

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

**SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.,**
Petitioners,

v.

MAXELL, LTD.,
Patent Owner

Case: IPR2025-01312

U.S. Patent No. 7,952,645

PATENT OWNER'S CONTINGENT MOTION TO AMEND

Mail Stop **Patent Board**
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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I. INTRODUCTION

Pursuant to 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121, Maxell, Ltd. (“Patent Owner”) submits this contingent Motion to Amend, to substitute proposed claims 9 – 16 for original claims 1 – 8, respectively, of U.S. Patent No. 7,952,645 (“the ’645 Patent”). The Board has authorized this motion pursuant to 37 C.F.R. § 42.121(a) via email on April 24, 2026. (EX3002).

Patent Owner requests preliminary guidance from the Board on this Motion to Amend pursuant to the Pilot Program Concerning Motion to Amend Practice and Procedures in Trial Proceedings Under the AIA. 86 Fed. Reg. 51656 (Sept. 16, 2021); 84 Fed. Reg. 9497 (March 15, 2019).

Patent Owner submits that this Motion to Amend satisfies the requirements under 37 C.F. R. §42.121(a), as explained below. Accordingly, should the Board find that claims 1 – 8 of the ’645 Patent are unpatentable, Patent Owner requests that the Board grant this Motion and herewith substitute original claims 1 – 8 with corresponding proposed substitute claims 9 – 16.

II. LEGAL STANDARD

For a motion to amend, a Patent Owner need show that the requirements of “paragraphs (1) and (3) of 35 U.S.C. 316(d), as well as paragraphs (a)(2) and (3) and (b)(1) and (2) of [37 C.F.R. § 42.121]” are met. 37 C.F.R. § 42.121(d)(1). The

burden to show that the amended claims are unpatentable over the prior art rests solely on the Petitioner. 37 C.F.R. § 42.121(d)(2); *Aqua Products Inc. v. Matal*, 872 F.3d 1290, 1324 (Fed. Cir. 2017) (*en banc*).

A Patent Owner must therefore only show that the substitute claims (1) do not introduce new subject matter (37 C.F.R. § 42.121(a)(2)(ii)); 2) do not impermissibly seek to enlarge the scope of the claims (*id.*); 3) propose a reasonable number of substitute claims (37 C.F.R. § 42.121(a)(3)); and (4) respond to a ground of unpatentability in the trial (37 C.F.R. § 42.121(a)(2)(i)). The Board may then consider whether the Petitioner has shown that the substitute claims at issue are unpatentable by a preponderance of the evidence. *L&P Property Mgt. Co. v. Remacro Machinery & Tech. Co., Ltd.*, Case IPR2019-00255, p. 6 (PTAB Jun. 18, 2019) (Paper No. 15).

A. The Substitute Claims Do Not Add New Matter

The '645 Patent (U.S. Pat. Appl. 11/602,956) was filed on Nov. 22, 2006, and claims foreign priority to Japanese Appl. No. JP2005-338000, filed Nov. 24, 2005. (EX1002 at 309). Patent Owner has proposed one substitute claim for each of original claims 1 – 8. The tables below indicate the proposed amendments presented in each substitute claim relative to the respective original claim, and where there is support for the substitute claims in the original disclosure of the '645 Patent (U.S.

Pat. Appl. 11/602,956), per 37 C.F.R. § 42.121(b)(1). (EX1002, pp. 309–419).

Each amendment proposed in the substitute claims finds full written description support in the original disclosure, and thus is proper pursuant to 37 CFR § 42.121(a)(2)(ii). *Lectrosonics, Inc. v. Zaxcom, Inc.*, Case IPR2018-01129, 01130, Paper 3 15., p.7 (Feb. 25, 2019) (“New matter is any addition to the claims without support in the original disclosure.”) (citation omitted).

