

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**ARCTIC CAT INC.,**  
*Appellant*

v.

**POLARIS INDUSTRIES, INC.,**  
*Appellee*

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2019-1440

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. IPR2017-  
00433.

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Decided: December 23, 2019

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JOSEPH HERRIGES, JR., Fish & Richardson P.C., Minne-  
apolis, MN, argued for appellant. Also represented by  
JOHN CAMERON ADKISSON, CONRAD GOSEN.

ALAN GARY CARLSON, Carlson, Caspers, Vandenburg  
& Lindquist PA, Minneapolis, MN, argued for appellee.  
Also represented by DENNIS BREMER, PETER M. KOHLHEPP,  
J. DEREK VANDENBURGH.

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Before WALLACH, CLEVINGER, and STOLL, *Circuit Judges*.  
CLEVINGER, *Circuit Judge*.

Arctic Cat, Inc. (“Arctic Cat”) appeals from a decision of the Patent Trial and Appeal Board denying a motion for additional discovery and a decision holding claims of U.S. Patent No. 9,217,501 (“the ’501 patent”) not unpatentable as obvious. *See Arctic Cat, Inc. v. Polaris Indus. Inc.*, No. IPR2018-00433 (P.T.A.B. Dec. 17, 2018). For the reasons set forth below, we affirm.

## BACKGROUND

### I

Polaris Industries Inc. (“Polaris”) owns the ’501 patent, which is directed to a side-by-side vehicle with a continuously variable transmission and an air inlet located on the side panel of the vehicle. ’501 patent Abstract, Figs. 2–4. Air inlets are commonly used in such vehicles to draw outside air through ducts or tubing and into the vehicle’s internal systems, including the carburetor and combustion chamber of the engine. Engines perform more efficiently with access to cool, ambient air, and need continuous access to cool air because the engines themselves produce heat when they burn fuel. Continuously variable transmissions, like engines, also work best when cooled during operation.

The ’501 patent describes both a power source and a continuously variable transmission that receive ambient air from an air intake system. ’501 patent col. 12 ll. 24–25, 30–31. It explains that ambient air is introduced into the internal systems through an air inlet which is part of the air intake system. *Id.* col. 16. ll. 21–24. The air inlet of the intake system is “positioned rearward of [the] operator area” and has a cover “coupled to [the] body panel [] and removeable from [the] body panel[.]” *Id.* col. 15 l. 23; *id.* col. 16 ll. 29–30.

Claim 1 of the '501 patent, the sole independent claim, is illustrative and is reproduced below.

1. A vehicle, comprising:

a frame;

a plurality of ground engaging members supporting the frame;

a power source supported by the frame and operatively coupled to at least one of the plurality of ground engaging members to propel the vehicle;

a CVT unit supported by the frame and operatively coupled between the power source and the at least one of the plurality of ground engaging members;

an operator area supported by the frame, the operator area including seating and operator controls, a first portion of the plurality of ground engaging members being located forward of the seating and a second portion of the plurality of ground engaging members being located rearward of the seating, the seating including a plurality of seats in a side-by-side arrangement, the first portion of the plurality of ground engaging members including a first ground engaging member including a first wheel and a first tire, the second portion of the plurality of ground engaging members including a second ground engaging member including a second wheel and a second tire;

a cargo carrying portion supported by the frame and located rearward of the seating;

a plurality of exterior body panels supported by the plurality of ground engaging members; and

*an air intake system operatively coupled to the CVT unit to communicate ambient air to an interior of the CVT unit, the air intake system receiving*

*ambient air through an inlet in a portion of the plurality of exterior body panels, the inlet in the portion of the plurality of exterior body panels being located rearward of the first wheel of the first ground engaging member and forward of the second wheel of the second ground engaging member and located laterally outside of a lateral extent of the power source and the CVT unit.*

*Id.* col. 25 ll. 16–52 (emphasis added).

## II

Arctic Cat filed a petition for *inter partes* review of the '501 patent asserting that claims 1–12 and 14–22 were obvious over various combinations of prior art references. Arctic Cat relied on six references, three of which are relevant to this appeal.

First, U.S. Pub. No. 2008/0023249 (“Sunsdahl”) describes all terrain vehicles with two seats, side-by-side. Sunsdahl discloses an engine cooling intake and a clutch cooling intake, both of which are positioned between the two seats of the vehicle to collect air that passes between the seats when the vehicle moves forward. Sunsdahl ¶66.

