



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
**United States Patent and Trademark Office**  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/135,612	04/22/2016	Junya Nakano	6006-0230	4373
39083	7590	06/12/2020	EXAMINER	
KENEALY VAIDYA LLP 3050 K Street, N.W. Suite 302 Washington, DC 20007			GE, JIN	
			ART UNIT	PAPER NUMBER
			2616	
			NOTIFICATION DATE	DELIVERY MODE
			06/12/2020	ELECTRONIC

**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.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

avaidya@kviplaw.com  
uspto@kviplaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* JUNYA NAKANO and KAZUHIRO MATSUNAGA

---

Appeal 2020-001471  
Application 15/135,612  
Technology Center 2600

---

Before JAMESON LEE, JUSTIN T. ARBES, and  
BARBARA A. BENOIT, *Administrative Patent Judges*.

LEE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner’s decision to finally reject claims 1–8, all of the claims now pending in this Application. We have jurisdiction under 35 U.S.C. § 6(b).

We *reverse* and enter a *new ground of rejection* pursuant to 37 C.F.R. § 41.50(b).

---

<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Yazaki Corporation. Appeal Br. 3.

### CLAIMED SUBJECT MATTER

The invention generally relates to a display device for a vehicle that displays a first entire image, a second entire image changed from the first entire image, and a single intermediate entire image indicating an intermediate stage between the first and the second images. Spec. ¶ 6. The Specification describes that in pre-existing systems a plurality of intermediate images are displayed between the initial and final image, and that such a plurality of intermediate images creates a storage problem. *Id.* ¶¶ 2–4. Thus, according to the Specification, the invention displays a single intermediate image indicating an intermediate stage between the first image and the second image. *Id.* ¶ 4.

Figures 5a and 5b illustrate an exemplary first and second image, respectively, and are reproduced below:

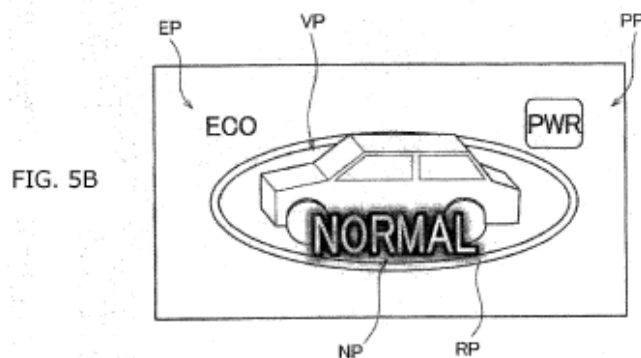
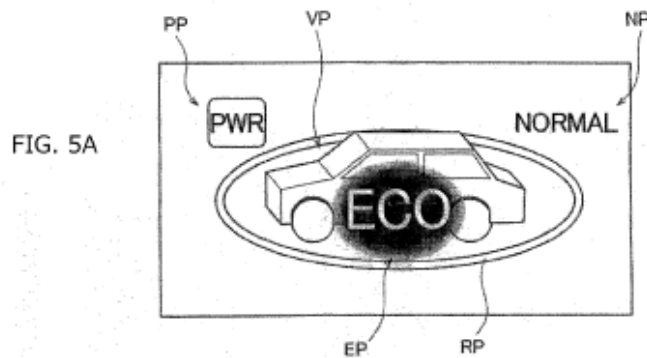


Figure 5a illustrates the display of one traveling mode for the vehicle and is the first image, and Figure 5b illustrates the display of a changed traveling mode of the vehicle and is the second image. *Id.* ¶¶ 33–36.