Proposed Claim 9 (Replacing Claim 1)	Exemplary Support in Original Disclosure of '645 Patent
<p>[1.pre] 9. <u>9.</u> A video processing apparatus <u>portable telephone</u> comprising:</p>	<p>“In the present embodiment, an example of a portable telephone including a detector to detect whether there is a pattern portion and having a function of stopping the picture quality correction when a pattern portion is detected will be described.” (EX1001, 16:21-25; EX1002, 351, ll. 2-6).</p> <p>“The present invention can be applied to a video processing apparatus, such as a portable telephone....” (EX1001, 3:39-44; EX1002, p. 316, ll. 18-24).</p>
<p>[1.a.1] <u>a battery which supplies power for components included in the portable telephone;</u></p>	<p>“A battery 20 is formed of a chargeable secondary battery such as a lithium ion battery or a nickel hydrogen battery. The battery 20 supplies power required for components included in the portable telephone to operate.” (EX1001, 4:60-63; EX1002, p. 320, ll. 6-10).</p> <p>“Furthermore, since power consumption for the high picture quality display can be made low, the present invention is effective especially for a portable terminal that operates with a battery.” (EX1001, 15:64-67; EX1002, p. 350, ll. 5-11).</p>

<p>[1.a] an input unit to which a video signal <u>comprising one or more frames</u> containing contents is input;</p>	<p>“If the video signal with the pattern portions added is subjected to picture quality correction by taking a frame as the unit or a scene as the unit...” (EX1001 16:16-25; EX1002, p. 350, ll. 23 – p. 351, ll. 6)</p> <p> (“The I/F unit 155 acquires the value of the luminance signal Y at each detection point from the pattern portion detector 1511 (S3302) and finds a difference from the preceding frame at each detection point (S3303).” (EX1001, 18:19-22; EX1002, p. 356, ll. 13-17).</p> <p>“The example in which the image having pattern portions is judged by using the difference in the luminance signal Y between two consecutive frames has been described. However, this is not restrictive. Alternatively, at least three consecutive frames may also be used. Or a decision may be made by using frames thinned at definite intervals and extracted.” (EX1001, 20:5-10; EX1002 p. 366, ll. 10-16).</p> <p>“FIG. 35C shows values of the luminance signal Y in the preceding frame and the subsequent frame at each detection point and their differences.” (EX1001, 19:26-33; EX1002, p. 358, ll. 10-16).</p>
<p>[1.b] a detector which detects whether pattern portions other than contents are contained in a <u>first frame of the one or more frames</u> in the video signal input to the input unit, <u>wherein the detector detects whether a first portion of the first</u></p>	<p>“If the video signal with the pattern portions added is subjected to picture quality correction by taking a frame as the unit or a scene as the unit...” (EX1001 16:16-25; EX1002, p. 350, ll. 23 – p. 351, ll. 6)</p> <p>“With respect to the detection points P11, P12 and P13 in the pattern portion display region when the 4:3 video image is displayed, a decision is made whether the difference ($\Delta P11$, $\Delta P12$, $\Delta P13$) from the preceding frame is “0” (S3304). When this difference is not “0”, the I/F unit 155 judges that a pattern portion is not contained and proceeds to S3308.” (EX1001, 18:23-28;</p>

<p><u>frame contains the pattern portions based on both the first portion and contents in the first frame other than the first portion;</u></p>	<p>EX1002, p. 356, ll. 19-24).</p> <p>“With respect to the detection points P21, P22 and P23 in the contents display region when the 4:3 video image is displayed, a decision is made whether the difference ($\Delta P21$, $\Delta P22$, $\Delta P23$) from the preceding frame is “0” in order to discriminate such contents at S3305. When this difference is “0”, the I/F unit 155 judges that the contents have a motion only in the central part, and proceeds to S3308.” (EX1001, 18:29-40; EX1002, p. 356, ll. 25 – p. 357, ll. 10).</p> <p>“When the frame difference at P21, P22 and P23 is not “0”, the I/F unit 155 judges that a pattern portion is contained, and sets a flag provided in a part of a register to indicate whether there is a pattern portion to “1” (there is a pattern portion) (S3306). And the I/F unit 155 issues an interrupt to the CPU 7, requests register reading, and notifies the CPU 7 that the contents have a pattern portion (S3307).” (EX1001, 18:41-49; EX1002, p. 357, ll. 11-20).</p>
<p>[1.c] a corrector which, <u>when controlled by a controller</u>, corrects the video signal input to the input unit; and</p>	<p>“When the pattern flag is “0” at S3401, i.e., when there is no pattern portion, the CPU 7 calculates correction data to conduct the picture quality enhancement processing by using the method described in the first embodiment or the second embodiment at 53402, and transmits the correction data to the I/F unit 153 (S3404). When the pattern flag is “1” at 53401, i.e., when there is a pattern portion, the CPU 7 sets correction data = “0” at S3403, and transmits the correction data to the I/F unit 153 (S3404).” (EX1001, 18:52-61; EX1002, p. 357, ll. 24 – p. 358, ll. 6).</p> <p>As adopted by the Petition, corresponding structure in the '645 Patent is at least CPU 7 or equivalents thereof.</p>

