Paper 66

Date: January 7, 2014

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

IDLE FREE SYSTEMS, INC.
Petitioner

V.

BERGSTROM, INC. Patent Owner

Case IPR2012-00027 Patent 7,591,303

Before JAMESON LEE, THOMAS L. GIANNETTI, and MICHAEL J. FITZPATRICK, *Administrative Patent Judges*.

LEE, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

BACKGROUND

A. Introduction

Petitioner, Idle Free Systems, Inc. ("Idle Free"), filed a Petition on September 18, 2012, for an *inter partes* review of claims 1-23 of U.S. Patent No. 7,591,303 ("the '303 patent") pursuant to 35 U.S.C. §§ 311 *et seq*. On January 31, 2013, the Board granted the Petition and instituted trial for all claims 1-23 on less than all of the grounds of unpatentability alleged in the Petition. Paper 14.

After institution of trial, Bergstrom, Inc. ("Bergstrom") filed a Patent Owner Response ("PO Resp."). Paper 21. In a telephone conference call held on May 20, 2013, Bergstrom conceded the unpatentability of claims 1-4, 8, 10, and 17-19, and the Board indicated that those claims would be cancelled, without need of further briefing for those claims on any ground of unpatentability. Paper 26.

Bergstrom also filed a Motion to Amend Claims, which was dismissed on June 11, 2013. Paper 26. Bergstrom then filed a Renewed Motion to Amend Claims, by substituting proposed new claims 24-26 for claims 17-19, respectively. Paper 29. Idle Free filed a Reply (Paper 35) to Bergstrom's Patent Owner Response, and an Opposition (Paper 36) to Bergstrom's Renewed Motion to Amend Claims. Bergstrom then filed a Reply (Paper 41) to Idle Free's Opposition to Bergstrom's Renewed Motion to Amend Claims.

Oral hearing was held on October 7, 2013.¹

The Board has jurisdiction under 35 U.S.C. § 6(c). This final written decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

¹ A transcript of the final hearing is included in the record as Exhibit 3001.

Idle Free has shown that claims 5-7, 9, 11-16, and 20-23 of the '303 patent are unpatentable. Bergstrom has conceded the unpatentability of claims 1-4, 8, 10, and 17-19 of the '303 patent.

Bergstrom's Renewed Motion to Amend Claims is denied.

B. The Invention of the '303 Patent

The disclosed invention of the '303 patent relates to a vehicle air conditioning system and a method of operating the same. Ex. 1001, Abstr.: 1-3. The '303 patent states that the method operates the air conditioning system at one capacity when the engine is running, and at a second capacity when the engine is not running. *Id.* at Abstr.: 3-6. It also states that the selection of the particular capacities is based on the power capacity of the source of electric power from which the air conditioning system is operated. *Id.* at Abstr.: 6-8. For instance, when a storage battery is used to power the air conditioning system during engine off conditions, the second capacity is lower than the capacity at which the system is operated when the engine is running. *Id.* at Abstr.: 8-11.

The specification states that there exists a need in the art for a vehicle heating, ventilation, and air conditioning system that is able to provide air conditioning of the interior of the vehicle, not only during periods of engine operation, but also during "engine off or no-idle" conditions. *Id.* at 2:27-31. According to the specification, the invention provides a new and improved heating, ventilating, and air conditioning system for a vehicle that may be operated regardless of the operational state of the engine. *Id.* at 2:35-38. The system may be operated to condition the interior compartments of a vehicle while the engine is running and also while the engine is in a "no-idle (off)" condition. *Id.* at 2:38-42.

C. Exemplary Claims²

Claims 1, 13, and 17 are the only independent claims:

1. A method of operating a vehicle air conditioning system, the vehicle having an engine, to provide engine on and engine off operation, comprising the steps of:

operating the air conditioning system at a first capacity when the engine is running; and

operating the air conditioning system at a second capacity when the engine is not running.

13. A method of operating a vehicle air conditioning system having an interior compartment fan and a compressor, the vehicle having an engine, to provide engine on and engine off operation, comprising the steps of:

operating at least one of the interior compartment fan and the compressor of the air conditioning system at a first speed when the engine is running; and

operating at least one of the interior compartment fan and the compressor of the air conditioning system at a second speed when the engine is not running.

17. A method of operating a vehicle air conditioning system, the vehicle having an engine, to provide engine on and engine off operation, comprising the steps of:

operating the air conditioning system with at least electric power generated as a result of the engine running when the engine is running; and

which depend from claim 1 or claim 17.

² Although Bergstrom conceded the unpatentability of claims 1 and 17, the content of these claims are still relevant for determining the patentability of the claims

operating the air conditioning system with stored electric power when the engine is not running.

