# United States Court of Appeals for the Federal Circuit

AIRBUS S.A.S., Appellant

v.

FIREPASS CORPORATION, Appellee

### 2019-1803

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 95/001,555.

Decided: November 8, 2019

MARK ALEXANDER CHAPMAN, Hunton Andrews Kurth LLP, New York, NY, argued for appellant. Also represented by CLIFFORD ULRICH.

ROGER THOMPSON, The Law Offices of Roger S. Thompson, New York, NY, argued for appellee.

Before LOURIE, MOORE, and STOLL, Circuit Judges.

STOLL, Circuit Judge.

Airbus S.A.S. appeals the Patent Trial and Appeal Board's reversal of the patent examiner's rejection of certain new claims presented by patent owner Firepass Corporation in an inter partes reexamination of U.S. Patent No. 6,418,752. Airbus challenges the Board's finding that an asserted prior art reference fails to qualify as relevant prior art because it is not analogous to the claimed invention of the '752 patent. We hold that the Board erred in its analogous art analysis by declining to consider record evidence relied on by Airbus to demonstrate the knowledge and perspective of a person of ordinary skill in the art at the time of the invention. We therefore vacate the Board's reversal of the examiner's rejection and remand for reconsideration in view of this additional evidence.

#### BACKGROUND

This inter partes reexamination returns from a prior appeal in which we vacated the Board's decision dismissing Airbus's cross-appeal for lack of jurisdiction and remanded to the Board to consider Airbus's challenge to certain newly presented claims. *See generally Airbus S.A.S. v. Firepass Corp.*, 793 F.3d 1376 (Fed. Cir. 2015). Airbus now appeals the Board's reversal of the examiner's rejection of those newly presented claims on remand.

Ι

The '752 patent discloses a fire prevention and suppression system that prevents and extinguishes fires using breathable air instead of water, foam, or toxic chemicals each of which can present risks to personnel or electronic equipment. See '752 patent col. 1 ll. 47–65, col. 2 ll. 41–64. The invention is based on the inventor's alleged discovery that a low-oxygen ("hypoxic") but normal pressure ("normbaric") atmosphere inhibits fire ignition and combustion, yet remains breathable for humans. See id. at col. 4 l. 60–col. 5 l. 25. More specifically, the '752 patent explains that, if one reduces the atmospheric concentration of oxygen from its natural level of 20.94% to about 16.2% or slightly lower while adding nitrogen to maintain the same air pressure, fires are suppressed while humans can continue to breathe. *Id.* at col. 6 ll. 21–67. The specification applies this principle to various fire-preventative and fire-suppressive enclosed facilities, from computer rooms and automobile tunnels to military vehicles and spacecraft. *See id.* at col. 10 l. 55–col. 22 l. 45. These enclosed facilities can utilize a "hypoxic generator" that produces hypoxic air by altering the composition of the surrounding ambient air. *See id.* at col. 9 l. 36–col. 10 l. 21. But "[a]ny oxygen extraction device, such as a nitrogen generator or an oxygen concentrator can be used instead of a hypoxic generator" with certain adaptations. *See id.* at col. 10 ll. 22–54.

Claim 91, the only independent claim at issue on appeal, is illustrative of the claimed invention:

91. A system for providing breathable fire-preventive and fire suppressive atmosphere in enclosed human-occupied spaces, said system comprising:

an enclosing structure having an internal environment therein containing a gas mixture which is lower in oxygen content than air outside said structure, and an entry communicating with said internal environment;

an oxygen-extraction device having a filter, an inlet taking in an intake gas mixture and first and second outlets, said oxygen-extraction device being a nitrogen generator, said first outlet transmitting a first gas mixture having a higher oxygen content than the intake gas mixture and said second outlet transmitting a second gas mixture having a lower oxygen content than the intake gas mixture;

said second outlet communicating with said internal environment and transmitting said second mixture into said internal environment so that said second mixture mixes with the atmosphere in said internal environment; said first outlet transmitting said first mixture to a location where it does not mix with said atmosphere in said internal environment;

said internal environment selectively communicating with the outside atmosphere and emitting excessive internal gas mixture into the outside atmosphere;

said intake gas mixture being ambient air taken in from the external atmosphere outside said internal environment with a reduced humidity; and

a computer control for regulating the oxygen content in said internal environment.

J.A. 77.

