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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/015,245	06/05/2023	9699444	20311.0001.REEX00	5884
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Ramey LLP 5020 Montrose Blvd. Suite 800 Houston, TX 77006			EXAMINER HUGHES, DEANDRA M	
			ART UNIT	PAPER NUMBER
			3992	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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4445 WILLARD AVENUE, SUITE 600
CHEVY CHASE, MD 20815

***EX PARTE* REEXAMINATION COMMUNICATION TRANSMITTAL FORM**

REEXAMINATION CONTROL NO. 90/015,245 .

PATENT UNDER REEXAMINATION 9699444 .

ART UNIT 3992 .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Office Action in Ex Parte Reexamination	Control No. 90/015,245	Patent Under Reexamination 9699444	
	Examiner DEANDRA M HUGHES	Art Unit 3992	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

- a. ☒ Responsive to the communication(s) filed on 27 November 2023.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

b. ☐ This action is made FINAL.

c. ☐ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 2 month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c)**. If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 3. <input type="checkbox"/> Interview Summary, PTO-474. |
| 2. <input type="checkbox"/> Information Disclosure Statement, PTO/SB/08. | 4. <input type="checkbox"/> _____. |

Part II SUMMARY OF ACTION

- 1a. ☒ Claims 26-27 are subject to reexamination.
- 1b. ☐ Claims _____ are not subject to reexamination.
2. ☐ Claims _____ have been canceled in the present reexamination proceeding.
3. ☐ Claims _____ are patentable and/or confirmed.
4. ☒ Claims 26-27 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ The drawings, filed on _____ are acceptable.
7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
 - 1 ☐ been received.
 - 2 ☐ not been received.
 - 3 ☐ been filed in Application No. _____.
 - 4 ☐ been filed in reexamination Control No. _____.
 - 5 ☐ been received by the International Bureau in PCT application No. _____.

* See the attached detailed Office action for a list of the certified copies not received.

9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.
10. ☐ Other: _____

cc: Requester (if third party requester)

EX PARTE REEXAMINATION NON-FINAL REJECTION

Acknowledgements

1. This is a non-final rejection in the *Ex Parte* Reexamination of claims 26 and 27 of U.S. Patent No. 9,699,444, (“444 Patent”) issued July 4, 2017 and filed on July 22, 2016 as U.S. Application No. 15/217,612 (“612 Application”), entitled “FASTER STATE TRANSITIONING FOR CONTINUOUS ADJUSTABLE 3DEEPS FILTER SPECTACLES USING MULTI-LAYERED VARIABLE TINT MATERIALS.”
2. Claims 26 and 27 have been ordered requested for *ex parte* reexamination.
3. Examiners find the following litigation involving the ‘444 Patent.
 - *Visual Effect Innovations, LLC v. NVIDIA Corp.* no. 3:17-cv-03187 (N.D. Cal.);
 - *Visual Effect Innovations, LLC v. Samsung Electronics America, Inc. et al.*, no. 2:17-cv-00645 (E.D. Tex.);
 - *Visual Effect Innovations, LLC v. LG Electronics USA, Inc.*, no. 1:17-cv-01275 (D. Del.);
 - *Visual Effect Innovations, LLC v. LG Electronics USA, Inc.*, no. 1:17-cv-00687 (D. Del.);
 - *Visual Effect Innovations, LLC v. Sony Electronics Inc.*, no. 1:17-cv-01276 (D. Del.);
 - *Samsung Electronics Co. LTD and Samsung Electronics America, Inc. v. Visual Effect Innovations, LLC*, IPR2018-01733 (P.T.A.B.).
 - *Sony Corporation v. Visual Effect Innovations, LLC*, IPR2018-01628 (P.T.A.B.).
4. Examiners do not find any previous and/or co-pending *Ex parte* reexaminations or supplemental examinations for the ‘444 Patent.
5. Patent Owner’s (“PO’s”) remarks filed Sept. 26, 2023 have been considered.
6. Third-Party Requester’s (“3PR’s”) comments filed Nov. 27, 2023 have been considered.

