

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PERMIAN GLOBAL INC., and MANTICORE FUELS, LLC,
Petitioner,

v.

FUEL AUTOMATION STATION, LLC,
Patent Owner.

IPR2023-01237
Patent 9,586,805 B1

Before CARL M. DeFRANCO, RICHARD H. MARSCHALL, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

DeFRANCO, *Administrative Patent Judge*.

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

Fuel Automation Station, LLC (“FAS”) is the owner of U.S. Patent No. 9,586,805 B1 (Ex. 1001, “the ’805 patent”). Permian Global Inc., and Manticore Fuels, LLC (“Permian”) filed a Petition requesting *inter partes* review of claims 1–22 of the ’805 patent. Paper 3 (“Pet.”). FAS filed a Preliminary Response. Paper 8 (“Prelim. Resp.”). Because we determine that Permian demonstrates a reasonable likelihood that at least claim 1 of the ’805 patent is unpatentable, we institute *inter partes* review of all claims as challenged in the Petition. *See* 35 U.S.C. § 314(a).

I. BACKGROUND

A. *Related Matters*

The ’805 patent is the subject of a parallel infringement action in *Fuel Automation Station, LLC v. Permian Global, Inc.*, No. 1-22-cv-00801, filed August 10, 2022, in the Western District of Texas. *See* Pet. 1. The infringement action is currently stayed pending completion of this proceeding, as well as *inter partes* review proceedings on two related patents: US 10,815,118 B2, and US 10,974,955 B2. FAS also notifies us of two related patent applications pending before the Office: U.S. Application 17/682,348, filed February 28, 2022, and U.S. Application No. 18/468,342, filed September 15, 2023. *See* Paper 7, 1.

B. *The ’805 Patent*

The ’805 patent is directed to a “mobile distribution station” that “serve[s] in ‘hot-refueling’ capacity to distribute fuel to multiple pieces of equipment while the equipment is running, such as fracking equipment at a well site.” Ex. 1001, 3:24–29. The distribution station includes a mobile trailer equipped with pumps, manifolds, and hose reels, with flow passages

connected to the manifolds and reels for delivering fuel to the fracking equipment. *Id.* at 3:36–4:25.

C. The Challenged Claims

Of the challenged claims, claims 1 and 17 are independent. Claim 1, reproduced below, is illustrative of the claimed subject matter (with Permian’s nomenclature added for clarity):

1. A distribution station comprising:

[1a] a mobile trailer;

[1b] a pump on the mobile trailer;

[1c] first and second manifolds on the mobile trailer and fluidly connected with the pump;

[1d] a plurality of reels on the mobile trailer;

[1e] a plurality of hoses connected, respectively, with the reels, wherein a portion of the reels are connected with the first manifold and another portion of the reels are connected with the second manifold;

[1f] a plurality of valves on the mobile trailer, each the valves situated between one of the first or second manifolds and a respective different one of the hoses; and

[1g] a plurality of fluid level sensors, each the fluid level sensors being associated [with] a respective different one of the hoses,

[1h] wherein the reels are arranged on first and second opposed sides in the mobile trailer, with an aisle walkway down the middle of the mobile trailer.

Ex. 1001, 16:2–22.

Independent claim 17 includes similar limitations. *See id.* at 17:9–18:5.

D. The Asserted Challenges

Claims Challenged	35 U.S.C. §	Basis
1–22	103	Van Vliet, ¹ Cable ²
17, 18	102/103	Van Vliet
9, 10	103	Van Vliet, Cable, AFD ³
4, 11, 12, 20	103	Van Vliet, Cable, Coxreels ⁴
1, 7–10, 13–18, 22	103	Van Vliet, AFD
2, 3, 6, 19	103	Van Vliet, AFD, Lowrie ⁵
4, 5, 20, 21	103	Van Vliet, AFD, Lowrie, Coxreels
11, 12	103	Van Vliet, AFD, Coxreels

II. ANALYSIS

A. Level of Ordinary Skill in the Art

Permian proposes that one skilled in the art would have had either:

(1) a Bachelor of Science in Mechanical Engineering, Electrical Engineering, Petroleum Engineering or an equivalent field and at least 2 years of academic or industry experience in the oil and gas industry, including well drilling, completion, or production, or (2) at least four years of industry experience in the oil and gas industry including well drilling, completion, or production.

