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Paper No. 9
Entered: February 16, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PORSCHE CARS NORTH AMERICA, INC.,
Petitioner

v.

YECHEZKAL EVAN SPERO,
Patent Owner.

Case IPR2023-01321
U.S. Patent 10,894,503 B2

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

MOORE, *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 1–19 and 37–58 of U.S. Patent No. 10,894,503 B2 (Ex. 1001, "the '503 patent"). Petitioner also filed a Motion for Joinder seeking to join Petitioner as a party to *Volkswagen Group of America, Inc. v. Yechezkal Evan Spero*, IPR2023-00335 ("the VW IPR"), instituted July 17, 2023. *See* Paper 3 ("Mot."). Yechezkal Evan Spero ("Patent Owner") filed a Preliminary Response. *See* Paper 7 ("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. *See* Pet. 129. Patent Owner identifies itself and Torchlight Technologies LLC, the exclusive licensee of the '503 patent, as the real parties in interest. *See* Paper 6, 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.) and *Torchlight Technologies*

LLC v. General Motors LLC et al., No. 1:22-cv-00752 (D. Del). *See* Pet. 129; Paper 6, 1–2.[1] They also identify IPR2023-00335, IPR2023-00197, IPR2023-00328, IPR2023-01026, and IPR2023-01027. *Id.*

C. THE '503 PATENT

The '503 patent is titled "Detector Controlled Headlight System" and is directed to "[a]n automated headlight system for vehicles [that] replaces the high and low beam with a continuum of beam patterns, with further variable spatial distribution of intensities and color spectrum." Ex. 1001, Abstract. The embodiment that corresponds to the challenged claims is depicted in Figure 15, reproduced in part below:

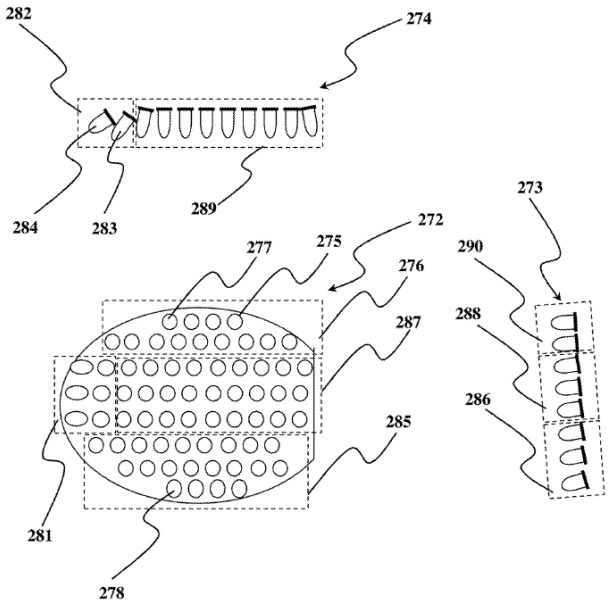

Figure 15 shows a "multiple light-source headlamp." Ex. 1001, 15:64.

The figure depicts "a headlamp 270 of a land, sea or air vehicle" . . . in front view 272, side view of a section 273 and top view of a section 274." Ex. 1001, 53:17–19.

[1] Patent Owner further lists matters involving two different patents related to the '503 patent. *See* Paper 6, 3–5.

A solid-state light source, "such as an LED 275 with [a] specific location within the cluster 276 has a specific spatial light distribution, color wavelength and aiming relative to the vehicle, such as straight ahead, and or downwards and or off towards the right or left." Ex. 1001, 53:19–23. Different LED 277, which is "at a second location within the same cluster[,] may have a similar or dissimilar aiming, wavelength and spatial light distribution." *Id*. at 53:19–32.

The patent explains that, because drivers may find yellow colored headlamps less offending than blueish colors, a controller that "receives traffic data from sensors" can "shift wavelength specific radiant power contributions of SLSs such that the resultant on the CIE chromacity diagram would be yellowish" but that if "there is no car immediately ahead or oncoming traffic," then the controller can shift the color to "bluish white, allowing the driver to better ascertain road conditions further up ahead." Ex. 1001, 53:53–62.

Claims 1 and 37 are independent and are directed to vehicle headlight systems. Claim 1 is reproduced in full below:

> 1. A vehicle headlight system comprising:
>
> one or more headlamps and a vehicle structure, arranged for affixing components of the system to the vehicle;
>
> a plurality of light clusters, arranged in each of the one or more of the one or more headlamps, the headlamps capable of projecting light so as to illuminate a plurality of sub-sections of a field-of-view with different illumination characteristics, the subsections determined in response to sensor data, wherein the light clusters operate to create a headlight beam;
>
> electronic control circuitry configured to independently operate the light clusters;
>
> one or more sensors configured to obtain and provide the sensor data predefined as pertinent to illumination requirements for the field-of-view; and

a logical controller including a processor, the processor in communication with a memory storing one or more algorithms, with the sensors, and with the control circuitry, wherein the processor is configured to process the one or more algorithms and the sensor data to determine an illumination for at least two of the sub-sections, that reduces illumination to reduce glare in at least a first of the at least two subsections and adapt the light emitted from one or more of the light-clusters so as to create the headlight beam that provides the determined illumination.

