

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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PORSCHE CARS NORTH AMERICA, INC.,  
Petitioner,

v.

YECHEZKAL EVAN SPERO,  
Patent Owner.

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IPR2023-01122  
Patent 11,208,029 B2

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Before JON M. JURGOVAN, JASON W. MELVIN, and  
AARON W. MOORE, *Administrative Patent Judges*.

MELVIN, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review  
35 U.S.C. § 314  
Granting Motion for Joinder  
35 U.S.C. § 315(c)

## I. INTRODUCTION

Porsche Cars North America, Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting *inter partes* review of claims 1–33 of U.S. Patent No. 11,208,029 B2 (Ex. 1001, “the ’029 patent”). Petitioner filed also a Motion for Joinder seeking to join Petitioner as a party to *Volkswagen Group of America, Inc. v. Yechezkal Evan Spero*, IPR2022-01586 (“the VW IPR”), instituted May 24, 2023. Paper 3 (“Mot.”); *see* IPR2022-01586, Paper 7. Yechezkal Evan Spero (“Patent Owner”) filed a Preliminary Response. (Paper 8, “Prelim. Resp.”). Patent Owner did not oppose joinder. Pursuant to 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a), we have authority to determine whether to institute review.

An *inter partes* review may not be instituted unless “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons set forth below, we conclude that Petitioner has shown a reasonable likelihood it will prevail in establishing the unpatentability of at least one challenged claim, and we institute *inter partes* review.

### A. REAL PARTIES IN INTEREST

Petitioner identifies itself and its affiliate Dr. Ing. h.c. F. Porsche Aktiengesellschaft as the real parties in interest. Pet. 93. Patent Owner identifies itself and Torchlight Technologies LLC, the exclusive licensee of the ’029 patent, as the real parties in interest. Paper 4, 1 (Patent Owner’s Mandatory Notices).

### B. RELATED MATTERS

The parties identify the following related litigation: *Torchlight Techs. LLC v. Daimler AG et al.*, Case No. 1:22-cv-00751 (D. Del.); *Torchlight Technologies*

*LLC v. General Motors LLC et al.*, No. 1:22-cv-00752 (D. Del). *See* Pet. 94; Paper 4, 1. They also identify IPR2022-01500, IPR2022-01586, IPR2023-01034, and IPR2023-01126. *See* Pet. 94; Paper 4, 1–2.<sup>1</sup>

### C. THE '029 PATENT

The '029 patent is titled “Adaptive Headlight System” and relates to motor vehicle headlamps with LED light sources and a processor to control the headlamp light pattern. Ex. 1001, codes (54), (57). The specification more generally describes a lighting device that “incorporates one or more discrete light sources and their ancillary optical and electrical control equipment in an integrated illuminating element.” *Id.* at 13:34–36. The combined unit is referred to as a Digital Lighting Fixture (DLF). *Id.* at 18:29–33.

The specification further describes transportation vehicle applications. *Id.* at 50:49–57:35. One such application involves a DLF headlamp device that includes a cluster of LEDs to illuminate around a curve. *Id.* at 51:54–63, 54:8–15. With LEDs having a variety of aims, the headlamp’s light distribution pattern may be controlled based on a number of factors, including location data from a GPS system, providing information about upcoming curves in the road. *See id.* at 51:54–67, 54:15–22.

### D. CHALLENGED CLAIMS

Petitioner challenges all thirty-three claims of the '029 patent. Pet. 4. Claim 1 is independent and is reproduced below:

1. A system, for a motor vehicle, comprising:

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<sup>1</sup> Patent Owner further lists matters involving two different patents related to the '029 patent, including several IPRs, a pending reissue, and a completed *ex parte* reexamination. Paper 4, 2–3.

a plurality of headlamps, each comprising a plurality of LED light sources;

one or more processors; and

a memory storing instructions that, when executed by one or more of the one or more processors, enable the one or more processors to:

receive first data, including at least map data, indicating a road curvature upcoming along a road on which the motor vehicle is traveling;

[<sup>2</sup>] determine a light change, the change adapting a light pattern of the headlamps in at least one of color, intensity or spatial distribution to increase light in a direction of the road curvature ahead of the motor vehicle and shaping light based at least in part on the road curvature; and

[<sup>3</sup>] control at least a first plurality of the LED light sources to provide light based at least in part on the determined light change and prior to the motor vehicle reaching the road curvature.

