

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

ADVANCED CODING TECHNOLOGIES,
LLC,

Plaintiff,

v.

LG ELECTRONICS INC. and
LG ELECTRONICS U.S.A., INC.,

Defendants.

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NO. 2:22-CV-00501-JRG

PRELIMINARY CONSTRUCTIONS

ID	Disputed Term	Preliminary Construction
A	“boundary condition” (’025 Patent, Claims 6–7, 10)	“gradient data pertaining to the pixels at the boundary of a block”
B	“[an estimated video signal] that satisfies Poisson’s Equation” (’025 Patent, Claims 6–7, 10)	“[an estimated video signal] for which Poisson’s Equation is true”
C	“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 6–7, 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”
D	“prescribed” (’995 Patent, Claims 2–4)	“Predetermined”
E	“standard resolution” (’995 Patent, Claims 2–4)	“the spatial resolution of a picture input into an encoding system as an encoding target”

ID	Disputed Term	Preliminary Construction
F	“decoding with an extension of the standard resolution” (’995 Patent, Claims 2–4)	“decoding with an enhancement layer based on standard resolution reference picture(s)”
G	“super-resolution enlarged decoded pictures” (’995 Patent, Claims 2–4)	Plain and ordinary meaning.
H	“first means for decoding the coded information in the coded multi-view video signal to recover the desired delay times for the coded signals originating from the picture signals corresponding to the viewpoints except the base viewpoint” (’150 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: “decoding the coded information in the coded multi-view video signal to recover the desired delay times for the coded signals originating from the picture signals corresponding to the viewpoints except the base viewpoint” Structure: “a processor programmed to (1) decode view dependency counts for the respective viewpoints, other than the base viewpoint, (a) from a coded set of dependency counts according to the syntax shown in Figures 5–6; or (b) individually and separately on a viewpoint-by-viewpoint basis according to the syntax shown in Figures 7–8 or MPEG-4 AVC/H.264, and ’150 Patent 12:1–31, 38–47; (2) derive the desired delays from the computed view dependency counts.’150 Patent 41:22–25.”

ID	Disputed Term	Preliminary Construction
I	“second means for decoding the coded signal originating from the picture signal corresponding to the base viewpoint” (’150 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: decoding the coded signal originating from the picture signal corresponding to the base viewpoint Structure: “a processor programmed to: (1) decode the bitstream into the coding mode signal, the motion vector or vectors, and the coded residual signal; (2) selectively perform motion-compensated prediction from a reference picture or pictures in response to the coding-mode signal and the motion vector or vectors, thereby generating a motion-compensated prediction block (i.e., a motion-compensated prediction signal); (3) generate a final prediction signal from the motion-compensated prediction block in accordance with the coding-mode signal; (4) decode the coded residual signal into a decoded residual signal through the signal processing inclusive of the inverse quantization and the inverse orthogonal transform; and (5) superimpose the decoded residual signal on the final prediction signal to generate a decoded picture signal. ’150 Patent at 33:29–60.”

ID	Disputed Term	Preliminary Construction
J	“third means for decoding the coded signals originating from the picture signal corresponding to the viewpoints except the base viewpoint” (’150 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: “a processor programmed to: (1) decode the bitstream into the coding mode signal, the motion vector or vectors, the disparity vector or vectors, and the coded residual signal; (2) selectively perform motion-compensated prediction from a reference picture or pictures in response to the coding-mode signal and the motion vector or vectors, thereby generating a motion-compensated prediction block (i.e., a motion-compensated prediction signal); (3) selectively perform a disparity-compensated prediction from an other-viewpoint reference picture or pictures in response to the coding-mode signal and the disparity vector or vectors, thereby generating a disparity compensated prediction block (i.e., a disparity-compensated prediction signal); (4) generate a final prediction signal from at least one of the motion-compensated prediction block and the disparity-compensated prediction block in accordance with the coding-mode signal; (5) decode the coded residual signal into a decoded residual signal through the signal processing inclusive of the inverse quantization and the inverse orthogonal transform; and (6) superimpose the decoded residual signal on the final prediction signal to generate a decoded picture signal. ’150 Patent at 33:29–60.”