Priority

7. The following are the U.S. Patents and U.S. Patent Applications cited in this examination of the '444 Patent's priority claims (hereafter "the specifications of the priority claims"):

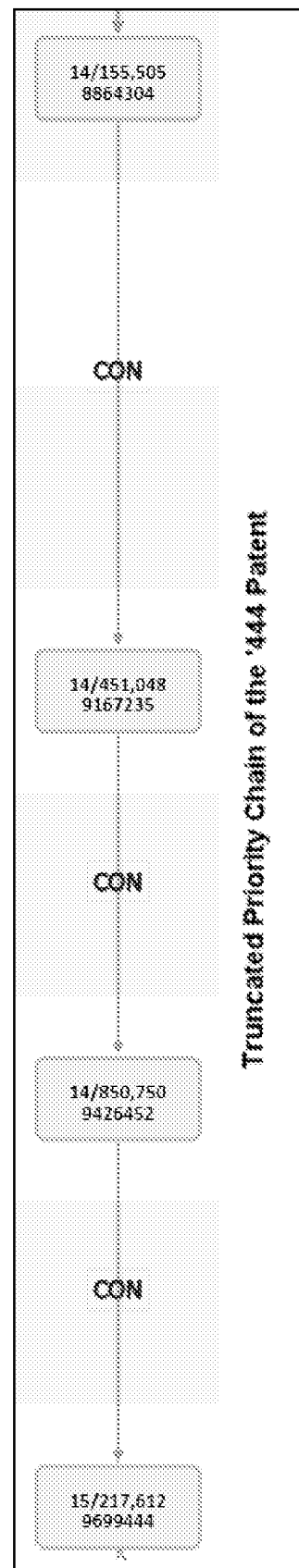
- USP 9,426,452 filed Sept. 10, 2015 and issued Aug. 23, 2016 ("452 Patent");
- USP 9,167,235 filed Aug. 4, 2014 and issued Oct. 20, 2015 ("235 Patent");
- USP 8,864,304 filed Jan. 15, 2014 and issued Oct. 21, 2014 ("4304 Patent");
- USP 8,657,438 filed Jan. 22, 2013 and issued Feb. 25, 2014 ("438 Patent");
- USP 7,508,485 filed Oct. 30, 2007 and issued Mar. 24, 2009 ("485 Patent");
- USP 7,030,902 filed Jan. 22, 2002 and issued Apr. 18, 2006 ("902 Patent");
- USP 7,405,801 filed Mar. 10, 2006 and issued Jan. 29, 2008 ("801 Patent");
- USP 7,218,339 filed Apr. 12, 2006 and issued May 15, 2007 ("339 Patent");
- USP 7,522,257 filed Mar. 10, 2006 and issued Apr. 21, 2009 ("257 Patent");
- USP 7,604,348 filed Nov. 20, 2008 and issued Oct. 20, 2009 ("348 Patent");
- USP 7,850,304 filed Sept. 8, 2009 and issued Dec. 14, 2010 ("0304 Patent");
- US Patent App. No. 12/938,495 filed Nov. 3, 2010 ("495 Application");
- U.S. Provisional App. No. 60/263,498 filed Jan. 23, 2001 ("498 Provisional Application");
- U.S. Provisional App. No. 60/664,369 filed Mar. 23, 2005 ("369 Provisional Application"); and
- U.S. Provisional App. No. 60/661,847 filed on Mar. 15, 2005 ("847 Provisional Application").

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8. Of the specifications of the priority claims, Examiners find the claimed “*image frame*” is disclosed only in the ‘452 Patent, the ‘235 Patent, the ‘4304 Patent, and the ‘348 Patent. The priority chain is broken with respect to the ‘348 Patent because the ‘4304 Patent was filed Jan. 15, 2014 and the ‘348 Patent was issued Oct. 20, 2009. Thus, the priority chain is truncated right before the ‘4304 Patent and the priority analysis is focused on the support for claims 26 and 27 found in the ‘452 Patent, the ‘235 Patent, and the ‘4304 Patent.