Ex. 1001, 95:56–96:8. Claims 2–11 depend, directly or indirectly, from claim 1. *Id.* at 96:9–97:44. Claim 12 is independent and recites limitations similar to claim 1’s. *Id.* at 97:45–62. Claims 13–22 depend, directly or indirectly, from claim 12. *Id.* at 97:63–99:27. Claim 23 is independent and recites limitations similar to claim 1’s. *Id.* at 99:28–43. Claims 24–33 depend, directly or indirectly, from claim 23. *Id.* at 99:44–100:66.

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<sup>2</sup> Patent Owner refers to these limitations as the “predictive curve illumination limitations.” Prelim. Resp. 16.

<sup>3</sup> Patent Owner refers to these limitations as the “control limitations.” Prelim. Resp. 16.

E. PRIOR ART AND ASSERTED GROUNDS

Petitioner asserts the following unpatentability grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–33	103	Beam, <sup>4</sup> Kobayashi <sup>5</sup>
1–33	103	Gotou, <sup>6</sup> Karlsson <sup>7</sup>

Pet. 4. Petitioner also relies on the Declaration of Scott Andrews. Ex. 1003.

II. ANALYSIS

To join a petitioner to an instituted proceeding, the Board first determines whether the Petition “warrants” institution under 35 U.S.C. § 314. 35 U.S.C. § 315(c); *see Facebook, Inc. Windy City Innovations, LLC*, 973 F.3d 1321, 1332 (Fed. Cir. 2020).

The Board next determines whether to exercise “discretion to decide whetherto ‘join as a party’ the joinder applicant,” who is the Petitioner in this proceeding. *Windy City*, 973 F.3d at 1332. As moving party, Petitioner bears the burden of proving that it is entitled to the requested relief. 37 C.F.R. § 42.20(c). A motion for joinder should (1) set forth the reasons joinder is appropriate; (2) identify any new grounds of unpatentability asserted in the petition; and (3) explain what impact (if any) joinder would have on the trial schedule for the existing review. *See Kyocera Corp. v. SoftView, LLC*, IPR2013-00004, Paper 15 at 4 (PTAB Apr. 24, 2013). In addition, a motion for joinder must be filed “no later

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<sup>4</sup> U.S. Patent No. 6,144,158, issued Nov. 7, 2000 (Ex. 1005).

<sup>5</sup> U.S. Patent No. 6,049,749, issued Apr. 11, 2000 (Ex. 1008).

<sup>6</sup> U.S. Patent No. 5,588,733, issued Dec. 31, 1996 (Ex. 1012).

<sup>7</sup> WIPO Patent Publication No. 98/54030, published December 3, 1998 (Ex. 1010).

than one month after the institution date of any inter partes review for which joinder is requested.” 37 C.F.R. § 42.122(b).

A. INSTITUTION OF INTER PARTES REVIEW

Petitioner represents that the “Petition is essentially a copy of the petition filed in” the VW IPR and that the Petition “includes identical grounds.” Mot. 3. Our independent review of the Petition and the VW IPR petition confirms Petitioner’s representations, and that the petitions in the two proceedings are substantially the same. Further, although Petitioner relies on a different expert declarant, Petitioner submits that the two declarations are “substantively identical.” *Id.* at 4–5.

Having already considered the merits of those challenges and the evidence in the VW IPR and having determined that the threshold for institution of *inter partes* review has been met, we determine that the Petition here also presents a reasonable likelihood of prevailing on the challenges to at least one claim. Additionally, we determine that Patent Owner’s arguments for discretionary denial (*see* Prelim. Resp. 68–75) are not persuasive.<sup>8</sup> Therefore, for the same reasons stated in our Decision to Institute in the VW IPR, we institute *inter partes* review in this proceeding on the grounds presented in the Petition. *See* IPR2022-01586, Paper 7.

B. MOTION FOR JOINDER

Petitioner timely filed its Motion for Joinder on June 22, 2023, which was no later than one month after the institution of the VW IPR on May 24, 2023. *See* 37 C.F.R. § 42.122(b).

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<sup>8</sup> Patent Owner notes that “the non-institution arguments in this Preliminary Response essentially repeat the non-institution arguments that were raised in the already-instituted target case.” Prelim. Resp. 8.

We determine that Petitioner has met its burden of showing that joinder is appropriate because, as set forth above, the Petition is substantially identical to the petition in the VW IPR, contains the same grounds based on the same evidence, and relies on a substantively identical declaration. Petitioner also represents that joinder will not impact the VW IPR schedule. Mot. 6.