# Π

The asserted prior art reference at issue on appeal, U.S. Patent No. 5,799,652 (Kotliar), is an earlier-issued patent with the same named inventor as the '752 patent.<sup>1</sup> Kotliar discloses equipment for providing hypoxic air in an enclosed area for the purposes of athletic training or therapy. Kotliar col. 1 ll. 14–29. The disclosed invention can simulate low-oxygen mountain air for training at different elevations. See id. at col. 1 ll. 50–53, col. 2 ll. 5–10. The disclosed system uses a "hypoxicator" that, similar to the "hypoxic generator" of the '752 patent, produces hypoxic air by altering the composition of the surrounding ambient air. See id. at col. 3 ll. 18–47. The Kotliar specification discloses a preferred oxygen range of 7% to 15%, which is

<sup>&</sup>lt;sup>1</sup> The '752 patent expressly acknowledges that its invention is "related in part" to Kotliar—at least in a subject matter sense. '752 patent col. 1 ll. 14–15; *see also id.* at col. 4 ll. 60–62 (referencing "Hypoxic Room System" manufactured by Hypoxico Inc., the named assignee of Kotliar).

below the 16.2% flame-preventative threshold disclosed in the '752 patent. *See id.* at col. 4 ll. 21–24. Kotliar explains that its system could be applied to "any closed room or structure," *id.* at col. 8 ll. 14–25, and also envisions its application to the passenger compartment of an automobile, *see id.* at col. 8 l. 34–col. 9 l. 39.

## III

Beyond Kotliar, the examiner considered other prior art references as part of Airbus's validity challenges to other claims of the '752 patent.<sup>2</sup> Four of these references are relevant on appeal.

Gustafsson<sup>3</sup> is a study focused on "human performance during [a] prolonged stay in normobaric hypoxia, a socalled 'fire retardant atmosphere." J.A. 1860. The reference explains that "[r]educed oxygen levels have . . . been discussed for fire prevention in closed spaces, such as submarines, computer rooms, store rooms, archives, or museums." *Id.* It further explains that "if humans are to work and live in localities where hypoxic atmospheres are used, a balance must be struck between the level of fire prevention achieved and the effect of hypoxia on human performance." *Id.* After surveying the literature, Gustafsson discloses the results of a human performance experiment in which the subjects were exposed to different levels of normobaric hypoxia for periods extending up to ten days.

<sup>&</sup>lt;sup>2</sup> Firepass did not appeal the examiner's rejection of these other claims to the Board. Instead, Firepass canceled claims 29–90 and 95–100 prior to its latest appeal to the Board.

<sup>&</sup>lt;sup>3</sup> Christina Gustafsson et al., *Effects of Normobaric Hypoxic Confinement on Visual and Motor Performance*, 68 AVIATION, SPACE, & ENVTL. MED. 985 (1997).

The 1167 Report<sup>4</sup> is a report from the U.S. Navy that examines the medical hazards of four types of flame-suppressant atmospheres for "sealed chambers." J.A. 1872. One of the disclosed "modifications of air that will suppress or extinguish flames" is the partial replacement of oxygen by nitrogen, or "N<sub>2</sub> Dilution." J.A. 1871-72. Another is "N<sub>2</sub> Pressurization," the addition of compressed nitrogen to air. Id. After surveying the literature, the 1167 Report discloses the results of six experiments performed to assess the effect of hypoxia at normobaric pressure on health and mental function over time. The 1167 Report endorses the use of N<sub>2</sub> Dilution to suppress flames aboard patrolling submarines. It further suggests that  $N_2$  Dilution and N<sub>2</sub> Pressurization "may be combined at minimal hazard to the crews serving aboard patrolling submarines." J.A. 1871.

Luria,<sup>5</sup> which shares an author with the 1167 Report, similarly explores the effect of "nitrogen-based, fire-retardant atmospheres" on human performance, particularly visual sensitivity. J.A. 2669–70. The reference discloses various experiments and concludes that the results support a strategy of reducing oxygen concentration to suppress fires.

U.S. Patent No. 3,893,514 (Carhart) is titled "Suppression of Fires in Confined Places by Pressurization." Carhart explains that "[i]t is well known to those skilled in the art that fires are supported by oxygen and that by using some means to deplete the surrounding area of oxygen or lowering the percent of oxygen the fire will be suppressed."

<sup>&</sup>lt;sup>4</sup> D.R. KNIGHT, NAVAL SUBMARINE MED. RESEARCH LAB., REPORT NO. 1167, THE MEDICAL HAZARDS OF FLAME-SUPPRESSANT ATMOSPHERES (1991).