D. The Prior Art References Supporting Alleged Unpatentability of Claims 5-7, 9, 11-16, and 20-23

| Iritani | US Published App. | July 4, 2002 | Exhibit |
|----------------------|--------------------------------|------------------|---------|
| | 2002/0084769 A1 | | 1005 |
| Erdman | US Patent 4,015,182 | March 29, 1977 | Exhibit |
| | | | 1007 |
| Yoshida ³ | Japanese Published Application | February 9, 1993 | Exhibit |
| | JP H05-32121 | · | 1011 |
| | English Translation of Yoshida | | Exhibit |
| | | | 1008 |

E. The Still-Pending Grounds of Unpatentability Against Claims 5-7, 9, 11-16, and 20-23

| Claims | Grounds | References | |
|-----------------------|----------|-----------------------------|--|
| Iritani | § 102(e) | Claims 5-7, 9, 11-16, 20-23 | |
| Erdman and Yoshida | § 103(a) | Claims 5-7, 9, 11-16, 20-23 | |

DISCUSSION

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); Office Patent Trial

³ In this opinion, all references to "Yoshida," unless otherwise noted, are to the English translation of the prior art reference, Exhibit 1008.

Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012). Claim terms are also given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech.*, *Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

If an inventor acts as his or her own lexicographer, the definition must be set forth in the specification with reasonable clarity, deliberateness, and precision. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998). Neither Idle Free nor Bergstrom contends that the specification of the '303 patent, as filed, coined a new meaning for any term, different from the ordinary recognized meaning for any term.

If a feature is not necessary to give meaning to what the inventor means by a claim term, it would be "extraneous" and should not be read into the claim. *Renishaw PLC*, 158 F.3d at 1249; *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988).

Engine off

The preamble of each of independent claims 1, 13, and 17 recites the phrase "to provide engine on and engine off operation" for a method of operating a vehicle air conditioning system. The body of each of claims 1, 13, and 17, however, refers to operations of the vehicle air conditioning system when the engine is running and when the engine is not running, and makes no mention of "engine on" operation or "engine off" operation.

According to Bergstrom, "engine off" cannot be met by an engine that is merely stopped or is not running, but requires that it be "completely off" such that there are no associated electronics in the ignition system that are primed and ready to start, automatically, the engine, upon detection of a certain condition. PO Resp. 12-13.

For reasons discussed below, Bergstrom's argument that "completely off" should be construed as not startable but for manual intervention is unpersuasive.

First, we note that the claims require only "engine off" operation of the air conditioning system, not "vehicle electronics off" operation of the air conditioning system. Secondly, it is not in dispute that if a vehicle is being driven, the engine is on. The question of "engine off" arises only for time periods when the vehicle is not being driven. In that regard, in numerous instances the specification of the '303 patent equates "off" to the vehicle engine's "no idle." Note these portions of the specification of the '303 patent (Ex. 1001), where the designation "(off)" follows immediately after the term "no-idle" or when the designation "(no idle)" follows immediately after the term "engine off": 2:42; 6:6-7; 9:50. Idle Free also points out other examples of how the specification of the '303 patent equates engine "on/off" with engine "run/not run." Reply 6-7 (Paper 35).

We note also the description in the specification of the '303 patent about prior art "belt-driven" compressors and pumps. The specification describes that such belt-driven systems are unable to operate when the engine is turned off. Ex. 1001, 2:4-5. When the engine is stopped or not running, the engine driven belt also is not moving. It is not necessary to adopt an interpretation as narrow as that which Bergstrom urges. Construing "engine off" as "engine not running" is, therefore, consistent with the specification. It also constitutes the broadest reasonable interpretation in light of the specification.

Bergstrom argues that its specification makes clear that the air conditioning system provides engine off operation even when the vehicle is completely shut down. PO Resp. 13:7-10. The argument is unpersuasive because the specification of the '303 patent makes no distinction between shut down and completely shut down, or between engine off and engine completely off. The specification

discloses no electronics to monitor any such condition and to start, automatically, the engine when a monitored condition is detected. Also, the argument is without merit because the specification does not preclude satisfaction of the engine off condition by a stopped or non-running engine.

Bergstrom asserts that different claim terms are presumed to have different meanings, citing several decisions of the United States Court of Appeals for the Federal Circuit. PO Resp. 13 n.3. On that basis, Bergstrom argues that "engine off" must not mean the same as "engine is not running," because both terms appear in the same claim. The argument is unpersuasive, because the claim interpretation principle that different terms have different meanings is only an initial presumption that can be rebutted by evidence such as showing how the terms have been used in the specification. *See Applied Medical Resources v. U.S. Surgical Corp.*, 448 F.3d 1324, 1333 n.3 (Fed. Cir. 2006); *CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000). The numerous examples of the language used in the specification of the '303 patent, as noted above, amply refute any such presumption here.

In any event, "engine off operation" appears only in the preamble of the independent claims. Bergstrom acknowledges that preamble features are limiting only if they are necessary to give life and meaning to the claimed invention. PO Resp. 12 n.2. Here, because the body of each independent claim recites only the condition of "engine is not running," the preamble is not restrictive because it is not necessary for the limiting aspect of the term "engine off" in the preamble to go beyond "not running."

