

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MERCEDES-BENZ GROUP AG,
Petitioner,

v.

THE PHELAN GROUP, LLC,
Patent Owner.

IPR2025-00930
Patent 11,472,427 B2

Before LINDA E. HORNER, MITCHELL G. WEATHERLY, and
KARA L. SZPONDOWSKI, *Administrative Patent Judges*.

WEATHERLY, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. Background

Mercedes-Benz Group AG (“Petitioner”) filed a petition (Paper 2, “Pet.”) to institute an *inter partes* review of claims 1–20 (the “challenged claims”) of U.S. Patent No. 11,472,427 B2 (Ex. 1001, “the ’427 patent”). 35 U.S.C. § 311. The Phelan Group, LLC (“Patent Owner”) did not file a

Preliminary Response. Therefore, Petitioner’s arguments for unpatentability are currently unopposed. Institution of an *inter partes* review is authorized by statute when “the information presented in the petition filed under section 311 and any response filed under section 313 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). Based on our review of the record, we conclude that Petitioner is reasonably likely to prevail with respect to at least one challenged claim.

Petitioner challenges the patentability of claims as follows:

Claim(s) challenged	35 U.S.C. §¹	Reference(s)
15–20	102	Murphy ²
1–6, 8–11, 13–20	103	Murphy
10	103	Murphy, Adams ³
7, 12	103	Murphy, Wu ⁴
1, 4–6, 10	103	Arshad ⁵
2–4, 8, 9, 11, 13–20	103	Arshad, Petrik ⁶

¹ The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. §§ 102 and 103 that became effective March 16, 2013. The application for the ’427 patent was filed on February 28, 2019. The ’427 patent claims priority to a series of continuation applications dating back to October 27, 2016. For the purposes of this Decision, we apply the pre-AIA versions of 35 U.S.C. §§ 102 and 103.

² U.S. Patent No. 6,225,890 B1 (Ex. 1006, “Murphy”).

³ U.S. Pat. App. Pub. No. 2008/0046739 A1 (Ex. 1009, “Adams”).

⁴ U.S. Pat. App. Pub. No. 2008/0114501 A1 (Ex. 1010, “Wu”).

⁵ U.S. Pat. App. Pub. No. 2003/0189482 A1 (Ex. 1007, “Arshad”).

⁶ U.S. Pat. App. Pub. No. 2007/0168125 A1 (Ex. 1008, “Petrik”).

Claim(s) challenged	35 U.S.C. §¹	Reference(s)
7, 12	103	Arshad, Wu
7, 12	103	Arshad, Petrik, Wu

B. Related Proceedings

Petitioner identified as a related proceeding the co-pending district court proceeding of *The Phelan Group, LLC v. Mercedes-Benz Group AG*, No. 1-25-cv-01399 (N.D. Ga.). Pet. 2. Although Patent Owner identifies five district court proceedings in the Eastern District of Texas, Paper 3, 3, the only one involving Petitioner has been transferred to the Northern District of Georgia proceeding mentioned in the prior sentence, Pet. 2. Additionally, Petitioner notes that the other Texas proceedings are either dismissed with prejudice or stayed based on a notice of settlement. *Id.* at 3.

The parties collectively identify the following matters before the Board involving Petitioner's contentions that claims in patents owned by Patent Owner are unpatentable: IPR2025-00413 (US 9,045,101), IPR2025-00758 (US 9,908,508), IPR2025-00986 (US 9,493,149), IPR2025-00990 (US 10,259,470), IPR2025-00992 (US 11,352,020), and IPR2025-00919 (US 10,259,465). *Id.*; Paper 3, 2.

C. The '427 Patent

The '427 patent relates to a "driver authentication and safety system" for "monitoring and controlling vehicle usage." Ex. 1001, code (57). An "authorized vehicle owner" can create an "operating profile" for "high-risk drivers." *Id.* at 6:39–7:7, 2:33–38. The profile, which can include restrictions like allowable "speed," "vehicle location," and "hours of operation," is enforced by a "master control unit," "slave control unit," and

“at least one computer” associated therewith. *Id.* at 2:33–51, 6:1–6:4, 6:47–52, Fig. 6.