<sup>&</sup>lt;sup>5</sup> D.R. Knight et al., *Effect of Nitrogen-Based, Fire-Retardant Atmospheres on Visual and Mental Performance*, UNDERWATER AND HYPERBARIC PHYSIOLOGY IX (1987).

Carhart col. 1 ll. 17–20. Carhart also explains that it is well-known that "[s]uppression of fires in open spaces and in confined spaces require[s] different efforts to extinguish the fire." *Id.* at col. 1 ll. 20–22. And, "the presence of machinery, electrical equipment, and more importantly the presence of human beings within the area of a fire requires special considerations for the type of extinguishant used." *Id.* at col. 1 ll. 22–26.

Carhart is specifically "directed to a system and method of adding nitrogen under pressure to a confined area including a habitable atmosphere to suppress a fire without any deleterious effects on humans within the environment in which the fire is suppressed." Id. at col. 1 ll. 61–65. An object of the disclosed invention is to "suppress a fire in a closed chamber while maintaining an environment suitable for human activity." Id. at col. 2 ll. 6-The areas of interest include "confined storage areas 8. such as a room-type safe or machine room that require a controlled environment," but Carhart's system "may be used for any controlled habitable environment which is either an enclosed area or an area which may be closed by closing of a door or window." Id. at col. 2 ll. 56-64; see also *id.* at col. 4 ll. 27–32 (similar).

#### IV

On remand from this court, the examiner rejected newly presented claims 91–94 as obvious over Kotliar in view of other prior art. The examiner also rejected other claims as obvious over various combinations of Kotliar with each of Gustafsson, the 1167 Report, Luria, and Carhart. Before the examiner, Firepass disputed whether Kotliar disclosed certain claim limitations and a motivation to combine the asserted prior art. But Firepass did not dispute Kotliar's status as analogous art to the '752 patent. Accordingly, the examiner evaluated neither Kotliar's status as analogous art, nor the disclosures of Gustafsson, the 1167 Report, Luria, and Carhart as background references establishing the knowledge and perspective of a person of ordinary skill in the art at the time of the invention.

appealed the examiner's rejection Firepass of claims 91–94 to the Board. Firepass then argued for the first time that Kotliar is not analogous art to the claimed invention of the '752 patent, and is therefore not relevant prior art for the purposes of obviousness. The examiner did not respond to this new argument in his answer, resting instead on his prior rejections. For its part, Airbus did not argue in its respondent brief that Firepass had waived this new argument; instead, Airbus addressed the issue on the merits. In relevant part, Airbus relied on Gustafsson, the 1167 Report, Luria, and Carhart to argue that "[i]t was well-known before the alleged invention of the '752 patent that a reduced oxygen atmosphere could be both breathable and fire suppressive." J.A. 4297; see also J.A. 4298-99.

The Board found that Kotliar was not analogous art and reversed the examiner's rejections of claims 91–94. The Board explained that "[t]here is no articulated rational underpinning that sufficiently links the problem of fire suppression/prevention confronting the inventor" of the '752 patent to the invention disclosed in Kotliar, "which is directed to human therapy, wellness, and physical training." J.A. 13. In doing so, the Board declined to consider Airbus's argument that "breathable fire suppressive environments [were] well-known in the art" because none of the four references relied on by Airbus was specifically used to support the examiner's rejection of claims 91–94. *Id*.

Airbus appeals the Board's reversal of the examiner's rejection. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

### DISCUSSION

On appeal, Airbus challenges the Board's finding that the Kotliar reference is not analogous to the claimed invention of the '752 patent.<sup>6</sup> A reference qualifies as prior art for an obviousness determination only when it is analogous to the claimed invention. *In re Klein*, 647 F.3d 1343, 1348 (Fed. Cir. 2011). Whether a reference qualifies as analogous prior art is a question of fact that we review for substantial evidence. *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004).

Two separate tests define the scope of analogous prior art: "(1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor. whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." Id. at 1325 (first citing In re Deminski, 796 F.2d 436, 442) (Fed. Cir. 1986); then citing In re Wood, 599 F.2d 1032, 1036 (C.C.P.A. 1979)). The Board held that Kotliar does not qualify as prior art under either of these two tests. For the reasons that follow, we hold that the Board's "field of endeavor" determination is supported by substantial evidence, but the Board erred in its "reasonably pertinent" determination because the Board declined to consider record evidence advanced by Airbus to demonstrate the knowledge and perspective of a person of ordinary skill in the art at the time of the invention.