<p>[1.d] a<u>the</u> controller which controls the corrector to cause the corrector to correct the video signal input to the input unit when the pattern portions are not contained <u>in the first frame</u>, and which controls the corrector to cause the corrector not to correct the video signal when the pattern portions are contained <u>in the first frame</u>.</p>	<p>“When the frame difference at P21, P22 and P23 is not “0”, the I/F unit 155 judges that a pattern portion is contained, and sets a flag provided in a part of a register to indicate whether there is a pattern portion to “1” (there is a pattern portion) (S3306). And the I/F unit 155 issues an interrupt to the CPU 7, requests register reading, and notifies the CPU 7 that the contents have a pattern portion (S3307). At S3308, the value of the luminance signal Y at each detection point is stored as preceding frame data.” (EX1001, 18:41-49; EX1002, p. 357, ll. 11-20).</p> <p>“When the pattern flag is “0” at S3401, i.e., when there is no pattern portion, the CPU 7 calculates correction data to conduct the picture quality enhancement processing by using the method described in the first embodiment or the second embodiment at 53402, and transmits the correction data to the I/F unit 153 (S3404). When the pattern flag is “1” at 53401, i.e., when there is a pattern portion, the CPU 7 sets correction data = “0” at S3403, and transmits the correction data to the I/F unit 153 (S3404).” (EX1001, 18:52-61; EX1002, p. 357, ll. 24 – p. 358, ll. 6).</p> <p>“The CPU 7 recognizes that the contents have pattern portions by detecting the pattern portion flag=“1”, and writes correction characteristics which output the input signal as it is, into the I/F unit 155. As a result, the picture quality enhancement processing at the time of display of contents having pattern portions is stopped.” (EX1001, 19:52-57; EX1002 p. 360, ll. 15-21).</p>
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Proposed Claim 10 (Replacing Claim 2)	Exemplary Support in Original Disclosure of '645 Patent
[2.pre] <u>10</u> . The video processing apparatus <u>portable telephone</u> according to claim [[1]] <u>9</u> , comprising:	See [1.pre], Substitute Claim 9.
[2.a] a characteristic point detector which detects a level or distribution of at least one of luminance, hue and saturation of the video signal,	Originally filed claim, see EX1002, p. 375.
[2.b] wherein the corrector corrects the video signal according to the level or distribution detected by the characteristic point detector.	Originally filed claim, see EX1002, p. 375.

Proposed Claim 11 (Replacing Claim 3)	Exemplary Support in Original Disclosure of '645 Patent
[3.pre] <u>11</u> . A video processing apparatus <u>portable telephone</u> comprising:	See [1.pre], Substitute Claim 9.
[3.a.1] <u>a battery which supplies power for components included in the portable telephone;</u>	See [1.a.1], Substitute Claim 9.
[3.a] an input unit to which a video signal <u>comprising one or more frames</u> containing contents is input;	See [1.a], Substitute Claim 9.
[3.b] a detector which detects whether pattern portions other than contents are contained in <u>a first frame of the one or more frames in the video signal input</u>	See [1.b], Substitute Claim 9.