Second, U.S. Pub. No. 2006/0270503 (“Suzuki”) describes a vehicle with a continuous variable transmission connected to the engine. Suzuki describes an air intake duct that is used to cool the continuous variable transmission and discloses that the air intake duct is compact and extends along the side of the continuous variable transmission.

Third, U.S. Patent No. 4,681,178 (“Brown”) describes a vehicle air scoop and engine air intake port located on the side panel of a vehicle.

## III

The Board initially instituted *inter partes* review on claims 1–9 of the '501 patent, and after the Supreme

Court's decision in *SAS Institute v. Iancu*, 138 S. Ct. 1348 (2018), instituted review on claims 10–12 and 14–22 of the '501 patent. The grounds for all asserted claims relied on a combination of prior art references including Sunsdahl, Suzuki, and Brown, with additional prior art references being asserted against claims 2–5.

Prior to the Board's Final Written Decision, Arctic Cat moved for additional discovery to obtain deposition testimony from Polaris's employees. The Board denied Arctic Cat's motion on the grounds that the motion was not responsive to Polaris's Patent Owner's Response and because Arctic Cat did not persuasively address why it was unable to obtain the information without an additional discovery request.<sup>1</sup>

In its Final Written Decision, the Board determined that Arctic Cat failed to show by a preponderance of the evidence that any of the challenged claims were unpatentable. The Board found that it was not necessary to construe the claims expressly and that the claims would be given their ordinary and customary meaning.

The Board determined that a person having ordinary skill in the art would not have been motivated to modify Sunsdahl with Suzuki, and even if he had been, would not have been further motivated to modify Sunsdahl and Suzuki with Brown. The Board rejected each of Arctic Cat's four proposed reasons that a skilled artisan would have been motivated to combine the three prior art references as "lack[ing] a sufficient rational underpinning." *Arctic Cat, Inc. v. Polaris Indus. Inc.*, No. IPR2017-00433, 2018 WL 6653160, at \*12 (P.T.A.B. Dec. 17, 2018). The Board found that Arctic Cat failed to prove that Sunsdahl had an inlet

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<sup>1</sup> The Board's denial of the motion also explained that Arctic Cat was aware of evidentiary shortcomings in its case since institution.

blockage problem and that Arctic Cat failed to prove that moving the air inlet as taught by Suzuki and Brown would have reduced rain, snow, and water ingestion because the intakes of Sundahl were not, as Arctic Cat contended, open to the sky. The Board also found that Arctic Cat had not proved that a skilled artisan would have made the proposed modifications “to reduce noise and vibration in the operator area” because the modification required longer intake ducts that would increase the noise and vibration. *Id.* at \*12–13.

Additionally, the Board found that Arctic Cat failed to demonstrate that a skilled artisan, after combining Sundahl and Suzuki, would further modify the vehicle in view of Brown. The Board also determined that Arctic Cat failed to explain how the negative impacts of modifying Sundahl with Suzuki and Brown could be overcome. Thus, because the Board concluded that Arctic Cat failed to demonstrate there was a motivation to combine the three prior art references, Arctic Cat did not prove that claim 1 of the ’501 patent and the other claims which depend from claim 1 were unpatentable as obvious.

Arctic Cat appeals the Board’s denial of Arctic Cat’s motion for additional discovery and the Board’s finding that a person having ordinary skill in the art would not have been motivated to combine the Sundahl, Suzuki, and Brown prior art references. We have jurisdiction to decide the appeal under 28 U.S.C. § 1295(a)(4)(A).

#### DISCUSSION

We review the Board’s administration of its rules for trial proceedings for an abuse of discretion. *Wi-Fi One, LLC v. Broadcom Corp.*, 887 F.3d 1329, 1339 (Fed. Cir. 2018). A decision is an abuse of discretion if it: “(1) is clearly unreasonable, arbitrary, or fanciful; (2) is based on an erroneous conclusion of law; (3) rests on clearly erroneous fact findings; or (4) involves a record that contains no evidence on which the Board could rationally base its

decision.” *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 442 (Fed. Cir. 2015).