ID	Disputed Term	Preliminary Construction
K	“fourth means for delaying the decoding of the coded signal by the third means relative to the decoding of the coded signal by the second means by time intervals equal to the desired delay times recovered by the first means” (’150 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: “delaying the decoding of the coded signals by the third means relative to the decoding of the coded signal by the second means by time intervals equal to the desired delay times recovered by the first means” Structure: “a processor programmed to, for a given access unit, (1) compare the decoded view dependency count and the value of an access-unit time counter to determine whether the present moment has reached the end of a desired delay of the start of the decoding of a coded picture of the viewpoint of interest, where the present moment is indicated by the value of the access-unit time counter and the desired delay is represented by the decoded view dependency counter; (2) if the present moment has reached the end of the desired delay, begin decoding the coded signal originating from the picture signal; otherwise, skip the decoding. ’150 Patent at 33:6–22.
L	“specify[ing] [the] output frame rate” (’041 Patent, Claim 1, 4, 6)	Plain and ordinary meaning. [NOTE: no disclaimer or disavowal]

ID	Disputed Term	Preliminary Construction
M	“a moving image data input unit configured to be input of first moving image data generated at a first frame rate and a second image data generated at a second frame rate that is different from the first frame rate” (’041 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: “inputting first moving image data generated at a first frame rate and a second image data generated at a second frame rate that is different from the first frame rate” Structure: “a wireless interface, a card interface, an input/output interface having an input/output terminal connected to an external device, or an image input controller programmed to receive digital image data output from an image A/D conversion unit as imaging data. ’150 Patent at 5:28–31, 7:58–65.”
N	“an input frame rate specification unit configured to specify the first frame rate of the first moving image data and the second frame rate of the second moving image data, the first and second moving image data having been input into the moving image data input unit” (’041 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: “specify the first frame rate of the first moving image data and the second frame rate of the second moving image data, the first and second moving image data having been input into the moving image data input unit” Structure: “a processor programed to, for each of the first moving image data and second moving image data: (1) if the image capture frame rate information or information of a similar kind is described in a predetermined data area, or exists as metadata, the input frame rate is specified based on them; otherwise, (2) the input frame rate is specified by analyzing the frame configuration of the moving image data. ’041 Patent at 8:3–9, 14:7–23.”

ID	Disputed Term	Preliminary Construction
O	“an output frame rate specification unit configured to specify output frame rate of the first moving image data and output frame rate of the second moving image data that have been input into the moving image data input unit” (’041 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: “specifying output frame rate of the first moving image data and output frame rate of the second moving image data that have been input into the moving image data input unit” Structure: “a processor programmed to, for each of the first moving image data and second moving image data: (1)(a) generate image data on an image that prompts a user to make a selection from among a number of frame rates, (b) display the image on a monitor, and (c) selecting the frame rate selected by the user as the output frame rate; or (2)(a) acquire, via an input/output I/F or the wireless I/F, information on the frame rate that has been set on the external device side related to the playback of the moving image data, and (b) specify the output frame rate based on the acquired information. ’041 Patent at 8:11–48, 11:54–12:40, Figs. 7A, 7B.”

ID	Disputed Term	Preliminary Construction
P	“a playback speed specification unit configured to specify a same playback speed for the first image data and the second moving image data” (’041 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: “specifying a same playback speed for the first moving image data and the second moving image data” Structure: “a processor programmed to: (1)(a) generate image data on an image that prompts a user to make a selection from among a number of playback speeds; (b) display the image on a monitor, and (c) receive the user’s selection of one of the number of playback speeds, and (d) set the playback speed of the first moving image data and the second moving image data to the user’s selection; or (2) use a predetermined playback speed as the playback speed of the first moving image data and the second moving image data to be output. ’041 Patent at 8:58–9:17.”
Q	“a frame rate conversion unit configured to change a frame rate of the first moving image data based on the first frame rate, the output frame rate, and the playback speed, and change a frame rate of the second moving image data based on the second frame rate, the output frame rate, and the playback speed” (’041 Patent, Claim 1)	Governed by 35 U.S.C. § 112 ¶ 6 Function: “changing a frame rate of the first moving image data based on the first frame rate, the output frame rate, and the playback speed, and changing a frame rate of the second moving image data based on the second frame rate, the output frame rate, and the playback speed” Structure: “a processor programmed to, for each of the first moving image data and the second moving image data, (1) apply the formula $x = F_{out} / M * F_{in}$ to determine the change multiplier; (2) if the change multiplier is less than 1, use decimation to reduce rate by change multiplier; (3) if the change multiplier is greater than 1, use interpolation to increase rate by change multiplier. ’041 Patent at 14:23–60.”