<p><u>to the input unit, wherein the detector detects whether a first portion of the first frame contains the pattern portions based on both the first portion and contents in the first frame other than the first portion,</u></p>	
<p><u>[3.b.1] and wherein the detector detects whether the first portion of the first frame contains the pattern portions based on comparing the first frame with a preceding frame of the one or more frames;</u></p>	<p>“The I/F unit 155 acquires the value of the luminance signal Y at each detection point from the pattern portion detector 1511 (S3302) and finds a difference from the preceding frame at each detection point (S3303).” (EX1001, 18:19-22; EX1002, p. 356, ll. 13-17).</p> <p>“With respect to the detection points P11, P12 and P13 in the pattern portion display region when the 4:3 video image is displayed, a decision is made whether the difference ($\Delta P11$, $\Delta P12$, $\Delta P13$) from the preceding frame is “0” (S3304). When this difference is not “0”, the I/F unit 155 judges that a pattern portion is not contained and proceeds to S3308.” (EX1001, 18:23-28; EX1002, p. 356, ll. 19-24).</p> <p>“With respect to the detection points P21, P22 and P23 in the contents display region when the 4:3 video image is displayed, a decision is made whether the difference ($\Delta P21$, $\Delta P22$, $\Delta P23$) from the preceding frame is “0” in order to discriminate such contents at S3305. When this difference is “0”, the I/F unit 155 judges that the contents have a motion only in the central part, and proceeds to S3308.” (EX1001, 18:29-40; EX1002, p. 356, ll. 25 – p. 357, ll. 10).</p> <p>“When the frame difference at P21, P22 and</p>

	<p>P23 is not “0”, the I/F unit 155 judges that a pattern portion is contained, and sets a flag provided in a part of a register to indicate whether there is a pattern portion to “1” (there is a pattern portion) (S3306) At S3308, the value of the luminance signal Y at each detection point is stored as preceding frame data.” (EX1001, 18:41-49; EX1002, p. 357, ll. 11-20).</p>
<p>[3.c] a characteristic point detector which detects a level or distribution of at least one of luminance, hue and saturation of the video signal input to the input unit;</p>	<p>[Originally filed claim, see EX1002, p. 376]</p>
<p>[3.d] a corrector which, <u>when controlled by a controller,</u> changes correction characteristics according to a result of detection <u>that is</u> output from the characteristic point detector, and corrects the video signal input to the input unit; and</p>	<p>See [1.c], Substitute Claim 9.</p> <p>“When the pattern flag is "0" at S3401, i.e., when there is no pattern portion, the CPU 7 calculates correction data to conduct the picture quality enhancement processing by using the method described in the first embodiment or the second embodiment at 53402, and transmits the correction data to the I/F unit 153 (S3404). When the pattern flag is "1" at 53401, i.e., when there is a pattern portion, the CPU 7 sets correction data = “0” at S3403, and transmits the correction data to the I/F unit 153 (S3404).” (EX1001, 18:52-61; EX1002, p. 357, ll. 24 – p. 358, ll. 6).</p> <p>“A characteristic point detector 154 calculates characteristic data such as a minimum level, an average level, a maximum level and a histogram of the input video signal on the basis of the</p>

	<p>luminance signal Y input from the RGB-YUV converter 151 and the hue H and the saturation S input from the color difference-HS converter 153. The characteristic point detector 154 writes the characteristic data into an I/F unit 155. The I/F unit 155 issues an interrupt signal 141 to the CPU 7 at predetermined timing. Upon detecting the interrupt signal 141, the CPU 7 reads out the characteristic data stored in the I/F unit 155 via an internal bus 1551, determines correction data according to a predetermined algorithm, and writes the correction data into the I/F unit 155 via the internal bus 1551.” (EX1001, 5:38-54; EX1002, p. 322, ll. 2-16).</p>
<p>[3.e] a<u>the controller which controls the corrector to cause the corrector to change the correction characteristics in the corrector when the pattern portions are not contained in the first frame, and which controls the corrector to cause the corrector not to change the correction characteristics in the corrector when the pattern portions are contained in the first frame.</u></p>	<p>See [1.d], Substitute Claim 9.</p>

Proposed Claim 12 (Replacing Claim 4)	Exemplary Support in Original Disclosure of '645 Patent
<p>[4.1] 12. The video processing apparatus portable telephone according to claim [[1]] 9, wherein the detector detects whether the first portion of the first frame contains the pattern</p>	<p>See [3.b.1], Substitute Claim 11.</p>