Ι

We first address the Board's application of the field of endeavor test. In resolving questions of obviousness, "we

<sup>&</sup>lt;sup>6</sup> On appeal, Airbus also challenges the Board's various determinations regarding waiver, including the Board's determination that Firepass did not waive its nonanalogous art argument when it failed to raise that argument before the examiner. *See generally* Appellant's Br. 59–69. We have considered Airbus's arguments, but we find no reversible error in the Board's waiver analysis.

presume full knowledge by the inventor of all the prior art in the field of his endeavor." *Wood*, 599 F.2d at 1036. To determine the applicable field of endeavor, the factfinder must consider "explanations of the invention's subject matter in the patent application, including the embodiments, function, and structure of the claimed invention." *Bigio*, 381 F.3d at 1325 (first citing *Wood*, 599 F.2d at 1036; then citing *Deminski*, 796 F.2d at 442). In *Wood*, for example, our predecessor court determined the field of endeavor based on an express disclosure in the Background of the Invention section of the applicant's specification. 599 F.2d at 1036.

While the disclosure of the references is the primary focus, this court has also instructed that the factfinder must consider each reference's disclosure in view of the "the reality of the circumstances," *Bigio*, 381 F.3d at 1326 (quoting *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992)), and "weigh those circumstances from the vantage point of the common sense likely to be exerted by one of ordinary skill in the art in assessing the scope of the endeavor," *id*. In *Deminski*, for example, this court found that the challenged prior art references were in the same field of endeavor because they disclosed pumps and compressors that had "essentially the same function and structure" as the claimed piston devices. 796 F.2d at 442.

The Board's finding under the field of endeavor test is supported by substantial evidence. The Board looked to the written description and claims of the '752 patent and Kotliar to determine the field of endeavor for each reference. Based on the '752 patent's disclosure, the Board found that the field of endeavor for the '752 patent is "devices and methods for fire prevention/suppression." J.A. 8. For support, the Board relied on the preamble of claim 1 of the '752 patent, which recites "[a] system for providing breathable fire-preventive and fire suppressive atmosphere in enclosed human-occupied spaces." *Id.* (emphasis

omitted) (quoting '752 patent col. 22 ll. 48–50).<sup>7</sup> The Board also cited the title of the '752 patent, which similarly recites "Hypoxic Fire Prevention and Fire Suppression Systems and Breathable Fire Extinguishing Compositions for Human Occupied Environments." Id. The Board further observed (without any citation) that "the Specification of the '752 Patent is indisputably directed to the problem of fire prevention and fire suppression." Id. Turning to Kotliar, the Board found that the applicable field of endeavor is "human therapy, wellness, and physical training." Id. For support, the Board quoted the title, "Hypoxic Room System and Equipment for Hypoxic Training and Therapy at Standard Atmospheric Pressure," along with several passages from the Field of the Invention section of Kotliar. Id. (quoting Kotliar Title, col. 1 ll. 14–29). The Board also emphasized that the term "fire" does not appear at all in Kotliar. Id. Thus, the Board concluded that "Kotliar cannot reasonably be said to be within the field of endeavor" of the '752 patent. Id. We cannot say that the Board's finding is unreasonable.

Airbus contends that the Board's determination is not supported by substantial evidence because the Board failed to identify adequate support in the specification and claims. Airbus emphasizes that the Board only cited the title of the '752 patent and the preamble of a single claim not at issue on appeal. While we agree that the Board's analysis could have been more developed, we disagree with Airbus's contention. A finding is supported by substantial evidence if a "reasonable mind might accept' a particular evidentiary record as 'adequate to support a conclusion." Dickinson v. Zurko, 527 U.S. 150, 162 (1999) (quoting Consol. Edison Co. of N.Y. v. NLRB, 305 U.S. 197, 229 (1938)). In view of the Board's factual findings that (1) the

<sup>&</sup>lt;sup>7</sup> The challenged claims 91–94 include the same preamble as claim 1.

challenged claims are expressly directed to a fire-preventive and fire-suppressive system, and (2) Kotliar does not even recite the word "fire" once throughout the entirety of its disclosure, a reasonable mind could conclude that the '752 patent and Kotliar are directed to different fields of endeavor—especially for a "common sense" inquiry like this. *Bigio*, 381 F.3d at 1326.