Of the specifications of the priority claims, Examiners find the claimed “*expanding the first image frame*” of independent claim 26 is expressly disclosed only in the ‘452 Patent (col.40:41-50), the ‘498 Provisional Application (pg. 29), and the ‘235 Patent (col.38:37-46). However, the ‘4304 Patent incorporates by reference the ‘498 Provisional Application (see ‘4304 Patent, col.1:24-25). As such, the ‘4304 Patent also discloses the claimed “*expanding the image frame*” of independent claim 26 by way of incorporation by reference to the ‘498 Provisional Application.

Because the ‘4304 Patent specification is the earliest filed Patent that supports the limitations of claims 26 and 27, the presumed effective filing date of claims 26 and 27 of the instant *ex parte* reexamination is **Jan. 15, 2014**.



Claim Interpretation

9. Claims 26 and 27 have been ordered for *ex parte* reexamination. Claim 26 contains a list of functions performed in the alternative, i.e., “...*a processor adapted to...generate a modified image by performing at least one of...*” The rejections in this proceeding focuses on the “...*removing a portion of the 1st image frame*” function. As such, claims 26 and 27 are reproduced below with redactions of the claim limitations pertaining to functions that are not at issue in this proceeding.

Claim 26: *An apparatus comprising:*

- *a storage adapted to:*
 - *store one or more image frames; and*
- *a processor adapted to:*
 - *obtain a 1st image frame from a 1st video stream;*
 - ***generate a modified image frame by performing at least one of...removing a portion of the 1st image frame...***
 - *generate a bridge frame,*
 - *wherein the bridge frame is a solid color,*
 - *wherein the bridge frame is different from the 1st image frame and different from the modified image frame;*
 - *display the modified image frame; and*
 - *display the bridge frame.*

Claim 27: *The apparatus of claim 26, wherein the bridge frame is black.*

10. Because the instant *ex parte* reexamination relates to an expired patent, claims 26 and 27¹ will be construed according to same standard applied by Article III courts, outlined in *Phillips v. AWH Carp.*, 415 F.3d 1303 (Fed Cir 2005) (en banc). See *In re CSB-System Int'l. Inc.*, 832 F.3d 1335, 1341 (Fed Cir. 2016). Under this standard, claims are given their ordinary and customary unless the patentee “has clearly set forth an explicit definition of the term” in the specification or disclaimed scope of coverage using expressions of “manifest exclusion or restriction” during prosecution *Id.* at 1319-20.

--“*removing a portion of the image frame*”--

11. PO argues the ordinary and customary meaning of “*removing a portion of the image frame*” means removing people or at least one object from background of an image frame, such that the modified image is substantially similar to the first image (see PO’s remarks, pg. 7).

Examiners disagree that “*removing a portion of the first image frame*” includes “removing people or at least one object from background of an image frame,” as argued by PO, because: (1) the ordinary and customary meaning of “*removing a portion of the first image frame*” does not include anything pertaining to “people/at least one object in the background of an image” and (2) the ‘444 Patent does not support PO’s definition

¹ As to claim 27, the Federal Circuit reversed and remanded a holding by the district court that the limitation “*processor adapted to...remov[e] a portion of the first image frame*” is drafted in means-plus-function format under §112(f). See *VDDP, LLC v. VIZIO, Inc.*, No. 2021-2040 2022 WL 885771 (Fed. Cir. Mar. 25, 2022).

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that “*removing a portion of the first image frame*” includes “removing people or at least one object from background of an image frame.”

As to the ordinary and customary meaning of “*an image frame*,” Examiners find the following definition of “*image frame*” in the art specific dictionary 3D A-Z: An Encyclopedic Dictionary.



Thus, the ordinary and customary meaning of “*removing a portion of the first image frame*” is removing a portion of a complete representation of a single 2D image at a single instant of time. Nowhere in this ordinary and customary meaning is a reference to people or objects within the image frame.