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<p><u>portions based on comparing the first frame with a preceding frame of the one or more frames</u> pattern portions are wallpaper areas or no-picture areas having a single color added to left and right of the contents or above and below the contents and displayed.</p>	
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Proposed Claim 13 (Replacing Claim 5)	Exemplary Support in Original Disclosure of '645 Patent
[5.pre] <u>13. A video processing apparatus portable telephone comprising:</u>	See [1.pre], Substitute Claim 9.
[5.a.1] <u>a battery which supplies power for components included in the portable telephone;</u>	See [1.a.1], Substitute Claim 9.
[5.a] <u>an input unit to which a video signal comprising one or more frames containing contents is input;</u>	See [1.a], Substitute Claim 9.
[5.b] <u>a pattern portion detector which detects whether a pattern portion portions other than contents is are contained in a first frame of the one or more frames in the video signal input to the input unit, wherein the detector detects whether a first portion of the first frame contains the pattern portions based on both the first portion and contents in the first frame other than the first portion;</u>	See [1.b], Substitute Claim 9. See, e.g., EX1001, 22:22-62; EX1002, p. 367, ll. 15 – p. 369, ll. 5 (same discussion of luminance differences and preceding frames).
[5.c] <u>a no-picture area detector which detects whether the pattern portions are no-picture areas having a single color;</u>	[Originally filed claim, see EX1002, p. 376]
[5.d] <u>a corrector which, when controlled by a controller, corrects the video signal input to the</u>	See [1.c], Substitute Claim 9.

input unit; and	
[5.e] a the controller which controls the corrector to cause the corrector to correct the video signal input to the input unit when the pattern portions are not contained <u>in the first frame</u> and when the pattern portions are the no-picture areas, and which controls the corrector to cause the corrector not to correct the video signal when the pattern portions <u>in the first frame</u> are not the no-picture areas.	See [1.d], Substitute Claim 9. See, e.g., EX1001, 22:58-23:12; EX1002, p. 368, ll. 28 – p. 369, ll. 23).

Proposed Claim 14 (Replacing Claim 6)	Exemplary Support in Original Disclosure of '645 Patent
<p>[14.1] 14. The video processing apparatus <u>portable telephone</u> according to claim [[5]] 9, <u>wherein the detector detects whether the first portion of the first frame contains the pattern portions based on comprising:</u></p> <ul style="list-style-type: none"> <u>a first difference between:</u> <ul style="list-style-type: none"> <u>a first luminance level detected in the first portion of the first frame, and</u> <u>a second luminance level detected in a second portion, corresponding to the first portion, of a preceding frame; and</u> <u>a second difference between:</u> <ul style="list-style-type: none"> <u>a third luminance level detected in the contents in the first frame other than the first portion, and</u> <u>a fourth luminance level detected in contents in the preceding frame other than the second portion</u> <p>a characteristic point detector which detects a level or distribution of at least one of</p>	<p>See [3.b.1], Substitute claim 11.</p> <p>“With respect to the detection points P11, P12 and P13 in the pattern portion display region when the 4:3 video image is displayed, a decision is made whether the difference ($\Delta P11$, $\Delta P12$, $\Delta P13$) from the preceding frame is "0" (S3304).” (EX1001, 18:23-26; EX1002, p. 356, ll. 18-22).</p> <p>“With respect to the detection points P21, P22 and P23 in the contents display region when the 4:3 video image is 5 displayed, a decision is made whether the difference ($\Delta P21$, $\Delta P22$, $\Delta P23$) from the preceding frame is "0" in order</p>

<p>luminance, hue and saturation of the video signal, wherein when the no-picture area detector has detected that the pattern portions are no-picture areas, the characteristic point detector detects a level or distribution of at least one of luminance, hue and saturation of the video signal other than the no-picture areas.</p>	<p>to discriminate such contents at S3305.” (EX1001, 18:33-38; EX1002, p. 357, ll. 2-7).</p>
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Proposed Claim 15 (Replacing Claim 7)	Exemplary Support in Original Disclosure of '645 Patent
<p>[7] <u>15</u>. The video processing apparatus portable telephone according to claim [[5]] 13, wherein the pattern portions are portions added to left and right of the contents or above and below the contents and displayed.</p>	<p>See [1.pre], Substitute claim 9. [Originally filed claim, see EX1002, p. 377]</p>

Proposed Claim 16 (Replacing Claim 8)	Exemplary Support in Original Disclosure of '645 Patent
<p>[8] <u>16</u>. The video processing apparatus portable telephone according to claim [[5]] 13, wherein the no-picture areas have a black color or a white color.</p>	<p>See [1.pre], Substitute claim 9. [Originally filed claim, see EX1002, p. 377]</p>

B. The Substitute Claims Do Not Expand the Scope of the Claims of the '645 Patent

Each claim amendment in the substitute claims further limits the claims beyond original independent claims 1, 3, and 5, and the substitute claims do not seek

to enlarge the scope of the claims of the '645 patent. 37 C.F.R. § 42.121(a)(2)(i).