Obviousness is a question of law with underlying findings of fact. *Idemitsu Kosan Co. v. SFC Co.*, 870 F.3d 1379, 1379 (Fed. Cir. 2017). As such, we review an obviousness determination *de novo*, though we review the factual findings of the Board for substantial evidence. *Id.* A factual finding is supported by substantial evidence “if a reasonable mind might accept the evidence as sufficient to support the finding.” *HP Inc. v. MPHJ Tech. Invs., LLC*, 817 F.3d 1339, 1343–44 (Fed. Cir. 2016).

Arctic Cat’s appeal presents two issues. First, Arctic Cat argues that the Board abused its discretion when it denied Arctic Cat’s motion for additional discovery. Second, Arctic Cat argues that the Board improperly required Arctic Cat to prove there was a known problem in the prior art and that the Board failed to weigh the benefits and drawbacks in determining whether an ordinarily skilled artisan would be motivated to combine the prior art references.<sup>2</sup> We address these issues in turn below.

## I

Arctic Cat argues that the Board abused its discretion by denying Arctic Cat’s motion for additional discovery because the deposition testimony it sought was responsive to Polaris’s Patent Owner’s Response. In response, Polaris contends that the Board denied Arctic Cat’s motion for additional discovery on two independent grounds: (1) the

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<sup>2</sup> Arctic Cat further argues that the Board did not consider its argument that locating the inlet where it has access to cooler air would provide a motivation to combine Brown with the other prior art references. Because we do not reach whether there was a motivation to combine Brown with the other references, we do not address this argument.

motion was not responsive to arguments raised by Polaris and (2) the motion failed to explain why the information could not be generated without additional discovery. Since both are independent grounds for denying the motion, our affirmance on any one of the grounds is sufficient to uphold the Board's denial of the motion. We find that the Board did not abuse its discretion in denying the motion because the motion failed to explain why the same information could not be generated without additional discovery. Because we affirm the Board's denial on that ground, we do not reach the question of whether the motion was responsive to the Patent Owner's Response.

Arctic Cat sought portions of the testimony of three Polaris employees that were taken during district court litigation between Arctic Cat and Polaris, after Arctic Cat had already filed its petition for *inter partes* review. Arctic Cat had the burden of demonstrating to the Board that "such additional discovery [was] in the interests of justice." 37 C.F.R. § 42.51(b)(2) (2015). To determine whether allowing additional discovery is in the interests of justice, the Board considers five factors: (1) whether there is more than a mere possibility that something useful will be found, (2) the litigation positions of the parties and underlying bases for those positions, (3) the ability of the parties to generate the same information by other means, (4) whether the instructions are easily understandable, and (5) whether the request is overly burdensome to answer. *Garmin Int'l v. Cuozzo Speed Techs. LLC*, No. IPR2012-00001, 2013 WL 11311697, at \*3 (P.T.A.B. Mar. 5, 2013).

Arctic Cat argues on appeal that testimony from the inventors of the '501 patent has special persuasive value that could not be captured if the same information was obtained in other ways. However, in determining whether the Board abused its discretion when it denied the motion, only the arguments that Arctic Cat made before the Board are relevant. Arctic Cat argued to the Board that the testimony was relevant to its claims that the location of the

Sunsdahl air intakes had known problems and that the testimony would rebut positions taken by Polaris in the Patent Owner's Response. Arctic Cat's motion before the Board did not address why Arctic Cat could not have obtained the information without additional discovery, nor did it address the *Garmin International* factors used by the Board in these determinations. As the party seeking additional discovery, Arctic Cat had the burden of proving that additional discovery was "in the interests of justice." 37 C.F.R. §42.51(b)(2). Arctic Cat did not meet its burden and, therefore, the Board did not abuse its discretion in denying the motion on that ground.

## II

The parties agree that the Board's decision on claim 1 of the '501 patent is illustrative of the remaining claims because the remaining claims depend from claim 1. Therefore, our analysis only considers whether claim 1 was obvious in view of the three prior art references at issue, all of which must be combined for the claim to be unpatentable. The combination of these prior art references occurs in two stages: first, Sunsdahl must be combined with Suzuki to move the air inlets away from the passenger compartment and second, the Sunsdahl and Suzuki combination must further be modified by Brown in order to locate the air inlet in the side panel of the vehicle. Because we affirm the Board's finding that a skilled artisan would not be motivated to first combine Sunsdahl and Suzuki, we need not consider whether a skilled artisan would also be motivated to further modify the vehicle with Brown.

