or routine that performs the steps of: • Receive a list presentation request; • Transmitting list information to the network	Governed by 35 U.S.C. § 112, ¶ 6 This term provides additive functionality to the functionality required by the term "a list information transmission unit adapted to respond to a list presentation request for the held digital contents of the server device for media from the network player by transmitting list

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
	or the network storage device in the display list of the network player"		player in response to the list presentation request; • if the network storage device is not connected to the network, making the list information for the network player include predetermined information for allowing the network player to perform a process for expressing the non-connection on its display list; and • excluding the digital contents that cannot be played in response to an instruction to play issued from the network player from the list information to be transmitted from the server device for media to the network player so that the digital contents are not shown on the display list of the network player; as set forth in 8:25-9:25, and equivalents thereof Function: makes the list information to be transmitted to the network player include information	information to the network player, wherein the list information lists the digital contents left in the internal storage device and the digital contents transferred from the internal storage device to the network storage device and stored in the network storage device, and wherein the list information maintains a tree structure of the digital contents in the internal storage device before transferring the digital contents to the network storage device" in claim 1. The corresponding structure for the additive functionality in claim 5 is not sufficient to perform the functionality from claim 1 and at most can perform the additional functionality added by claim 5. Therefore, claim 5 is indefinite. Function: makes the list information to be transmitted to the network player include information for identifying whether each digital content is currently stored in the internal storage device or the network storage device in the display list of the network player Structure (if not indefinite based on lack of corresponding structure for

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
			for identifying whether each digital content is currently stored in the internal storage device or the network storage device in the display list of the network player	claim 1 function): shows whether the digital contents is stored in the network storage device or internal storage device using a proper flag, different colors, lighter colors, an asterisk, or an extension tag as set forth in the '101 patent at 8:35-42 and 9:4-25, and equivalents thereof
12.	"a search unit adapted to respond to a data transmission request for the held digital contents from the network player by searching for a location where the held digital contents are currently stored"	'101 Patent, Claim 1	Subject to 112 p. 6 Structure: Software algorithm, program, or routine that performs the steps of: • receiving a data transmission request for held digital contents from the network player; • responding to a data transmission request by searching for the location of requested digital contents; and • transmitting the result of the search to the contents data transmission processing means if the result of the search shows the network storage device; as set forth in 6:41-48, and equivalents thereof	Indefinite under 35 § 112(6). Function: respond to a data transmission request for the held digital contents from the network player by searching for a location where the held digital contents are currently stored Structure: Not disclosed

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
			Function: respond to a data transmission request for the held digital contents from the network player by searching for a location where the held digital contents are currently stored	
13.	"a digital contents data transmission processing unit adapted to allow the corresponding data in held digital contents to be stream-delivered from the network storage device to the network player, if the result of search shows the network storage device"	'101 Patent, Claim 1	Subject to 112 p. 6 Structure: Software algorithm, program, or routine that performs the steps of: • determining where digital contents are held; • determining whether digital contents should be transmitted from the network storage device to the network player directly or indirectly; and • transmitting digital contents to the network player according to the determination of direct or indirect transmission; as set forth in 7:24-65, and equivalents thereof Function: allow the corresponding data in held digital contents to be stream-delivered from the network storage device to the network	Indefinite under 35 § 112(6). Function: allow the corresponding data in held digital contents to be stream-delivered from the network storage device to the network player, if the result of search shows the network storage device Structure: Not disclosed

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
			player, if the result of search shows the network storage device	
14.	"said digital contents data transmission processing unit causes the network storage device to transmit the corresponding data to the server device for media, and then transmits the corresponding data received from the network storage device from the server device for media to the network player"	'101 Patent, Claim 2	Subject to 112 p. 6 Structure: Software algorithm, program, or routine that performs the steps of: • determining where digital contents are held; • determining whether digital contents should be transmitted from the network storage device to the network player directly or indirectly; and • transmitting digital contents to the network player according to the determination of direct or indirect transmission, as set forth in 7:24-65, and equivalents thereof. Function: allow the corresponding data in held digital contents to be stream-delivered from the network storage device to the network player, if the result of search shows the network storage device; and causes the network storage device to transmit the corresponding data	Indefinite under 35 § 112(6). Function: causes the network storage device to transmit the corresponding data to the server device for media, and then transmits the corresponding data received from the network storage device from the server device for media to the network player Structure: Not disclosed