Substitute Claim 9 retains essentially all limitations of Original Claim 1, but further specifies that the video signal comprises one or more frames containing the contents. The amendments further specify that the detector acts on a first frame, and that the detection is based on both a first portion of the first frame and contents in the first frame other than the first portion. No amendment expands beyond the scope of Original Claim 1.

Substitute Claim 11 retains essentially all limitations of Original Claim 3, but further recites limitations similar to Substitute Claim 9. The amendments further specify that the detection that the first frame contains the pattern portion is based on comparing the first frame with a preceding frame. No amendment expands beyond the scope of Original Claim 3.

Substitute Claim 13 retains essentially all limitations of Original Claim 5, but further recites limitations similar to Substitute Claim 9. No amendment expands beyond the scope of Original Claim 5.

Substitute Claims 10, 12, and 14 each depend from Substitute Claim 9, and Substitute Claims 15 and 16 depend from Substitute Claim 13, each reciting further limitations, and thus also do not expand beyond the scope of Original Claims 1 or 5.

C. Patent Owner Proposes a Reasonable Number of Substitute Claims

Patent Owner proposes only one substitute claim for each of original claims 1-8. Accordingly, Patent Owner “propose[s] a reasonable number of substitute claims.” 37 C.F.R. § 42.121(a)(3).

D. The Proposed Substitute Claims Respond to the Instituted Grounds

Petitioner alleges that claims 1 – 8 of the ’645 Patent would have been obvious under pre-AIA 35 U.S.C. § 103 and raises three grounds of alleged unpatentability. Pet. 1. The alleged invalidity grounds are summarized as follows:

Ground	'645 Claims	Type of Challenge	References
1	1-3	§ 103	Kim (EX1004)
2	1-4	§ 103	Fujimura (EX1005)
3	5-8	§ 103	Fujimura and Kim

Ground 1 – Obviousness over Kim (EX1004)

Petitioner argues Kim’s “r calculation device 34” and “apparatus 20” satisfy the claimed “detector which detects whether pattern portions other than contents are contained in the video signal input to the input unit.” Pet. 22-23. But Kim is directed to assigning a value on a scale of 0 to 1 of how likely the entire input image is directed to a pattern-like image. EX1004 ¶ [0039]. While Patent Owner does not concede that Kim teaches the claimed feature, the substitute claims further

emphasize this distinction over Kim in that the substitute claims recite “wherein the detector detects whether a first portion of the first frame contains the pattern portions based on both the first portion and contents in the first frame other than the first portion.” Kim is exclusively looking for a full image pattern, and does not separately consider pattern portions and contents other than the pattern portions in a frame.

Kim also fails to disclose the claimed controller because its calculation device will cause correction even when the pattern portions are contained. When r approaches 1 (but is not equal to 1), “one can conclude that the input image is most likely a pattern-like image,” however, the calculated value will still cause correction by Kim’s own equation: $g = rf + (1-r)e$. EX1004 ¶ [0042]. And Kim computes the correction regardless of whether the pattern portions are detected. EX1004 ¶ [0011], FIG. 6. While Patent Owner does not concede that Kim teaches the claimed features, the substitute claims further emphasize this distinction over Kim in that the substitute claims recite “a corrector which, when controlled by a controller, corrects the video signal.” The disclosures of the ’645 Patent discuss that a benefit of not doing the corrections is to conserve battery life, especially important in a portable telephone. (EX1001, 15:64-67). Kim is also silent as to considerations due to a portable telephone, or battery operation.

Further, Substitute Claim 11 and Substitute Claim 12 also distinguish over

Kim in that they recite “wherein the detector detects whether the first portion of the first frame contains the pattern portions based on comparing the first frame with a preceding frame of the one or more frames.”