Airbus does not point to any express disclosure in either reference that directly contradicts the Board's conclusion.<sup>8</sup> Instead, Airbus argues that these two references share the same function, "producing breathable hypoxic air that is fire-preventative and fire-suppressive for a humanoccupied enclosure," and the same structure, "a system that includes an oxygen-extraction device (a nitrogen generator)." Appellant's Br. 40. In support of this argument, Airbus relies in part on the references that the Board declined to consider—Gustafsson, the 1167 Report, Luria, and Carhart—to argue that "a POSA would have known and appreciated that the breathable hypoxic air produced by Kotliar is fire-preventative and fire-suppressive, *even though Kotliar does not state this.*" *Id.* at 41–42 (emphasis added).

We agree that the knowledge of a person of ordinary skill in the art, as demonstrated by particular prior art references, could be relevant to establishing the scope of the field of endeavor. As discussed in greater detail in the following section, the Board should have considered Gustafsson, the 1167 Report, Luria, and Carhart as record evidence relevant to the knowledge and perspective of an ordinarily skilled artisan at the time of the invention. But to the extent the Board failed to do so here, its error is

<sup>&</sup>lt;sup>8</sup> Indeed, the specification of each reference includes a "Field of the Invention" section that distinctly describes each applicable field of endeavor. *Compare* '752 patent col. 1 ll. 16–45, *with* Kotliar col. 1 ll. 13–29.

harmless. Even taking these additional prior art references into account, we are not persuaded that a reasonable factfinder could conclude that a person of ordinary skill would understand that Kotliar—a reference that is expressly directed to exercise equipment and fails to mention the word "fire" even a single time—falls within the field of fire prevention and suppression. Such a conclusion would not only defy the plain text of Kotliar, it would also defy "common sense" and the "reality of the circumstances" that a factfinder must consider in determining the field of endeavor. *Bigio*, 381 F.3d at 1326 (quoting *Oetiker*, 977 F.2d at 1447). We therefore conclude that the Board's determination under the field of endeavor test is supported by substantial evidence.

Π

We next address the Board's application of the reasonably pertinent test. Outside of an inventor's field of endeavor, "we only presume knowledge from those arts reasonably pertinent to the particular problem with which the inventor was involved." Wood, 599 F.2d at 1036 (citing In re Antle, 444 F.2d 1168, 1171–72 (C.C.P.A. 1971)). This rule reflects the "reality of the circumstances" that "an inventor could not possibly be aware of every teaching in every art." Id. Indeed, "[t]he pertinence of the reference as a source of solution to the inventor's problem must be recognizable with the foresight of a person of ordinary skill, not with the hindsight of the inventor's successful achievement." Sci. Plastic Prods., Inc. v. Biotage AB, 766 F.3d 1355, 1359 (Fed. Cir. 2014) (first citing Oetiker, 977 F.2d at 1447; then citing KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 421 (2007)).

Accordingly, a reference outside an inventor's field of endeavor is "reasonably pertinent" only if its subject matter "logically would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992). In other words, references are

"reasonably pertinent" only if "a person of ordinary skill would reasonably have consulted those references and applied their teachings in seeking a solution to the problem that the inventor was attempting to solve." In re GPAC Inc., 57 F.3d 1573, 1578 (Fed. Cir. 1995) (quoting Heidelberger Druckmaschinen v. Hantscho Commercial, 21 F.3d 1068, 1071 (Fed. Cir. 1994)). In GPAC, for example, we found that a reference disclosing an equilibrium air door was reasonably pertinent to a patent directed to asbestos removal because they both addressed the same problem of "maintaining a pressurized environment while allowing for human ingress and egress." Id. at 1578-79. But if the problems addressed are substantially different, then the references are not analogous. See Clay, 966 F.2d at 659-60. In *Clay*, for example, we held that a reference that sought to recover oil from rock was not reasonably pertinent to the problem of "preventing loss of stored product to tank dead volume while preventing contamination of such product"—even though both references generally related to the petroleum industry. Id.