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
			to the server device for media, and then transmits the corresponding data received from the network storage device from the server device for media to the network player	
15.	"said digital contents data transmission processing unit transmits the corresponding data and information for identifying the network storage device to the network player, and causes the network storage device to directly transmit the corresponding data to the network player."	'101 Patent, Claim 3	Subject to 112 p. 6 Structure: Software algorithm, program, or routine that performs the steps of: • determining where digital contents are held; • determining whether digital contents should be transmitted from the network storage device to the network player directly or indirectly; and • transmitting digital contents to the network player according to the determination of direct or indirect transmission, as set forth in 7:24-65, and equivalents thereof Function: allow the corresponding data in held digital contents to be stream-delivered from the network	Indefinite under 35 § 112(6). Function: transmits the corresponding data and information for identifying the network storage device to the network player, and causes the network storage device to directly transmit the corresponding data to the network player Structure: Not disclosed

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
			storage device to the network player, if the result of search shows the network storage device; transmits the corresponding data and information for identifying the network storage device to the network player, and causes the network storage device to directly transmit the corresponding data to the network player	
16.	"a return control unit adapted to cause the digital contents corresponding to a predetermined condition among the digital contents which have been transferred to the network storage device to be returned from the network storage device to the internal storage device"	'101 Patent, Claim 4	Subject to 112 p. 6 Structure: Software algorithm, program, or routine that performs the steps of: • (i) determining a predetermined condition whether digital contents have recently been subjected to self-playback among the digital contents which have been transferred to the network storage device; or (ii) determining a predetermined condition whether the digital contents have recently been played, whether by self-playback or network-playback; and	Indefinite under 35 § 112(6). Function: cause the digital contents corresponding to a predetermined condition among the digital contents which have been transferred to the network storage device to be returned from the network storage device to the internal storage device Structure: Not disclosed

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
			• returning digital contents from the network storage device to the internal storage device based on the determined predetermined condition; as set forth in 7:66-8:24, and equivalents thereof Function: cause the digital contents corresponding to a predetermined condition among the digital contents which have been transferred to the network storage device to be returned from the network storage device to the internal storage device	
17.	"a symbol judging means for obtaining a baseband signal representative of a sequence of multilevel symbols and judging the symbol represented by the baseband signal"	'891 Patent, Claims 1	Subject to 112 p. 6: Structure: processor and a memory that stores a processor and a memory that stores a program executed by the processor in a receiver that judges the instantaneous value of the baseband signal at the Nyquist point against threshold values and determines a symbol value of the section depending on the result as set forth in 9:13-10:4, 14:30-43, and equivalents thereof	Governed by 35 U.S.C. § 112, ¶ 6 Function: obtaining a baseband signal representative of a sequence of multilevel symbols and judging the symbol represented by the baseband signal Structure/Algorithm: special purpose electronics or a general-purpose processor that performs the recited function by obtaining from a demodulator a baseband signal representative of a sequence of multilevel symbols and judging the

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
			Function: obtaining a baseband signal representative of a sequence of multilevel symbols and judging the symbol represented by the baseband signal	symbol by comparing the symbol level to a set of thresholds as disclosed at 9:13-10:4, 13:1-3, 14:30-43, and equivalents thereof
18.	"a communication quality judging means for judging communication quality of a transmission channel over which the baseband signal has been transmitted, based on content of the symbol judged by the symbol judging means; [. . .] wherein the communication quality judging means identifies the number of redundant bits having the predetermined value or the number of redundant bits missing the predetermined value among the redundant bits contained in the symbol that contains a bit belonging to the protected portion, and judges the	'891 Patent, Claim 1	Subject to 112 p. 6: Structure: a processor and a memory that stores a program executed by the processor that receives a bit string derived from symbols obtained from a demodulated signal and checks the value of bits and compares the number of bits having or missing a predetermined value to threshold values as set forth in 9:13-25, 10:45-54, 10:62-12:10, and equivalents thereof. Function: judging communication quality of a transmission channel over which the baseband signal has been transmitted, based on content of the symbol judged by the symbol judging means"; "identifies the number of redundant bits having the predetermined value or the number of redundant bits missing the predetermined value among the redundant bits contained in the symbol that contains a bit	Governed by 35 U.S.C. § 112, ¶ 6 Function: judging communication quality of a transmission channel over which the baseband signal has been transmitted, based on content of the symbol judged by the symbol judging means…[by] identif[ying] the number of redundant bits having the predetermined value or the number of redundant bits missing the predetermined value among the redundant bits contained in the symbol that contains a bit belonging to the protected portion, and judges the communication quality of the transmission channel based on the identified result Structure/Algorithm: special purpose electronics or a processor configured to perform the recited function by evaluating the number of redundant bits x that do or do not have the predetermined value with respect to a predetermined lower limit n and a