Ground 2 – Obviousness over Fujimura (EX1005)

Fujimura does not detect whether pattern portions other than contents are contained, instead it detects whether an image is of a particular format, *i.e.*, a letterbox format. For example, Fujimura's letterbox detector “determines whether the luminance signal Y is a letterbox signal,” and if so, the letterbox signal detector 46 “outputs a pair of line numbers specifying the starting and ending lines of the picture area in the image.” EX1005, 13:50-58. Fujimura's detection of whether a luminance signal is a letterbox signal fails to satisfy this limitation, because Fujimura fails to disclose any detection of “**pattern** portions other than contents.” Fujimura is completely silent on pattern detection and fails to disclose or refer to pattern detection at all. *See, e.g.*, EX1005, 13:50-58.

While Patent Owner does not concede that Fujimura teaches the claimed features, the substitute claims further emphasize this distinction over Fujimura in that the substitute claims recite “wherein the detector detects whether a first portion of the first frame contains the pattern portions based on both the first portion and contents in the first frame other than the first portion.” Petitioner's interpretation of

the “individual scanning lines” of Fujimura as the claimed video signal (Pet. 39-41, 41-42) fails to meet the features as claimed, even further as amended.

And Fujimura in operation acts to correct the video signal, even when the letterbox portions are detected. EX1005, 2:48-52, 13:64-14:6.

Finally, Fujimura is silent as to any CPU used to implement the claimed corrector, instead at best describing that the component circuits could be combined in an application-specific integrated circuit (ASIC) or general-purpose processor with the specific example of a digital signal processor (DSP). EX1005, 4:6-13, see Pet. 44-45. Further, the described “mappers” in Fujimura are circuit components, described as comprising a multiplier, an adder, and parameter-generating logic. EX1005, 6:39-47. A CPU is fully different from an ASIC or DSP in manner of operation. Fujimura is focused on speed, and the circuit hardware discussed in Fujimura is important to avoid timing issues that Fujimura itself criticizes in the prior art. EX1005, 1:27-30.

Further, Substitute Claim 11 and Substitute Claim 12 also distinguish over Fujimura in that they recite “wherein the detector detects whether the first portion of the first frame contains the pattern portions based on comparing the first frame with a preceding frame of the one or more frames.” Fujimura discusses that a result of a preceding image dictates the corrections applied to a later image. (EX1005, 6:11-

18, 7:27-30). And a different embodiment of Fujimura counts a number of dark lines in a number of consecutive frames. (EX1005, 15:61-63). But Fujimura is silent as to comparing a first frame with a preceding frame of the one or more frames. Even further, Substitute Claim 14 distinguishes over Fujimura in its specific recitation of what is compared.

Ground 3 – Kim in view of Fujimura

Neither Kim nor Fujimura disclose the features of the claims individually, and combined they fare no better. The Petition gloms the two systems together, hoping the result somehow meets the claim limitations. (See Pet. 62, discussing [5.b]'s pattern detection with no mention of Kim, then Pet. 68 inexplicably bringing in Kim's detailed pattern detection despite Fujimura already having a solution to avoiding color correcting the letter box bars). Kim and Fujimura are directed to different problems, and each solution is specific to their respective problem. Adding Kim's decision to not correct a full screen pattern to Fujimura's solution to isolate and avoid the letter box bars would not make sense, as Fujimura already solved its problem – and indeed, one advantage of Fujimura is that it is able to apply color correction despite the presence of letter box bands (the alleged patterns detected). (EX1005, 2:48-52), The amendments proposed to the claims further underscore these shortcomings.

III. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Board grant this contingent Motion to Amend should claims 1 – 8 of the '645 Patent be found unpatentable.

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APPENDIX A

CLAIM LISTING

9. (Proposed Substitute for Claim 1) A ~~video processing apparatus~~ portable telephone comprising:

a battery which supplies power for components included in the portable telephone;

an input unit to which a video signal comprising one or more frames containing contents is input;

a detector which detects whether pattern portions other than contents are contained in a first frame of the one or more frames in the video signal input to the input unit, wherein the detector detects whether a first portion of the first frame contains the pattern portions based on both the first portion and contents in the first frame other than the first portion;

a corrector which, when controlled by a controller, corrects the video signal input to the input unit; and

a ~~the~~ controller which controls the corrector to cause the corrector to correct the video signal input to the input unit when the pattern portions are not contained in the first frame, and which controls the corrector to cause the corrector not to

correct the video signal when the pattern portions are contained in the first frame.

