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Bejin Bieneman PLC Ford Global Technologies, LLC 2000 Town Center Suite 800 Southfield, MI 48075			CHEN, SHELLEY	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MARK A. CUDDIHY, THOMAS EDWARD PILUTTI,  
MANOHARPRASAD K. RAO, ANDREW WALDIS,  
ROGER ARNOLD TROMBLEY, MATTHEW Y. RUPP,  
and WILFORD TRENT YOPP

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Appeal 2017-006637<sup>1</sup>  
Application 14/208,203<sup>2</sup>  
Technology Center 3600

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Before KENNETH G. SCHOPFER, AMEE A. SHAH, and  
MATTHEW S. MEYERS, *Administrative Patent Judges*.

SCHOPFER, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the rejection of  
claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

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<sup>1</sup> Our decision references the Appeal Brief (“Appeal Br.,” filed July 26, 2016) and Reply Brief (“Reply Br.,” filed Mar. 17, 2017), and the Examiner’s Answer (“Ans.,” mailed Jan. 19, 2017) and Final Office Action (“Final Act.,” mailed Feb. 25, 2016).

<sup>2</sup> According to Appellants, the real party in interest is Ford Global Technologies, LLC. Appeal Br. 2.

## BACKGROUND

The Specification relates to vehicles with “at least one autonomous driving sensor and an autonomous mode controller configured to receive signals generated by the autonomous driving sensor” in which “the autonomous mode controller is configured to shade at least one vehicle window when the vehicle is operating in an autonomous mode.” Spec. ¶ 6.

## ILLUSTRATIVE CLAIM

Claim 1 is illustrative of the appealed claims and recites:

1. A vehicle system comprising:
  - at least one autonomous driving sensor;
  - an autonomous mode controller configured to receive signals generated by the autonomous driving sensor and control at least one vehicle subsystem based at least in part on the signals received;
  - wherein the autonomous mode controller is programmed to selectively shade at least one vehicle window when the vehicle is operating in an autonomous mode and in accordance with an ambient light signal.

Appeal Br. 12.

## REJECTIONS

1. The Examiner rejects claims 1–20 under 35 U.S.C. § 103 as unpatentable over Disley<sup>3</sup> in view of Popat.<sup>4</sup>
2. The Examiner rejects claims 5, 12, and 20 under 35 U.S.C. § 103 as unpatentable over Disley in view of Popat and Snider.<sup>5</sup>

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<sup>3</sup> Disley, US 2014/0168608 A1, pub. June 19, 2014.

<sup>4</sup> Popat, US 5,663,621, iss. Sept. 2, 1997.

<sup>5</sup> Snider et al., US 2014/0097636 A1, pub. Apr. 10, 2014.

DISCUSSION

*Disley in view of Popat*

*Claims 1–5, 7–12, and 14–20*

With respect to this group of claims, Appellants raise arguments only with respect to independent claim 1 and indicate that the remaining claims will stand or fall with claim 1. *See* Appeal Br. 7–10. Accordingly, we discuss only claim 1 below, and claims 2–5, 7–12, and 14–20 fall with claim 1.

With respect to claim 1, the Examiner finds that Disley discloses a system as claimed except that Disley does not disclose shading “in accordance with an ambient light signal.” Final Act. 3 (citing Disley ¶¶ 6, 10, 11). The Examiner finds that Popat teaches shading based on an ambient light signal, and the Examiner concludes that it would have been obvious to modify Disley based on Popat, “in order to maintain a comfortable light level inside the vehicle under all external light conditions and times of day, with predictable results.” *Id.* at 3–4 (citing Popat Fig. 4).

For the reasons set forth below, we are not persuaded of reversible error with respect to the rejection of claim 1 by Appellants’ arguments.

Appellants first argue that the proposed modification of Disley would render it unsatisfactory for its intended purpose. Appeal Br. 7. In support, Appellants assert that “Disley seeks to make its vehicle as dark and reflective as possible when projecting images” and that “[a]dmitting diffuse daylight, as advocated by Popat, will make it harder for the occupants of Disley’s vehicle to view the projected images.” *Id.* (citing Disley ¶ 21; Popat col. 9, ll. 16–19). Thus, Appellants assert that “the proposed modification undermines Disley’s goal of providing in-vehicle

entertainment, thereby rendering Disley's system unsatisfactory for its intended purpose." *Id.* We disagree.