Pet. 12–13 (citing Ex. 1003 ¶ 105). FAS responds, “at this stage of the proceeding, [it] does not dispute the level of ordinary skill in the art.”

Prelim. Resp. 8. Permian’s proposed definition is consistent with the

¹ US 2011/0197988 A1, published Aug. 18, 2011 (Ex. 1004, “Van Vliet”).

² US 3,810,487, issued May 14, 1974 (Ex. 1005, “Cable”).

³ AFD PETROLEUM LTD., *AFD Onsite Refueling Systems*, http://web.archive.org/web/20150922012312/https://www.afdpetroleum.com/fuel/onsite_refuelling (Sept. 22, 2015), published Sep. 22, 2015 (Ex. 1007, “AFD”).

⁴ COXREELS, INC., *Coxreels 1125 Series “Competitor” Hand Crank and Motorized Hose Reels*, <https://web.archive.org/web/20140408035634/http://www.coxreels.com/products/hand-crank/1125-series>, published Apr. 08, 2014 (Ex. 1008, “Coxreels”).

⁵ US 2018/0057348 A1, published Mar. 1, 2018 (Ex. 1006, “Lowrie”).

problems and solutions in the '805 patent and prior art of record. Thus, for purposes of institution, we adopt Permian's definition of the level of skill in the art.

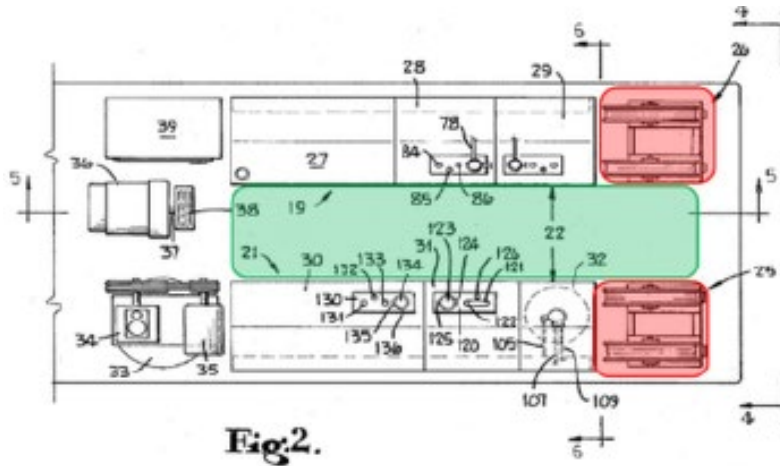
B. Claim Construction

Permian "appl[ies] the ordinary and customary meaning of the claims terms," and, thus, maintains that "[e]xpress constructions are not required here." Pet. 20–21. FAS similarly responds that "[n]o claim construction is necessary." Prelim. Resp. 9. At this stage, the specification and prosecution history of the '805 patent, as well as the asserted prior art, adequately inform us as to the plain and ordinary meaning of the claim terms. Thus, for now, we do not perceive the need to expressly construe any claim terms, as we can decide the threshold question of institution without further construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

C. Threshold for Institution

Permian challenges claims 1–22 as rendered obvious by the combination of Van Vliet and Cable. Pet. 33–45. We begin with independent claim 1, which recites elements 1[a]–1[h]. *See id.* at 81 (Claims Appendix). FAS does not contest Permian's showing that the asserted combination of Van Vliet and Cable discloses claim elements 1[a]–1[g]. *See* Prelim. Resp. 17–28. Instead, FAS disputes only Permian's showing for "claim 1[h]" (*id.* at 17–20) and Permian's "reason to combine" the asserted references of Van Vliet and Cable (*id.* at 20–26). With respect to uncontested claim elements, the preliminary record supports Permian's showing that the asserted combination discloses those elements. *See* Pet. 25–34; Ex. 1003 ¶¶ 142–168.