Drivers authenticate themselves via a “driver identification” interface. *Id.*, 6:64–7:2, 2:63–7:1. Once authenticated, the system monitors vehicle operation, e.g., using GPS “time of day, speed and location” data, and compares this to the driver’s profile. *Id.*, 7:13–29, 3:2–4. If the driver violates her profile, the system can provide feedback by generating an “alarm” or governing operation like limiting speed. *Id.*, 7:13–29, 2:47–51.

Claims 1, 11, and 15 are the independent claims among the challenged claims. Claim 1, which is illustrative, recites:

1[pre]. A driver authentication and monitoring system,
comprising:

[A] a master control unit operating in a motor vehicle for
authenticating at least one driver via a driver identification
interface,

[B] wherein the master control unit receives a unique
identification code to permit the at least one driver to
operate the vehicle within an operating profile associated
with the at least one driver and accessible by the master
control unit; and

[C] [i] a slave control unit installed in the motor vehicle and
coupled to at least one computer associated with the motor
vehicle, [ii] said slave control unit in communication with
said master control unit and

[D] [i] configured to monitor operation of the motor vehicle and
generate a signal to the master control unit if the at least one
driver violates the operating profile thereby providing
feedback to the master control unit about usage of the
vehicle, and [ii] wherein the slave control unit cooperates
with the at least one computer to control operation of the
vehicle based on commands received from the master
control unit.

Id. at 10:5–26 (with certain line breaks and bracketed labels added to ease discussion).

II. ANALYSIS

A. Claim Interpretation

We interpret claims in the same manner used “in a civil action under 35 U.S.C. § 282(b), including construing the claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b). When applying that standard, we interpret the claim language as it would have been understood by one of ordinary skill in the art in light of the specification. *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1279–80 (Fed. Cir. 2017). Thus, we give claim terms their ordinary and customary meaning as understood by an ordinarily skilled artisan. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

Neither party identifies any claim language requiring express interpretation. Pet. 7. We therefore interpret the claims according to the principles set forth above.

B. Legal Standards

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). The Supreme Court in *KSR International Co. v.*

Teleflex Inc., 550 U.S. 398 (2007), reaffirmed the framework for determining obviousness as set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The *KSR* Court summarized the four factual inquiries set forth in *Graham* that we apply in determining whether a claim is reasonably likely to be unpatentable as obvious under 35 U.S.C. § 103(a) as follows:

(1) determining the scope and content of the prior art, (2) ascertaining the differences between the prior art and the claims at issue, (3) resolving the level of ordinary skill in the pertinent art, and (4) considering objective evidence indicating obviousness or nonobviousness. *KSR*, 550 U.S. at 406. With these standards in mind, we address each challenge below.

C. Claims 1–6, 8–11, and 13–20: Obviousness in View of Murphy

Petitioner argues that the teachings of Murphy render claims 1–6, 8–11, and 13–20 unpatentable as obvious. Pet. 8–27 (independent claims 1, 11, 15), 27–38 (claims 2–6, 8–10, 13, 14, 16–20).⁷

Patent Owner has not filed a Preliminary Response and thus does not contest Petitioner’s showing on the merits of patentability. At this preliminary stage, we determine that Petitioner has made a sufficient showing for claim 1 to warrant a trial.

Petitioner supports its argument that claim 1 is unpatentable as obvious in view of Murphy by identifying those portions of Murphy that describe or suggest each limitation of claim 1. *Id.* (citing Ex. 1006, 1:66–2:53, 3:20–47, 4:15–27, 4:39–5:60, 6:1–18, 6:46–7:29, 7:49–9:44, 10:29–40, 10:45–11:27, 11:60–67, 12:1–27, 13:28–18:19, 19:3–12,

⁷ Petitioner also contends that Murphy anticipates independent claim 15 and claims 16–20, which depend from claim 15. Pet. 23–27 (claim 15), 37–38 (claims 16–20).

Figs. 1–3, 6, 7, code (57), claims 1–3, 7, 9, 10, 12, 15, 18, 37–39).