Figure 6 illustrates another displayed image related to the images shown in Figures 5(a) and 5(b) and is reproduced below:

FIG. 6

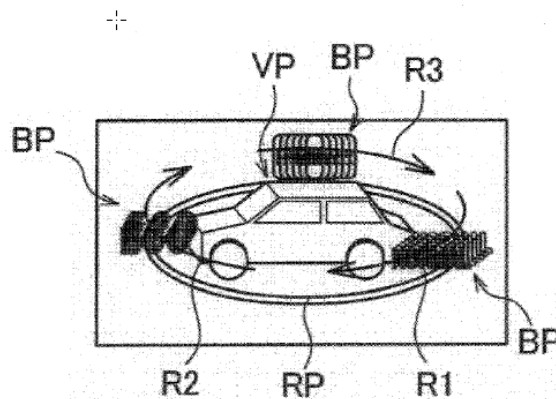


Figure 6 illustrates an intermediate image displayed between the first image and second image illustrated in Figures 5a and 5b. *Id.* ¶ 39. In this intermediate image, “the blur image (afterimage) BP is disposed, on a specific track.” *Id.*

Claim 1 is the only independent claim and is reproduced below:

1. A display device for a vehicle, which performs information display by a liquid crystal display, the display device comprising:

a processor; and

a graphic controller,

wherein the processor sends a command code to the graphic controller,

wherein the graphic controller displays a first entire image in a certain entire display region of the liquid crystal

display, a second entire image that is changed from the first entire image displayed in the certain entire display region, and a single intermediate entire image indicating an intermediate stage of a change between the first entire image and the second entire image in the certain entire display region according to the command code,

wherein the second image is a final display state in which a certain mark is displayed in a certain portion within the certain display region,

wherein the intermediate entire image includes an afterimage of the certain mark being extended in a track direction on a track of the certain mark moving to the certain portion, and

wherein the graphic controller displays the single intermediate entire image as an only one interposed image between displaying the first entire image and the second entire image.

Appeal Br. 16 (Claims App.).

#### REFERENCES

Flider	US 2015/0113371 A1	Apr. 23, 2015 (filed Oct. 18, 2013)
Masahito	JP 2015-063302 A	Apr. 9, 2015

#### REJECTIONS

Claims 1–8 were finally rejected under 35 U.S.C. § 103 as obvious over Masahito and Flider. Final Act. 4.

#### OPINION

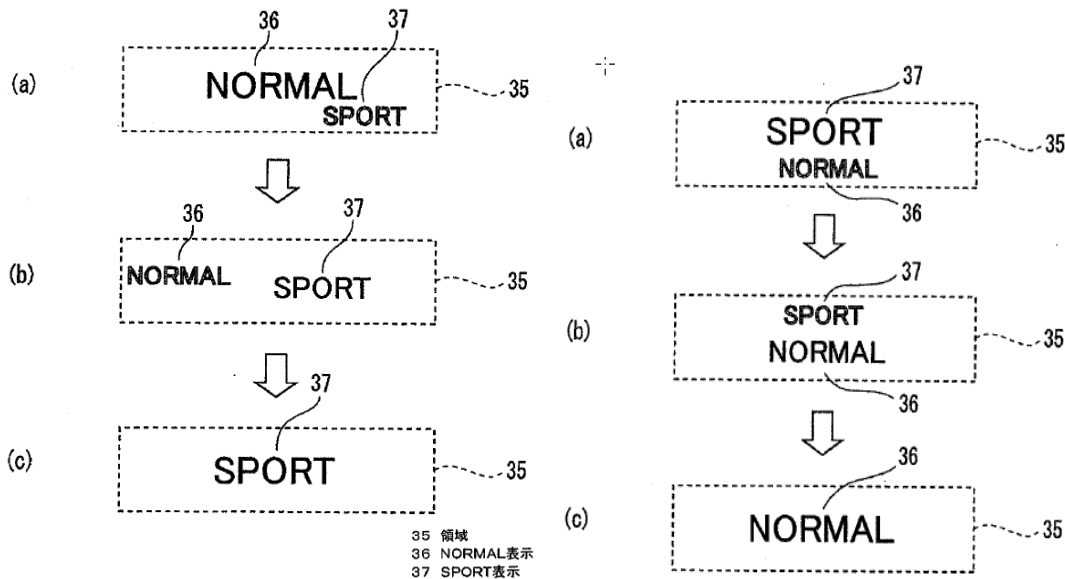
##### A. The Obviousness Rejection of Claims 1–8 as Obvious over Masahito and Flider

##### 1. Claim 1

The Examiner determined that Masahito discloses the limitation relating to the display of an intermediate image, recited in claim 1 as

follows: “a single intermediate entire image indicating an intermediate stage of a change between the first entire image and the second entire image.” Final Act. 5 (citing Figures 2, 7, ¶¶ 8, 21, 30, 50). For reasons discussed below, that finding is not supported by the evidence and the explanation provided by the Examiner is deficient.