In response to PO’s remarks at pg. 7 regarding the support in the ‘444 Patent for the narrowing of the limitation to include “removing people or at least one object from background of an image frame,” Examiners disagree that col.46:37-61, which describes pictures being “collaged or stitched together from multiple sources” where “parts may be removed or inserted, lifted, and reshaped and/or relocated,” requires reading “removing people or at least one object from background of an image frame” into the claim

limitation “*removing a portion of the first image frame*” because nothing in col.46:37-61 requires removing people and/or objects (see PO’s remarks, pg. 7).

Thus, for the above reasons, Examiners maintain that the ordinary and customary meaning of “*removing a portion of the first image frame*” is removing a portion of a complete representation of a single 2D image at a single instant of time.

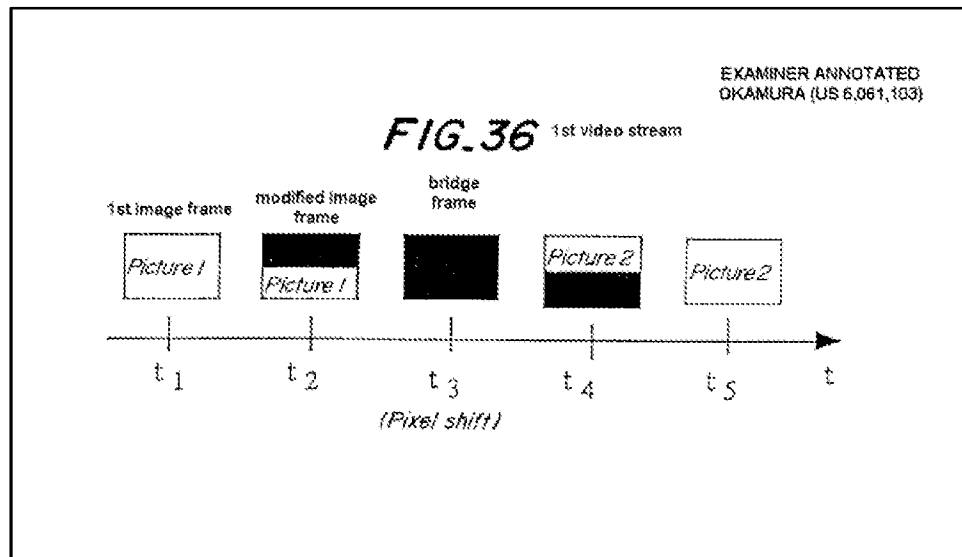
--“*display the modified image frame; and display the bridge frame*”--

12. PO argues the limitation “*display the modified image frame; and display the bridge frame*” means there is no other image frame displayed between the modified image frame and the bridge frame, which is supported by the ‘444 Patent at figures 20a-20c and col.38:62-68 (see PO’s Remarks at 14).

Examiners disagree because nothing in the claim limitation requires the claimed “*bridge frame*” to immediately follow the “*modified image frame*.” Moreover, absent an explicit definition of the term in the ‘444 Patent specification, which is missing here, the ordinary and customary meaning of the limitation “*display the modified image frame; and display the bridge frame*” merely requires: (1) the display of the “*modified image frame*” and (2) the display of “*the bridge frame*.”

Response to PO’s Remarks filed Sept. 26, 2023

13. In response to the proposed rejections of the Request, PO presents three (3) arguments that Examiners find relevant to the anticipation rejections over Okamura in this action. As such, Examiners present a response to these arguments here.



First, PO argues Okamura's teaching of modifying picture 1 by gradually rewriting by a black image as shown to time t_3 in figure 36 is not within the scope of the ordinary and customary meaning of "a processor adapted to...generate a modified image frame by performing at least one of...removing a portion of the 1st image frame...", which 'includes removing people or at least one object from the background of an image frame, such that the modified image is substantially similar to the first image.' See PO's Remarks at 11-12.