10. (Proposed Substitute for Claim 2) The ~~video processing apparatus~~ portable telephone according to claim ~~[[1]]~~ 9, comprising:

a characteristic point detector which detects a level or distribution of at least one of luminance, hue and saturation of the video signal,

wherein the corrector corrects the video signal according to the level or distribution detected by the characteristic point detector.

11. (Proposed Substitute for Claim 3) A ~~video processing apparatus~~ portable telephone comprising:

a battery which supplies power for components included in the portable telephone;

an input unit to which a video signal comprising one or more frames containing contents is input;

a detector which detects whether pattern portions other than contents are contained in a first frame of the one or more frames in the video signal input to the input unit, wherein the detector detects whether a first portion of the first frame contains the pattern portions based on both the first portion and contents in the first

frame other than the first portion, and wherein the detector detects whether the first portion of the first frame contains the pattern portions based on comparing the first frame with a preceding frame of the one or more frames;

a characteristic point detector which detects a level or distribution of at least one of luminance, hue and saturation of the video signal input to the input unit;

a corrector which, when controlled by a controller, changes correction characteristics according to a result of detection that is output from the characteristic point detector, and corrects the video signal input to the input unit; and

a the controller which controls the corrector to cause the corrector to change the correction characteristics in the corrector when the pattern portions are not contained in the first frame, and which controls the corrector to cause the corrector not to change the correction characteristics in the corrector when the pattern portions are contained in the first frame.

12. (Proposed Substitute for Claim 4) The ~~video processing apparatus~~ portable telephone according to claim [[1]] 9, wherein the detector detects whether the first portion of the first frame contains the pattern portions based on comparing the first frame with a preceding frame of the one or more frames ~~pattern portions are wallpaper areas or no picture areas having a single color added to left and right of~~

~~the contents or above and below the contents and displayed.~~

13. (Proposed Substitute for Claim 5) A ~~video processing apparatus~~ portable telephone comprising:

a battery which supplies power for components included in the portable telephone;

an input unit to which a video signal comprising one or more frames containing contents is input;

a pattern portion detector which detects whether ~~a pattern portion~~ portions other than contents ~~is~~ are contained in a first frame of the one or more frames in the video signal input to the input unit, wherein the detector detects whether a first portion of the first frame contains the pattern portions based on both the first portion and contents in the first frame other than the first portion;

a no-picture area detector which detects whether the pattern portions are no-picture areas having a single color;

a corrector which, when controlled by a controller, corrects the video signal input to the input unit; and

~~a~~ the controller which controls the corrector to cause the corrector to correct the video signal input to the input unit when the pattern portions are not contained

in the first frame and when the pattern portions are the no-picture areas, and which controls the corrector to cause the corrector not to correct the video signal when the pattern portions in the first frame are not the no-picture areas.

14. (Proposed Substitute for Claim 6) The ~~video processing apparatus~~ portable telephone according to claim [[5]] 9, wherein the detector detects whether the first portion of the first frame contains the pattern portions based on~~comprising~~:

a first difference between:

a first luminance level detected in the first portion of the first frame,

and

a second luminance level detected in a second portion, corresponding to the first portion, of a preceding frame; and

a second difference between:

a third luminance level detected in the contents in the first frame other than the first portion, and

a fourth luminance level detected in contents in the preceding frame other than the second portion

~~a characteristic point detector which detects a level or distribution of at least one of luminance, hue and saturation of the video signal,~~

~~wherein when the no picture area detector has detected that the pattern portions are no picture areas, the characteristic point detector detects a level or distribution of at least one of luminance, hue and saturation of the video signal other than the no picture areas.~~

15. (Proposed Substitute for Claim 7) The ~~video processing apparatus~~ portable telephone according to claim ~~[[5]]~~ 13, wherein the pattern portions are portions added to left and right of the contents or above and below the contents and displayed.

16. (Proposed Substitute for Claim 8) The ~~video processing apparatus~~ portable telephone according to claim ~~[[5]]~~ 13, wherein the no-picture areas have a black color or a white color.

Case IPR2025-01312
Patent No. 7,952,645
Patent Owner's Contingent Motion to Amend

CERTIFICATE OF SERVICE

I hereby certify that on this 5th day of May 2026, a copy of the attached **PATENT OWNER'S CONTINGENT MOTION TO AMEND** was served by electronic mail to the attorneys of record, at the following addresses:

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Date: May 5, 2026

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