Petitioner also relies upon the testimony by Dr. Ehani. *Id.* (citing Ex. 1004 ¶¶ 39–77).

1. Preamble of Claim 1

The preamble of claim 1 reads: “A driver authentication and monitoring system, comprising.” Ex. 1001, 10:5–6. Petitioner contends that Murphy describes the subject matter recited in the preamble. Pet. 8. Murphy describes a “system for restricting use of a vehicle,” Ex. 1006, code (57), including a “controller” that can “authenticate” drivers, *e.g.*, *id.* at 13:28–42; *see also* Ex. 1004 ¶ 40. Petitioner cites additional evidence to support its contention. Pet. 8.

Patent Owner does not contest Petitioner’s showing. Based on our review of Petitioner’s argument and the evidence that Petitioner cites in support, we find that Petitioner has demonstrated a reasonable likelihood of proving that Murphy describes the subject matter recited in the preamble. We express no opinion on whether the subject matter recited in the preamble is limiting.

2. Limitation 1A

Limitation 1A refers to the following portion of claim 1: “a master control unit operating in a motor vehicle for authenticating at least one driver via a driver identification interface.” Ex. 1001, 10:7–9. Petitioner contends that Murphy describes the subject matter of limitation 1A. Pet. 9–10. Petitioner identifies Murphy’s master control unit 170 including its controller 179 and “biometric indicium receiving and analysis mechanism 177” among other elements as meeting limitation 1A. *Id.* at 9. Petitioner cites additional evidence to support its contention. *Id.* at 10

(citing Ex. 1006, 2:26–38, 5:12–24, 6:55–7:29, 7:49–63, 10:45–11:27, 13:28–42, 14:45–16:11, 16:50–17:62, Figs. 2, 3, 6, 7; Ex. 1004 ¶¶ 41–46).

Patent Owner does not contest Petitioner’s showing. Based on our review of Petitioner’s argument and the evidence that Petitioner cites in support, we find that Petitioner has demonstrated a reasonable likelihood of proving that Murphy describes the subject matter of limitation 1A.

3. Limitation 1B

Limitation 1B refers to the following portion of claim 1: “wherein the master control unit receives a unique identification code to permit the at least one driver to operate the vehicle within an operating profile associated with the at least one driver and accessible by the master control unit.”

Ex. 1001, 10:9–13. Petitioner contends that Murphy describes the subject matter of limitation 1B. Pet. 10–13. Petitioner identifies Murphy’s description of associating an “operating profile” with a driver so that “driving restrictions” can be imposed on the driver among other features as meeting limitation 1B. *Id.* (citing Ex. 1006, 1:66–2:16, 2:20–53, 3:20–47, 4:39–5:60, 6:8–17, 6:46–7:29, 7:49–9:44, 10:45–11:19, 11:60–67, 12:6–27, 13:35–41, 13:53–17:2, 17:14–18:19, Figs. 2, 3, 6, 7, code (57), claims 3, 10, 37–39; Ex. 1004 ¶¶ 47–57).

Patent Owner does not contest Petitioner’s showing. Based on our review of Petitioner’s argument and the evidence that Petitioner cites in support, we find that Petitioner has demonstrated a reasonable likelihood of proving that Murphy describes the subject matter of limitation 1B.

4. Limitation 1C

Limitation 1C refers to the following portion of claim 1: [i] a slave control unit installed in the motor vehicle and coupled to at least one

computer associated with the motor vehicle, [ii] said slave control unit in communication with said master control unit.” Ex. 1001, 10:14–17.

Petitioner contends that Murphy describes the subject matter of limitation 1C. Pet. 13–15. Petitioner identifies Murphy’s vehicle interface module 182 that is connected to its controller 179 and communicates with various other computers in Murphy’s system as the recited “slave control unit” meeting limitation 1C. *Id.* (citing Ex. 1006, 4:15–27, 12:16–27, 13:28–15:54, 16:12–17:63, Figs. 1, 6, 7, claims 2, 3; Ex. 1004 ¶¶ 58–63).