This argument is not persuasive because Examiners do not agree that the ordinary and customary meaning of "removing a portion of the 1st image frame" requires removing people or at least one object from the background of an image frame, such that the modified image is substantially similar to the first image, as argued by PO. Examiners maintain that Okamura's disclosure of 'Picture 1' at t_1 (i.e., the "1st image frame") being gradually rewritten by a black image from the upper side produces Picture 1 at t_2 (i.e., the "modified image frame") (see col.22:60-62).

Second, PO argues Okamura's teaching at figure 36 showing that at time t_2 half of the image frame at Picture 1 is at t_1 is removed by rewriting that at time t_2 by rewriting it with black pixels so as to create a different image essentially removes a portion of the image frame identified as Picture 1 of figure 36, it does NOT create a different image. See PO's Remarks at 11-12.

This argument is not persuasive because nothing in claims 26-27 requires the creation of a *different* image but rather a "*modified image frame*" is claimed. Examiners maintain Picture 1 at t_2 reads on the claimed "*modified image frame*."

Third, PO argues the limitation of "*display and modified image frame; and display the bridge frame*" means there is no other image frame displayed between the modified image frame and the bridge frame. See PO's Remarks at 14.

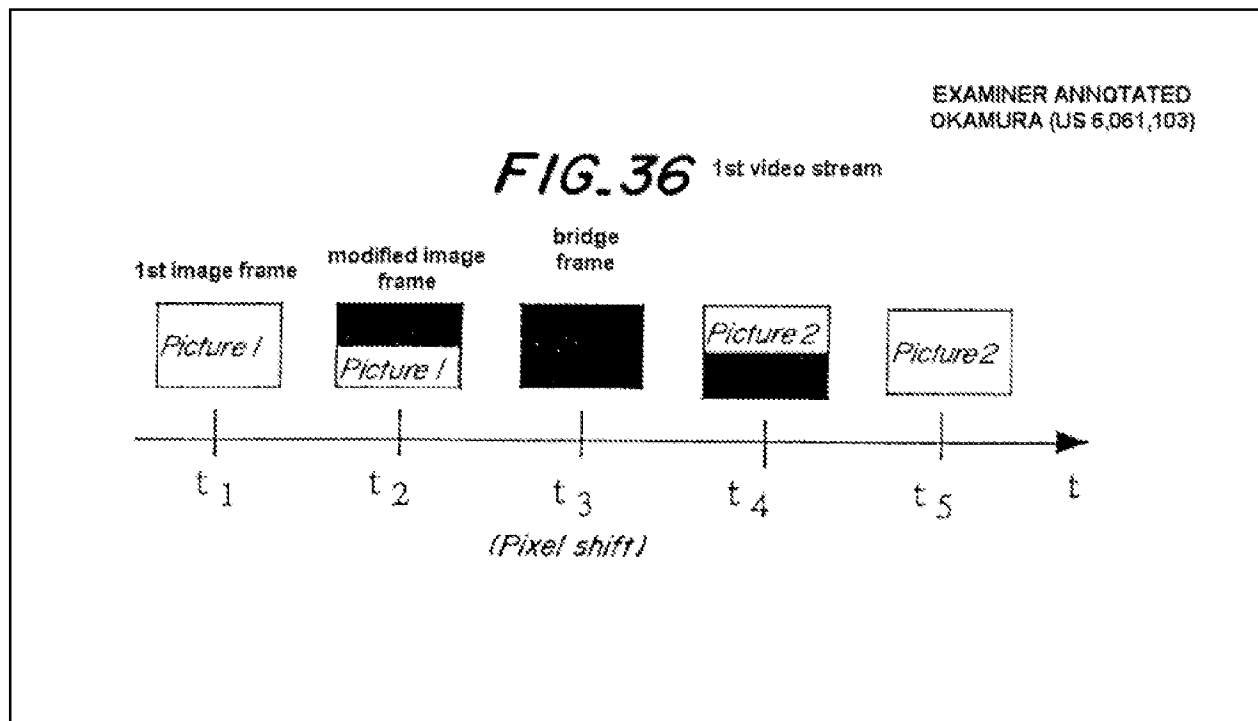
This argument is not persuasive because nothing in claims 26-27 requires "*the bridge frame*" to immediately follow "*the modified image frame*," i.e., no other image frame is displayed between "*the modified image frame*" and "*the bridge frame*." Moreover, assuming *arguendo*, the claims required "*the bridge frame*" to immediately follow "*the modified image frame*," this limitation is taught by Okamura because figure 36 shows the black image at t_3 ("*the bridge frame*") immediately follows the Picture 1 at t_2 (i.e., "*the modified image frame*").