A patent is obvious when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 405 (2007). Under 35 U.S.C. § 103, courts must determine

the scope and content of the prior art, differences between the prior art and the claims, and the level of ordinary skill in the art. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17 (1966). Based on these factual findings, the courts take an “expansive and flexible approach” to determining whether a claim is obvious in light of the prior art. *KSR*, 550 U.S. at 415; *Graham*, 383 U.S. at 17. Furthermore, a showing of obviousness must demonstrate that a person of ordinary skill in the art at the time of the invention would have combined prior art elements to yield the claimed invention. *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011).

When several prior art references are combined a claimed invention is not obvious unless a person having ordinary skill in the art would have been motivated to combine the references. *KSR*, 550 U.S. at 418. The important inquiry is whether an ordinarily skilled artisan is “able to recognize, based on her background knowledge, [a technique’s] potential to improve the device and be able to apply the technique.” *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 995, 1003 (Fed. Cir. 2016). This court has previously held that a challenger need not prove that there was a known problem with the prior art in order to demonstrate that there was a motivation to combine prior art references. *Id.* at 1002–03.

Arctic Cat argues that the Board misapplied the law by requiring Arctic Cat to prove that there was a known problem in the prior art. However, the Board did not misapply the law here. Arctic Cat argued to the Board that there were problems with the Sundahl reference that could be improved through modifying Sundahl with Suzuki and Brown. Arctic Cat claimed that there was a blockage problem with the Sundahl air inlets and that Sundahl’s air intake was open to the sky, creating a problem with rain and snow ingestion. The Board rejected these arguments because Arctic Cat failed to prove that these alleged problems with Sundahl existed such that a skilled artisan

would be motivated to combine Sunsdahl with the other prior art to overcome those alleged problems. In this case, Arctic Cat tried to create a problem with the prior art in hopes of creating a motivation to combine references, but it failed. Although a challenger to a patent is not required to prove there was a known problem with the prior art, *Unwired Planet*, 841 F.3d at 1002–03, the Board did not misapply the law by requiring Arctic Cat to prove the facts that it alleged. Arctic Cat’s case was doomed when it failed to prove the premise it offered for combining Sunsdahl with Suzuki.

Arctic Cat also argues that the Board improperly required it to explain how drawbacks of that combination would be overcome. The relevant inquiry is whether or not a person having ordinary skill in the art would be motivated to combine references despite drawbacks that the combination might present. *Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 (Fed. Cir. 2000). The Board must weigh the benefits and drawbacks of the modification against each other, to determine whether there would be a motivation to combine. *Id.* at 1349 n.8; *see also Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1331–32 (Fed. Cir. 2019).

The Board stated that Arctic Cat failed to explain how the drawbacks of the modifications would be overcome, rather than weighing the benefits and drawbacks of the modifications against each other. However, the Board also made factual findings regarding the benefits and drawbacks of modifying Sunsdahl with Suzuki. The Board found that the air inlets of Sunsdahl were not open to the sky as Arctic Cat claimed, and therefore moving the inlets to the side did not provide Arctic Cat’s alleged benefits of preventing inlet blockage or rain and snow ingestion. The Board further found Arctic Cat’s expert evidence supporting these claimed benefits of moving the air inlets to be unpersuasive.

Additionally, the Board found that the modification of Sundahl with Suzuki would be unlikely to reduce noise and vibration due to the longer ducts that would be required to place the inlet on the side of the vehicle. The Board supported its conclusion with evidence from Arctic Cat's expert that shorter intake pipes were less likely to vibrate and would help avoid sound resonance, as well as evidence from Polaris's expert that moving the inlet to the side placed it closer to the passengers' heads, making the inlets noisier for passengers.

The Board's additional factual findings were supported by substantial evidence. Those findings demonstrate that a person of ordinary skill in the art, weighing the putative benefits of the modifications of Sundahl with Suzuki against the drawbacks of the modification would not have been motivated to combine the two prior art references.

#### CONCLUSION

For the reasons stated above, we affirm the Board's denial of Arctic Cat's motion for additional discovery. We also affirm the Board's conclusion that Arctic Cat failed to prove that there was a motivation to combine the prior art references Sundahl, Suzuki, and Brown and thus failed to prove that the '501 patent was unpatentable as obvious.

#### **AFFIRMED**

#### COSTS

No costs.