First, we note that the rejection does not appear to rely on a bodily incorporation of Popat's system into Disley's. Rather, the rejection relies on Popat, to the extent that Popat teaches shading a window based on an ambient light signal. *See* Final Act. 3. Thus, the proposed modification does not require that the resulting system allows the admission of diffuse daylight in windows that are screened/shaded. Second, we disagree that Disley's intended purpose would be circumvented if any light were admitted into the vehicle. Disley does not expressly state that the vehicle need be "as dark and reflective as possible when projecting images" as Appellants assert. In fact, we see no express indication of the level of darkness required for Disley's system to operate, either in paragraph 21 cited by Appellants, or any other portion of Disley. Further, Disley appears to contemplate that light may be admitted while the windows are made to function as screens. *See, e.g.*, Disley ¶ 8 ("However, if it is acceptable to allow light to enter through the window glass, the screen made by the sheet material could also be somewhat smaller than the actual area, e.g if it is considered to be relevant to be able to at least get a glimpse of the outside from the vehicle through the window"), ¶ 11 (indicating that some windows may automatically function as screens while others may require manual control when the vehicle is in autonomous mode). Thus, Disley provides no indication that allowing light into the vehicle would prevent operation of the screened windows.

Next, Appellants argue that Disley does not disclose selective shading of at least one vehicle window. Appeal Br. 8. In support, Appellants assert

that “Disley’s system does not make any decisions about which windows to shade” and that “Disley requires that all windows be darkened so that images can be projected onto one or more of the windows.” *Id.* Thus, Appellants indicate that the claim requires that the autonomous mode controller makes decisions about which window to shade. Appellants also assert that the Specification provides “examples of various subsets of windows selected for shading based on the orientation of the vehicle relative to the sun” and the scope of the term “selectively” must be determined in view of this portion of the Specification. *Id.* at 9.

We are not persuaded of error by this argument. First, to the extent Appellants argue that Disley requires that all windows must be darkened, we disagree for the reasons discussed with respect to the previous argument. Second, we agree with the Examiner that the Specification does not provide a limiting definition for the term “selectively.” Rather, the Specification provides only examples of how the shades *may* be controlled. For example, the Specification states that “the autonomous mode controller 135 *may* control the shades 120 to cover any combination of” windows. Spec. ¶ 18 (emphasis added). This example suggests that the controller may selectively shade one window, all windows at once, or no windows based on the current conditions. Thus, we agree with the Examiner’s interpretation (Ans. 4) that “selectively shading” could mean selecting one, all windows at once, or no windows at all, which is consistent with the Specification.

Based on the foregoing, we are not persuaded of reversible error and we sustain the rejection of claim 1. We also sustain the rejection of claims 2–5, 7–12, and 14–20, which fall with claim 1.

*Claims 6 and 13*

With respect to claims 6 and 13, Appellants argue that “[t]he Final Office Action does not present any reasons for the rejection” and “claims 6 and 13 are not substantively addressed at all in the Final Office Action or in the Advisory Action.” Appeal Br. 7. We agree and determine that the Examiner has failed to set forth a prima facie showing of obviousness with respect to these claims. Accordingly, we do not sustain the rejection of claims 6 and 13.

*Disley in view of Popat and Snider*

Appellants do not raise separate arguments with respect to the separate rejection of claims 5, 12, and 20, and Appellants indicate that these claims will stand or fall with their respective independent claims. Appeal Br. 10. Accordingly, because we sustain the rejection of independent claims 1, 8, and 15 above, we sustain the rejection of claims 5, 12, and 20 here.

CONCLUSION

We AFFIRM the rejections of claims 1–5, 7–12, and 14–20. We REVERSE the rejection of claims 6 and 13.

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).

AFFIRMED-IN-PART