The Examiner cites to Figures 6(a), 6(b), and 6(c) of Masahito, reproduced below on the left, and Figures 8(a), 8(b), and 8(c) of Masahito, reproduced below on the right (Ans. 4–5):<sup>2</sup>



Figures 6(a) through 6(c) illustrate displays as the running mode of a vehicle

---

<sup>2</sup> In the Final Office Action, the Examiner refers to Figure 7 as showing first and second entire images and to Figure 7(b) as an intermediate entire image. Final Act. 4–5. In the Advisory Action dated July 16, 2019, the Examiner refers to Figure 7(a) as the first entire image, and Figure 7(b) as the intermediate entire image, and Figure 7(c) as the second entire image. Adv. Act. Box 12 Continuation. But there are no Figures 7(a)–7(c), and Figure 7 is a flowchart, not any one or more displayed image. It appears the Examiner intended to reference Figures 6(a)-6(c) or 8(a)-8(c) as is explained on pages 4–5 of the Examiner’s Answer. We assume that is the case.

changes from NORMAL (Figure 6(a)) to SPORT (Figure 6(c)). Masahito ¶ 48. Figures 8(a) through 8(c) illustrate displays as the running mode of a vehicle changes from SPORT (Figure 8(a)) to NORMAL (Figure 8(c)). *Id.* ¶¶ 51, 52, 56. The Examiner identifies Figure 6(a) as the showing the first entire image, Figure 6(c) as showing the second entire image, and Figure 6(b) as showing the intermediate entire image. Ans. 4–5. The Examiner identifies Figure 8(a) as the showing the first entire image, Figure 8(c) as showing the second entire image, and Figure 8(b) as showing the intermediate entire image. *Id.*

The determinative question is whether Figure 6(b) or Figure 8(b) shows a “single” intermediate entire image indicating an intermediate stage between the first entire image and the second entire image. In the context of the Specification, discussed above, which describes pre-existing systems as having storage problems because they display a plurality of intermediate images (Spec. ¶¶ 2–4), the word “single” in the claim as applied to an intermediate entire image means “only one.” The Examiner has not expressed disagreement with that interpretation. Neither has the Examiner indicated that the recitation “single intermediate entire image” covers more than one intermediate image. In any event, that “single” intermediate entire image in claim 1 cannot be satisfied by a plurality of intermediate images is not reasonably disputable, because claim 1 further states: “wherein the graphic controller displays the single intermediate entire image as an *only one* interposed image between displaying the first entire image and the second entire image.” Appeal Br. 16 (Claims App.).

Although each of Masahito’s Figures 6(b) and 8(b) shows only a single intermediate entire image, as the Examiner asserts, focusing on

Figures 6(b) and 8(b) is an oversimplification of the operation of Masahito. Appellant more accurately describes the operation of Masahito by noting that Masahito's microcomputer checks if the intermediate image on display, such as the one in Figure 6(b) or 8(b), shows the desired icon ("SPORT" in Figure 6(b) and "NORMAL" in Figure 8(b)) at the center of display area 35 and, if not, then another intermediate image is produced and displayed.

Appeal Br. 8–9; Reply Br. 2–3. Indeed, with respect to Figures 6(b), Masahito describes as follows:

*That is, in this embodiment, the microcomputer 101 judges whether the position of the SPORT display 37 on the region 35 is placed in the center of the region 35 at Step S54. When it judges with the position of the SPORT display 37 not being placed in the center of the region 35 as a result of a judgment, Step S52 and 53 are performed again. When it judges with the position of the SPORT display 37 being placed in the center of the region 35 as a result of a judgment, Step S55 is performed.*

*In Step S55, the microcomputer 101 eliminates the NORMAL display 36 from on the region 35, namely, suspends the output of the NORMAL display 36 to the region 35.*

Masahito ¶¶ 44–45 (emphasis added). In Step S52, the SPORT display is placed deeper (more towards the center) and larger than it was, and in Step 53, the NORMAL display is placed smaller and more peripherally. *Id.*