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

Claim Rejections - 35 USC § 102

14. Claims 26-27 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by US 6,061,103 to Okamura published May 9, 2000 ("Okamura").

As to claim 26, Figure 36 of Okamura reads on the claimed "*apparatus*."



Okamura discloses "*a storage adapted to store one or more image frames*" because the 12th embodiment of Okamura (i.e., figures 35-36 and col.22:46 to col.23:17) is an image display apparatus, which necessarily has storage to store one more image frames in order to display the image.

Okamura necessarily discloses a "*processor*" because the pixel shifts of figure 36 are images processed by a computer.

Okamura discloses "*a processor adapted to...obtain a 1st image frame from a 1st video stream*" because 'Picture 1' at t_1 of figure 36 reads on the claimed "*1st image frame*" and figure 36, itself, reads on the claimed "*1st video stream*."

Okamura discloses *"a processor adapted to...generate a modified image frame by performing at least one of...removing a portion of the 1st image frame..."* because 'Picture 1' at t₁ (i.e., the *"1st image frame"*) is gradually rewritten by a black image from the upper side, which produces Picture 1 at t₂ (i.e., the *"modified image frame"*) (see col.22:60-62).

Okamura discloses *"a processor adapted to...generate a bridge frame, wherein the bridge frame is a solid color..."* because the black image at t₃ reads on the claimed *"bridge frame"* and the solid color is black (see col.22:60-62).

Okamura discloses *"a processor adapted to...generate a bridge frame...wherein the bridge frame is different from the 1st image frame and different from the modified image frame"* because the black image at t₃ (i.e., the *"bridge frame"*) is different from 'Picture 1' at t₁ (i.e., the *"1st image frame"*) and different from Picture 1 at t₂ (i.e., the *"modified image frame"*).

Okamura discloses *"display the modified image frame; and display the bridge frame"* because Picture 1 at t₂ (i.e., the *"modified image frame"*) is displayed at time t₂ and black image at t₃ (i.e., the *"bridge frame"*) is displayed at time t₃.

As to claim 27, Okamura discloses *"the bridge frame is black"* because the image at t₃ (i.e., the *"bridge frame"*) is black (see col.22:62, which is reproduced below).

FIG. 36 shows the change of the images on the display element in this embodiment. As shown in FIG. 36, at an instant (time) t₁, a picture 1 is displayed on the display element, at a time t₂, the picture 1 is gradually rewritten by a black image from upper side and at a time t₃, the picture 1 is wholly replaced by a black image. At this instant, the

Conclusion

15. The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving **Patent No. 9,699,444** throughout the course of this reexamination proceeding. The 3PR is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

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23. All correspondence relating to this *ex parte* reexamination proceeding should be directed as follows:

By U.S. Postal Service Mail to:
Mail Stop *Ex Parte* Reexam
ATTN: Central Reexamination Unit
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P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to:
(571) 273-9900
Central Reexamination Unit

Signed:

/DEANDRA M HUGHES/
Reexamination Specialist, Art Unit 3992

Conferees:

/CHRISTINA Y. LEUNG/
Primary Examiner, Art Unit 3991
/MICHAEL FUELLING/
Supervisory Patent Examiner, Art Unit 3992