Patent Owner does not contest Petitioner’s showing. Based on our review of Petitioner’s argument and the evidence that Petitioner cites in support, we find that Petitioner has demonstrated a reasonable likelihood of proving that Murphy describes the subject matter of limitation 1C.

5. Limitation 1D

Limitation 1D refers to the following portion of claim 1:

[wherein the slave control unit is] . . . [i] configured to monitor operation of the motor vehicle and generate a signal to the master control unit if the at least one driver violates the operating profile thereby providing feedback to the master control unit about usage of the vehicle, and [ii] wherein the slave control unit cooperates with the at least one computer to control operation of the vehicle based on commands received from the master control unit.

Ex. 1001, 10:18–26. Petitioner contends that Murphy describes or suggests the subject matter of limitation 1D. Pet. 15–19. Petitioner explains how Murphy’s vehicle interface module “cooperates” with computers in Murphy’s vehicle (e.g., Murphy’s “telecommunication module” and “information processing facility”) to control the operation of the vehicle. *Id.* at 15–17 (citing Ex. 1006, 2:20–53, 4:15–27, 5:13–60, 6:1–18, 7:49–9:44, 10:29–40, 10:45–11:27, 12:6–27, 13:66–14:17, 14:23–45, 15:9–54,

16:12–50, 17:30–63, Figs. 2, 3, 6, 7, claims 1–3, 7, 9, 12, 15, 18, code (57); Ex. 1004 ¶¶ 65–77). Petitioner also argues that it would have been obvious to modify Murphy’s vehicle interface module to monitor operation of the vehicle for violations and transmit a signal to the master control unit. *Id.* at 17–19 (citing Ex. 1006, 1:66–2:53, 5:29–60, 7:49–9:44, 10:29–40, 10:45–11:27, 12:1–15, 13:28–43, 13:53–14:22, 15:9–16:11, 16:50–17:63, code (57), Figs. 2, 3, 6, 7, claims 1, 10; Ex. 1004 ¶¶ 74–77). Petitioner contends that the modification would have involved a “simple substitution of one existing component (e.g., controller) for another (e.g., vehicle interface module) to perform the same functionality. This substitution would have had predictable results: the system would determine whether the driver has violated her profile regardless of which component is used.” *Id.* at 18 (citing Ex. 1004 ¶¶ 74–77) (internal citations omitted). The modification would reduce the communication and computation burden on Murphy’s controller. *Id.* at 19.

Patent Owner does not contest Petitioner’s showing. Based on our review of Petitioner’s argument and the evidence that Petitioner cites in support, we find that Petitioner has demonstrated a reasonable likelihood of proving that Murphy describes the subject matter of limitation 1D.

6. Summary

For the reasons summarized above, we find that Petitioner has demonstrated a reasonable likelihood of proving that the teachings of Murphy render claim 1 unpatentable as obvious.

III. CONCLUSION

In accordance with the Court’s decision in *SAS Institute, Inc. v. Iancu*, 584 U.S. 357, 371 (2018) and 37 C.F.R. § 42.108(a), we institute an *inter*

IPR2025-00930
Patent 11,472,427 B2

partes review of all challenged claims of the '427 patent on all grounds alleged by Petitioner. This Decision does not reflect a final determination on the patentability of any claim. We further note that the burden remains on Petitioner to prove unpatentability of each challenged claim. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

IV. ORDER

For the reasons given, it is:

ORDERED that *inter partes* review of claims 1–20 of U.S. Patent No. 11,472,427 B2 is *instituted* with respect to all grounds of unpatentability set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter partes* review of U.S. Patent No. 11,472,427 B2 is instituted commencing on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is given of the institution of a trial.

IPR2025-00930
Patent 11,472,427 B2

PETITIONER:

Celine Crowson
Joe Raffetto
Scott Hughes
HOGAN LOVELLS US LLP
celine.crowson@hoganlovells.com
joseph.raffetto@hoganlovells.com
scott.hughes@hoganlovells.com

PATENT OWNER:

Gregory S. Donahue
Andrew G. DiNovo
DiNOVO PRICE LLP
gdonahue@dinovoprice.com
adinovo@dinovoprice.com
docketing@dinovoprice.com