¶¶ 42–43. Masahito's description of Figure 8(b) is similar to its description of Figure 6(b), except that the references to the SPORT display and to the NORMAL display are interchanged. *Id.* ¶¶ 52–55. Thus, Appellant is correct that Masahito's Figure 6(b), and similarly Figure 8(b), "illustrates only one of a series of iterations of the Steps S52 and S53 in the flowchart of Fig. 5." Appeal Br. 11. The disclosure of Masahito does not support that the image in Figure 6(b) is the only intermediate image interposed between

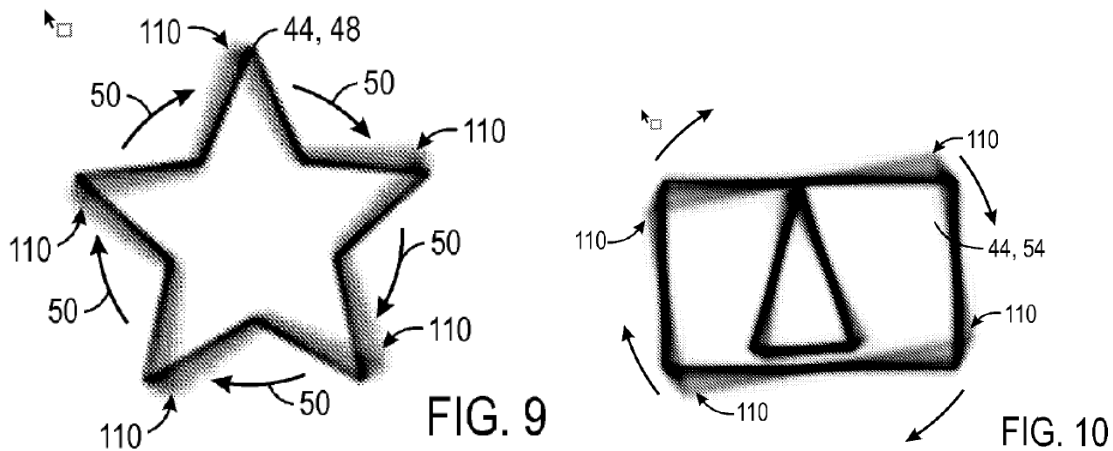


the first image shown in Figure 6(a) and the second image shown in Figure 6(c), or that the image in Figure 8(b) is the only intermediate image interposed between the first image shown in Figure 8(a) and the second image shown in Figure 8(c).

For the foregoing reasons, the Examiner incorrectly determined that Masahito describes “a single intermediate entire image indicating an intermediate stage of a change between the first entire image and the second entire image.” Final Act. 5. We agree with Appellant (Appeal Br. 10) that the evidence does not support the Examiner’s determination.

Flider is relied on by the Examiner to account for a different feature, i.e., that the intermediate entire image “includes an afterimage of the certain mark being extended in a track direction on a track of the certain mark moving to the certain portion.” Final Act. 6. The above-noted deficiency with regard to Masahito is not cured by the Examiner’s application of and reliance on Flider.

In any event, Flider discloses techniques for enhancing animation presentations by applying motion blur to animated objects. Flider ¶ 6. The animation provided is based on displays of multiple slides, slide by slide, and the system applies motion blur effects based on the shape morph and/or position change between successive slides. *Id.* ¶ 50. Thus, as is the case with Masahito, Flider does not disclose the display of a single intermediate entire image as an *only one* interposed image between the first entire image and the second entire image. For illustration purposes, Figures 9 and 10 of Flider are reproduced below:



Figures 9 and 10 illustrate the applied motion blur for rotating objects. *Id.* ¶¶ 16–17.

For the foregoing reasons, the rejection of claim 1 as unpatentable over Masahito and Flider is erroneous and cannot be sustained.

2. Claims 2–8

Claims 2–8 each depend, directly or indirectly, from claim 1, and thus incorporate all of the limitations of claim 1. The deficiency of the Examiner’s application of Masahito and Flider, as described above in the context of claim 1, equally applies to claims 2–8. Accordingly, the rejection of claims 2–8 as obvious over Masahito and Flider cannot be sustained.