D. PRIOR ART AND ASSERTED GROUNDS

Petitioner asserts the following unpatentability grounds:

Claims Challenged	Basis	References
1–5, 7, 8, 10–14, 18, 19	§ 103	Beam,[2] Thominet[3]
37–45, 47, 48, 50–53, 57, 58	§ 103	Beam, Thominet, Stam[4]
9, 15–17	§ 103	Beam, Thominet, Kobayashi[5]
49, 54–56	§ 103	Beam, Thominet, Stam, Kobayashi
6	§ 103	Beam, Thominet, Braun[6]
46	§ 103	Beam, Thominet, Stam, Braun

[2] U.S. Patent No. 6,144,158 (Exhibit 1005).

[3] U.S. Patent App. Pub. No. 2001/0019486 A1 (Exhibit 1006).

[4] PCT Patent App. Pub. No. WO 01/70538 A2 (Exhibit 1007).

[5] U.S. Patent No. 6,049,749 (Exhibit 1008).

[6] PCT Patent App. Pub. No. WO 02/04247 A1 (Exhibit 1009).

1–5, 7, 8, 10–14, 18, 19, 37–45, 47, 48, 50–53, 57, 58	§ 103	Karlsson,[7] Harbers[8]
9, 15–17, 49, 54–56	§ 103	Karlsson, Harbers, Gotou[9]
6, 46	§ 103	Karlsson, Harbers, Braun

Petitioner also relies on Declaration of Scott Andrews, filed as Exhibit 1003. Patent Owner relies on Declaration of Matthew A. Turk, filed as Exhibit 2001.

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. *See* 35 U.S.C. § 315(c); *Facebook, Inc. Windy City Innovations, LLC*, 973 F.3d 1321, 1332 (Fed. Cir. 2020).

The Board next determines whether to exercise "discretion to decide whether to '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

[7] PCT Patent App. Pub. No. WO 98,54030 (Exhibit 1010).

[8] PCT Patent App. Pub. No. WO 01/01038 A1 (Exhibit 1011).

[9] U.S. Patent No. 5,588,733 (Exhibit 1012).

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 evidence and arguments "are substantively identical to the evidence and arguments supporting the VW Petition." Mot. 1, 4. 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 3.

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 this Petition also establishes a reasonable likelihood that Petitioner will prevail with respect to at least one claim. Additionally, we determine that Patent Owner's arguments for discretionary denial (*see* Prelim. Resp. 59–69) are not persuasive.[10] 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.

B. MOTION FOR JOINDER

Petitioner timely filed its Motion for Joinder on August 14, 2023, which was no later than one month after the institution of the VW IPR on July 17, 2023. *See* 37 C.F.R. § 42.122(b).

[10] Patent Owner notes that "the non-institution arguments in [the] Preliminary Response essentially repeat the non-institution arguments that were raised in the already-instituted target case." Prelim. Resp. 1.

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. *See* Mot. 4.

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. *See id.* at 5; *id*. at 5 n.3. 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 the 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; and
>
> (e) Petitioner will not rely on expert testimony beyond that submitted by VW unless and until VW is terminated as party to the proceeding prior to any necessary depositions.

See id. at 5–6. 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 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. As long as VW remains as a non-terminated petitioner in the proceeding, Petitioner must obtain prior Board authorization to file any paper or take any action on its own 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 IPR2023-00335 and of Patent Owner.

III. CONCLUSION

For the reasons discussed above, we institute *inter partes* review of the challenged claims of the '503 patent based on the asserted grounds. We *grant* Petitioner's Motion for Joinder and join Petitioner to IPR2023-00335, 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 1–19 and 37–58 of the '503 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 IPR2023-00335, 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 IPR2023-00335 are unchanged and remain the only instituted grounds;

FURTHER ORDERED that the Scheduling Order entered in IPR2023-00335, including any schedule changes agreed to by the parties in that proceeding, shall govern the trial schedule in IPR2023-01321;

FURTHER ORDERED that the case caption in IPR2023-00335 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 IPR2023-00335.

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[Sample Case Caption]

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YECHEZKAL EVAN SPERO,
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IPR2023-00335*
10,894,503 B2

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* Porsche Cars North America, Inc., which filed a petition in IPR2023-01321, has been joined as a party to this proceeding.