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
	communication quality of the transmission channel based on the identified result"		belonging to the protected portion, and judges the communication quality of the transmission channel based on the identified result"	predetermined upper limit m (where n is an integer not less than 0, and m is an integer greater than n), and equivalents thereof as disclosed at 9:13-25, 10:45-12:10, 13:1-4, FIG. 8, and equivalents thereof
19.	"a data changing means for, if the communication quality judged by the communication quality judging means does not satisfy a predetermined condition, making a predetermined change to the data to be transmitted represented by the symbol used in the judgment"	'891 Patent Claim 1	Subject to 112 p. 6: Structure: processor and a memory that stores a program executed by the processor that either (i) replaces the content of output data with content of previous output data; (ii) destroys / mutes either all of or certain output data of the total output data; or (iii) do not change the output data; as set forth in 11:26-34, FIG. 8, and equivalents thereof. Function: if the communication quality judged by the communication quality judging means does not satisfy a predetermined condition, making a predetermined change to the data to be transmitted represented by the symbol used in the judgment	Governed by 35 U.S.C. § 112, ¶ 6 Function: if the communication quality judged by the communication quality judging means does not satisfy a predetermined condition, making a predetermined change to the data to be transmitted represented by the symbol used in the judgment. Structure: special-purpose electronics or a processor configured to perform the recited function by replacing, attenuating, or destroying data to be transmitted as disclosed at 9:13-25, 11:7-12:19, 13:1-4, 13:23-14:2, and equivalents thereof
20.	"means for externally obtaining a parameter that defines at least a portion of the condition"	'891 Patent, Claim 2	Subject to 112 p. 6: Structure: a receiver compatible with (i) a switch, keyboard, or other	Governed by 35 U.S.C. § 112, ¶ 6

No.	Term	Patent/Claim(s)	ACT's Preliminary Construction	Apple's Preliminary Construction
			input devices for inputting parameters; or (ii) serial interface circuit or recording media drive device to externally obtain serially-transmitted parameters or to read parameters recorded on the recording media, as set forth in 14:3-16, and equivalents thereof. Function: externally obtaining a parameter that defines at least a portion of the condition	Function: externally obtaining a parameter that defines at least a portion of the condition Structure: A switch, a keyboard, a serial interface, other input devices, or a recording media drive device to externally obtain serially-transmitted parameters or to read parameters record on the recording media as disclosed at 14:3-16, and equivalents thereof

III. Claim Construction Briefing and Hearing (P.R. 4-3(a)(3), P.R. 4-3(a)(4))

A. Length of Time for the Hearing

The parties anticipate that the claim construction hearing will run about three hours in length.

B. Witnesses

The parties do not anticipate calling any witnesses at the Markman hearing in support of the parties' respective claim construction arguments.

Dated: August 21, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on August 21, 2025, a true and correct copy of the above and foregoing document has been served on all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system per Local Rule CV-5(a)(3).

/s/ Peter Lambrianakos
Peter Lambrianakos

CERTIFICATE OF CONFERENCE

The undersigned hereby certifies that Plaintiff's counsel has met and conferred with counsel for Defendant, and all parties have agreed to the submission of the P.R. 4-3 Claim Construction and Prehearing Statement submitted herewith.

/s/ Peter Lambrianakos
Peter Lambrianakos