As for contested claim element 1[h], Permian points to Figure 2 of Cable (reproduced below and annotated by Permian) for teaching hose assemblies (25, 26) that include reels (red) arranged on opposite sides of the interior of a van truck and an aisle walkway (green) extending down the middle of the truck between the reels. Pet. 34 (citing Ex. 1005, 2:55–68, Fig. 2).



According to Permian, implementing the above spatial arrangement of Cable in the trailer of Van Vliet would have been obvious because “[Van] Vliet contemplates various arrangements of its on-trailer equipment, stating that ‘[t]he spatial orientation of the control station 56, reels 30, manifolds 36, 38, tanks 18, 20, and other equipment such as the generators is a matter of design choice for the manufacturer and will depend on space requirements.’” Pet. 34–35 (quoting Ex. 1004 ¶ 27). In support, Permian provides testimony from its expert, who offers no less than three reasons why one skilled in the art would have implemented the spatial arrangement of equipment taught by Cable in Van Vliet’s trailer. See Ex. 1003 ¶¶ 170–172.

FAS responds that Permian “falls short of meeting its burden of establishing claim 1[h] is an obvious matter of design choice” because

Permian's assertions are "conclusory" and, to the extent there is any analysis, it "fails to follow any legal framework or to explain how [one skilled in the art] would have found the particular claimed arrangement obvious based on Van Vliet's mere generic statement of space requirements." Prelim. Resp. 17–18.

We disagree. As discussed above, Permian's position regarding claim element 1[h] is supported by the cited testimony of its expert, which stands un rebutted at this stage. *See* Ex. 1003 ¶¶ 169–173. We find that testimony credible, at least on the preliminary record. We find unpersuasive FAS's argument that Permian's expert testimony should be disregarded because the expert "does not profess to be a patent attorney . . . informed about any legal standard for 'design choice.'" Prelim. Resp. 19–20. Permian is not offering its expert as a legal expert here, and, contrary to FAS's argument, Permian's expert actually does profess an understanding of the underlying "considerations" used in an obviousness analysis, such as "ordinary creativity," "predictable results," "simple substitution," "obvious to try," "design incentives," or "some teaching, suggestion, or motivation in the prior art." Ex. 1003 ¶¶ 29, 34. It is the distinct role of Permian's expert to opine on those underlying *fact* considerations, and they do not need to be a patent attorney to do so, as FAS mistakenly believes. Thus, at this stage, Permian sufficiently shows that the asserted Van Vliet-Cable combination discloses claim element 1[h].

Next, FAS argues that one skilled in the art would not have had a reason to combine Van Vliet and Cable because Cable "includes mostly different equipment" and "is used for a different purpose" than Van Vliet. Prelim. Resp 20. Although FAS identifies differences between these two

references, FAS never acknowledges what one skilled in the art would have understood from their respective teachings. *See id.* at 20–23. Thus, Permian’s expert testimony is the only evidence of record on this point. *See, e.g.,* Ex. 1003 ¶¶ 137–140, 169–173.

FAS’s argument is also unavailing because there is no evidence that the differences identified by FAS are sufficiently different such that one skilled in the art would disregard Cable’s teachings. For instance, FAS argues that Van Vliet and Cable are different because they handle different fluids—for example, “fuel” versus “waste oil.” Prelim. Resp. 23–24. But FAS never explains why the type of petroleum product in each delivery hose would render the references so dissimilar that one skilled in the art would not consider them together when contemplating ease of access to the hoses. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 401 (2007) (“[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond that person’s skill.”).

In a further attempt to find fault with Permian’s reason for combining Van Vliet and Cable, FAS takes issue with Permian’s reliance “*on Cable* to argue that it would have been obvious to arrange Van Vliet’s reels on opposed sides of the trailer,” as required by claim element 1[h]. Prelim. Resp 25 (emphasis added). According to FAS, Van Vliet shows that its hoses extend only “through one of the side walls,” while Cable discloses that its hoses extend “from the rear of its truck,” and, thus, “it is not clear why [one skilled in the art] would look to Cable’s hoses that deploy out the rear

to modify Van Vliet” so that its reels deploy from both sides of the truck.
Id. at 25–26.