B. New Ground of Rejection – Claim 1 is Unpatentable over the Combined Teachings of Masahito and Flider

Despite the deficiency of the Examiner’s analysis discussed above, the same rejection is without such deficiency, if the first entire image, the second entire image, and the intermediate entire image in Masahito are identified differently than what the Examiner had proposed. Claim 1’s recitation of a “first entire image” is broad, and claim 1’s recitation of a “second entire image” also is broad. As discussed above, and as asserted by Appellant, Masahito discloses the generation of a plurality of images

between the display of the image shown in Figure 6(a) and the display of the image shown in Figure 6(c), and the generation of a series of images interposed between the display of the image shown in Figure 8(a) and the display of the image shown in Figure 8(c). Any series of three images, consecutive in time, in either setting satisfies the claim recitation relating to a first entire image, a second entire image changed from the first entire image, and a single intermediate image indicating an intermediate stage of a change between the first entire image and the second entire image. The first image in the series of three constitutes the first entire image; the second image in the series of three constitutes the single intermediate entire image; and the third image in the series of three constitutes the second entire image. The first image in the series can even be the image shown in Figure 6(a) or Figure 8(a) (in which case the single intermediate image would be the immediately following image, and the second entire image would be the next image following that). Similarly, the third image in the series can even be the image shown in Figure 6(c) or Figure 8(c).

With this change in the identification of the three images in Masahito, no error would have been shown by the Appellant in the Examiner's rejection based on Masahito and Flider. Appellant also argues that the combination fails to teach an intermediate entire image including "an afterimage of [a] certain mark," as recited in claim 1. App. Br. 13. Appellant's argument, however, is premised on Flider not curing the deficiency in the Examiner's identification of an intermediate entire image in Masahito. *Id.* As explained above, we agree with that deficiency but find that Masahito in fact teaches a sequence of three images as recited in

claim 1, and the Examiner relies on Flider only for a teaching of including an “afterimage of [a] certain mark” in a particular image. *See* Final Rej. 6.

Accordingly, we now enter the modified rejection of claim 1 as unpatentable over Masahito and Flider under 35 U.S.C. § 103 as a new ground of rejection, so that Appellant would have a full and fair opportunity to respond to the changed identification of images. *See In re Leithem*, 661 F.3d 1316, 1319 (Fed. Cir. 2011) (“Mere reliance on the same statutory basis and the same prior art references, alone, is insufficient to avoid making a new ground of rejection when the Board relies on new facts and rationales not previously raised to the applicant by the examiner.”); *In re Stepan Co.*, 660 F.3d 1341, 1346 (Fed. Cir. 2011) (“Had the Board labeled its rejection as a new ground of rejection, [the applicant] could have reopened prosecution to address the newly-alleged deficiencies in its Declaration with the examiner.”). Except for the modified identification of the first entire image, the second entire image, and the intermediate entire image, the new ground of rejection is the same as what the Examiner has articulated for claim 1 in the Final Rejection. Final Act. 4–7.

With regard to dependent claims 2–8, we leave them for further consideration by the Examiner in light of our new ground of rejection for claim 1.

## CONCLUSION

In summary:

<b>Claim Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/ Basis</b>	<b>Affirmed</b>	<b>Reversed</b>	<b>New Ground</b>
1–8	103	Masahito, Flider		1–8	
1	103	Masahito, Flider			1

This Decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). Section 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.” Section 41.50(b) also provides:

When the Board enters such a non-final decision, the appellant, within two months from the date of the decision, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the [E]xaminer, in which event the prosecution will be remanded to the [E]xaminer. The new ground of rejection is binding upon the [E]xaminer unless an amendment or new Evidence not previously of Record is made which, in the opinion of the [E]xaminer, overcomes the new ground of rejection designated in the decision. Should the [E]xaminer reject the claims, appellant may again appeal to the Board pursuant to this subpart.

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same Record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been

Appeal 2020-001471  
Application 15/135,612

misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure § 1214.01 (9th ed. 2018).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

REVERSED  
37 C.F.R. § 41.50(b)