In finding that Kotliar is not reasonably pertinent to the problem of fire prevention and suppression, the Board accurately observed that the examiner's rejection did not "provide or explain the requisite correlation" between the problems addressed by Kotliar and the '752 patent. J.A. 9. But in doing so, the Board also expressly declined to consider multiple references in the record that Airbus asserted would establish the necessary link. Specifically, Airbus argued that four prior art references in the record—Gustafsson, the 1167 Report, Luria, and Carhart-establish that the use of normbaric hypoxic atmospheres in enclosed environments was well-known in the art of fire prevention and suppression at the time of the invention. Thus, according to Airbus, an ordinarily skilled artisan seeking to address the problem identified by the '752 patent would reasonably have consulted references relating to enclosed hypoxic environments, such as Kotliar. While the four references were considered by the examiner as part of other obviousness combinations, the Board refused to consider them because they were "not cited or applied in the proposed rejection, and consequently, not fully addressed by the Examiner or the Patent Owner as to their relevancy... as to claim 91." J.A. 13.

We hold that the Board erred by refusing to consider these references in support of the reasonably pertinent test. Because a "reasonably pertinent" reference is one that an ordinarily skilled artisan would reasonably have consulted in seeking a solution to the problem that the inventor was attempting to solve, the reasonably pertinent inquiry is inextricably tied to the knowledge and perspective of a person of ordinary skill in the art at the time of the invention. For example, the reasonably pertinent inquiry may consider where an ordinarily skilled artisan would reasonably look, and what that person would reasonably search for, in seeking to address the problem confronted by the inventor. In order to determine whether a reference is "reasonably pertinent," then, a reasonable factfinder should consider record evidence cited by the parties to demonstrate the knowledge and perspective of a person of ordinary skill in the art at the time of the invention.

The Gustafsson, the 1167 Report, Luria, and Carhart prior art references are relevant to the question of whether a person of ordinary skill in the art of fire prevention and suppression would have reasonably consulted references relating to normbaric hypoxic atmospheres to address the problem of preventing and suppressing fires in enclosed environments. *See* Background § III, *supra*. These references could lead a reasonable factfinder to conclude that an ordinarily skilled artisan in the field of fire prevention and suppression would have looked to Kotliar for its disclosure of a hypoxic room, even though Kotliar itself is outside the field of endeavor.

This court's opinion in Randall Manufacturing v. Rea, 733 F.3d 1355 (Fed. Cir. 2013), is instructive. Randall similarly involved an inter partes reexamination in which the Board reversed the examiner's obviousness rejection of several patent claims. 733 F.3d at 1356. The Board rejected the challenger's proposed four-reference combination due to a lack of motivation to combine. See id. at 1361. As here, the challenger pointed to a host of other references that the examiner had considered over the course of the examination—including some that had been the basis for rejecting other claims—as background evidence establishing what a person of ordinary skill would have known at the relevant time. See id. at 1360. But the Board refused to consider these background references, and instead limited its review to the content of the four references in the asserted combination. See id. at 1361.

We vacated and remanded for the Board to consider the background references. See id. at 1363–64. We explained that KSR requires consideration of the "background knowledge possessed by a person having ordinary skill in the art," and that our pre-KSR decisions consistently require consideration of common knowledge and common sense. Id. at 1362 (quoting KSR, 550 U.S. at 418). We emphasized that "documentary evidence consisting of prior art in the area" is "perhaps the most reliable" form of evidence of what an ordinarily skilled artisan would have known. Id. at 1362–63. As we explained:

By narrowly focusing on the four prior-art references cited by the Examiner and ignoring the additional record evidence [the challenger] cited to demonstrate the knowledge and perspective of one of ordinary skill in the art, the Board failed to account for critical background information that could easily explain why an ordinarily skilled artisan would have been motivated to combine or modify the cited references to arrive at the claimed inventions.

## Id. at 1362.

Here, the Board distinguished *Randall* on the ground that Randall concerned motivation to combine, not analogous art. We do not agree that this is a meaningful basis for distinction in this context. Motivation to combine and the scope of analogous art are both factual inquiries underpinning an obviousness determination that take into account the knowledge and perspective of an ordinarily skilled artisan. We therefore hold that the principles of *Randall* should apply here with equal effect: an analysis of whether an asserted reference is analogous art should take into account any relevant evidence in the record cited by the parties to demonstrate the knowledge and perspective of a person of ordinary skill in the art. We accordingly vacate the Board's reversal of the examiner's rejection and remand for the Board to reconsider its analogous art determination.

#### CONCLUSION

We have considered the parties' other arguments, and we do not find them persuasive. For the foregoing reasons, we vacate the Board's reversal of the examiner's rejection and remand to the Board to consider whether Kotliar is analogous art in view of the four prior art references relied on by Airbus to demonstrate the knowledge and perspective of a person of ordinary skill in the art at the time of the invention.

## VACATED AND REMANDED

Costs

No costs.