We find this argument unavailing for the simple reason that FAS misunderstands the challenge as articulated by Permian. Although Permian points to Cable’s “reel-and-aisle arrangement” for element 1[h], Permian also notes that, in combining the teachings of Van Vliet and Cable, “*Vliet* already teaches that ‘one manifold 36 may supply fluid to equipment 10 lined up on one side of a well, while another manifold 38 may supply fluid to equipment 10 lined up on the other side,’” such that “[one skilled in the art] would have understood this disclosure describes two groups of hoses each deployable through one of two opposite side walls.” Pet. 23 (quoting Ex. 1004 ¶ 24), 46 (citing Ex. 1003 ¶¶ 221–223). To that end, Permian relies on *both* Van Vliet and Cable, that is, Van Vliet for its teaching of arranging groups of reels along opposing side walls of a trailer, and Cable’s teaching of arranging reels on opposite sides of a trailer. Thus, we reject FAS’s attempt to overcome Permian’s reasoning by focusing on Cable individually.

After reviewing the preliminary record, we determine that Permian demonstrates a reasonable likelihood that at least claim 1 is unpatentable as obvious over the combined teachings of Van Vliet and Cable. Thus, Permian meets the threshold for institution.

D. Permian’s Other Challenges

Permian challenges claims 2–22 as also being rendered obvious by Van Vliet and Cable. Pet. 35–47. And Permian challenges various sub-groups of these claims based on Van Vliet either alone or in combination with references that include Cable, AFD, Coxreels, and Lowrie. *See id.* at

47–79. With respect to these additional challenges, FAS argues, *first*, that Permian fails to show the asserted Van Vliet-Cable combination discloses the elements of dependent claims 7–10 (Prelim. Resp. 26–28); *second*, that Permian provides “no reason to combine Van Vliet and AFD” (*id.* at 28–33); and, *third*, that Permian “fails to explain how Van Vliet discloses or renders obvious claim 17[f]” (*id.* at 33–36).

We note that Permian relies on *unrebutted* expert testimony to support each of these alleged shortcomings in its challenges. *See* Pet. 40–43 (citing Ex. 1003 ¶¶ 188–198), 47–48 (citing Ex. 1003 ¶¶ 231, 233), 58–61 (citing Ex. 1003 ¶¶ 259–265). Thus, in the absence of rebuttal evidence, we do not see the need to further address the sufficiency of Permian’s showing in this regard. Further analysis of these additional challenges is best left for trial after full development of the record.

E. FAS’s Request for § 325(d) Discretionary Denial

FAS requests that we exercise discretion to deny the Petition under 35 U.S.C. § 325(d). *See* Prelim. Resp. 9–16. We decline. FAS’s request hinges simply on the fact that Van Vliet was considered during prosecution, while ignoring the fact that Permian’s challenge relies on Van Vliet *and* Cable, a combination that FAS never contends was considered during prosecution. *See id.* (omitting any mention of Cable). Thus, FAS does not persuade us that exercising our § 325(d) discretion is appropriate where the challenge asserted in the petition is based on a material reference not considered during prosecution.

III. CONCLUSION

For the above reasons, we determine that the information presented in Permian’s Petition demonstrates a reasonable likelihood that at least claim 1

of the '805 patent is unpatentable as obvious over Van Vliet and Cable. And because “[e]qual treatment of claims and grounds for institution purposes has pervasive support in *SAS*,” we institute on all the claims as challenged in the Petition. See 37 C.F.R. § 42.108(a),(c); *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (citing *SAS Institute v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018)).

IV. ORDER

Accordingly, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–22 of the '805 patent is *instituted*; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), notice is hereby given of the institution of trial, which will commence on the entry date of this Decision.

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