Additionally, Petitioner represents that it is willing to accept a limited, “understudy role” to Volkswagen (the original petitioner in the VW IPR), taking over only in the event VW no longer participates. *Id.* at 6 & n.2. Specifically, Petitioner represents that in its understudy role, it agrees that the following conditions will apply:

- (a) Petitioner will not make any substantive filings and shall be bound by the filings of VW, unless a filing concerns termination and settlement, or issues solely involving Petitioner.
- (b) Petitioner will not present any argument or make any presentation at oral hearing unless an issue solely involves Petitioner, or when addressing motions that do not affect VW.
- (c) Petitioner will not seek to cross-examine or defend the cross-examination of any witness, unless the topic of cross-examination concerns issues solely involving Petitioner, within the time permitted by VW alone and with VW’s agreement.
- (d) Petitioner will not seek discovery from Patent Owner, unless issues arise that are unique to, and only applicable to, Petitioner.
- (e) Petitioner will not rely on expert testimony beyond that submitted by VW unless and until VW is terminated as party to the proceedings, prior to any necessary depositions. While Petitioner’s expert, Scott Andrews, is not the same expert as VW’s expert, Jianzhong Jiao, Mr. Andres’s expert declaration submitted herein is substantively identical to Dr. Jiao’s declaration submitted on behalf of VW.

*Id.* at 6–7. Patent Owner has not filed an opposition to Petitioner’s Motion. Thus, Petitioner’s Motion stands unopposed.

Under these circumstances, we agree with Petitioner that joinder is appropriate and will not unduly impact the ongoing trial in the VW IPR. We limit Petitioner's participation in the VW IPR proceeding, as follows: (1) VW alone is responsible for all petitioner filings in the proceeding until such time that it is no longer an entity in the proceeding, and (2) Petitioner is bound by all filings by VW in the VW IPR proceeding, except for (a) filings regarding termination or settlement, and (b) filings where Petitioner receives permission to file an independent paper. Petitioner must obtain prior Board authorization to file any paper or take any action on its own in the proceeding, so long as VW remains as a non-terminated petitioner in the proceeding. This arrangement promotes the just and efficient administration of the ongoing trial in the VW IPR and protects the interests of VW as original petitioner in IPR2022-01586 and of Patent Owner.

### III. CONCLUSION

For the reasons discussed above, we institute *inter partes* review of the challenged claims of the '029 patent based on the asserted grounds. We *grant* Petitioner's Motion for Joinder and join Petitioner to IPR2022-01586, with the restrictions set forth above.

### IV. ORDER

Accordingly, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), *inter partes* review of claims 1–33 of the '029 patent is instituted on the grounds set forth in the Petition;

FURTHER ORDERED that, pursuant to 35 U.S.C. § 315(c) and 37 C.F.R. § 42.122, Petitioner's Motion for Joinder is *granted*, and Petitioner is joined as a petitioner to IPR2022-01586, subject to the above-described restrictions on Petitioner's participation;



FURTHER ORDERED that the asserted grounds of unpatentability on which the Board instituted *inter partes* review in IPR2022-01586 are unchanged and remain the only instituted grounds;

FURTHER ORDERED that the Scheduling Order entered in IPR2022-01586, including any schedule changes agreed by the parties in that proceeding pursuant to the Scheduling Order, shall govern the trial schedule in IPR2022-01586;

FURTHER ORDERED that the case caption in IPR2022-01586 for all further submissions shall be modified to add Porsche Cars North America, Inc., as a named Petitioner, and to indicate by footnote the joinder of Petitioner to that proceeding, as indicated in the attached sample case caption; and

FURTHER ORDERED that a copy of this Decision be entered into the record of IPR2022-01586.

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For PETITIONER:

Edgar H. Haug  
Robert E. Colletti  
HAUG PARTNERS LLP  
ehaug@haugpartners.com  
rcolletti@haugpartners.com

For PATENT OWNER:

Sangeeta Shah  
David Bir  
Andrew B. Turner  
BROOKS KUSHMAN P.C.  
sshah@brookskushman.com  
dbir@brookskushman.com  
aturner@brookskushman.com

[Sample Case Caption]

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\* Porsche Cars North America, Inc., which filed a petition in IPR2023-01122, has been joined as a party to this proceeding.