We have read the entirety of the specification of the '303 patent and can find no reasonable instance where interpreting "engine off" as an engine being in a stopped or not running state would be inconsistent with the disclosure. Bergstrom

also has identified no such disclosure in the specification of the '303 patent. Bergstrom's argument, that for the engine to be off, electronic circuits that automatically start the engine on a certain detected condition also must be off, is unpersuasive, particularly under the rule of broadest reasonable interpretation in light of the specification. Thus, we conclude that, regardless of whether there are active electronic circuits that, upon the detection of a certain condition, cause the engine to be started automatically without manual intervention, an engine that is not running and needs to be started to run is "off."

B. Alleged Anticipation of Claims 5-7, 9, 11-16, and 20-23, by Iritani, under 35 U.S.C. § 102(e)

Petitioner asserts that claims 5-7, 9, 11-16, and 20-23, are unpatentable under 35 U.S.C. § 102(e) as anticipated by Iritani. Claims 5-7, 9, 11, and 12 depend, directly or indirectly, from claim 1. Claims 14-16 depend, directly or indirectly, from claim 13. Claims 20-23 depend, directly or indirectly, from claim 17.

We have reviewed Idle Free's anticipation argument and supporting evidence, including Iritani's disclosure, the declaration of Mr. Mark D. Williams (Ex. 1002), and the detailed claim chart section appearing on pages 12-22 of the Petition. The claim chart persuasively reads all elements of each of claims 5-7, 9, 11-16, and 20-23 onto the disclosure of Iritani. Despite the counter-arguments in Bergstrom's Patent Owner Response, and the evidence cited therein, which we also have considered, Idle Free has shown, by a preponderance of the evidence, that each of claims 5-7, 9, 11-16, and 20-23 is unpatentable, under 35 U.S.C. § 102(e), as anticipated by Iritani.

To establish anticipation, each and every element in a claim, arranged as is recited in the claim, must be found in a single prior art reference. *Net MoneyIN*,

Inc. v. VeriSign, Inc., 545 F.3d 1359, 1369 (Fed. Cir. 2008); Karsten Mfg. Corp. v. Cleveland Golf Co., 242 F.3d 1376, 1383 (Fed. Cir. 2001).

Under 35 U.S.C. § 112(d), a dependent claim includes all of the limitations contained in the claim on which it depends. Claim 1 recites operating the air conditioning system at a first capacity when the engine is running, and at a second capacity when the engine is not running. Claim 13 recites operating at least the fan or the compressor of the air conditioning system at a first speed when the engine is running, and at a second speed when the engine is not running. Claim 17 recites operating the air conditioning system with at least power generated as a result of the engine running when the engine is running, and with stored electric power when the engine is not running. In its Patent Owner Response, Bergstrom's arguments are directed to the recitation of "engine off operation" in the preamble of each of independent claims 1, 13, and 17.

Of significance to each claim, particularly independent claim 1, Iritani states:

[A]ccording to the present invention, air-conditioning capacity of the air conditioning unit is set lower while the engine is stopped than the air-conditioning capacity while the engine is driven. . . . While the engine is driven, the air-conditioning performance of the air conditioning unit is set higher to improve an amenity in a passenger compartment of the vehicle.

Ex. $1005 \ \P \ 0012$.

With regard to independent claim 13, we credit the testimony and explanation of Idle Free's expert witness, Mr. Williams, that Iritani implements two different air conditioning capacities, by governing the speed of a variable speed compressor. Ex. 1002 ¶ 33. In that regard, Iritani states: "[T]he set usable electrical power SUEP is set at the air-conditioning usable electrical power (A/C)

UEP). Thereafter, at step **S98**, the rotation speed of the electrical compressor **41** is determined based on the set usable electrical power SUEP." Ex. $1005 \ 9056$. Iritani further states:

[A]ir-conditioning usable electrical power A/C UEP is calculated by multiplying the air-conditioning necessary electrical power NEP by the constant K. While the engine 1 is operated, the constant K is changed as indicated by the line "d" shown in **FIG. 7**. . . . On the other hand, while the engine 1 is stopped, the constant K is changed as indicated by the line "c" shown in **FIG. 7**.

Id. at ¶ 0062.

With regard to independent claim 17, Iritani discloses that when electrical motor generator 2 is used for its electrical generating function, as in when the engine is running, the capacity of the air conditioning unit is set higher so that performance of air conditioning unit 6 can be improved. *Id.* at ¶ 0109. We credit the explanatory testimony of Mr. Williams that such disclosure means, while the engine is running, the air conditioning system fills some of its power needs from the power generated by the engine. Ex. $1002 \, \P \, 29$.

Also with regard to independent claim 17, Iritani discloses that, while the engine is stopped, electrical power used for the air conditioning unit is restricted, to reduce the load on the battery. Ex. 1005 ¶ 0068. We credit the testimony of Mr. Williams that such disclosure means that, while the engine is not running, the air conditioning system is operated with stored electric power. Ex. 1002 ¶ 30.

Based on its proposed interpretation of "engine off," Bergstrom argues that Iritani does not disclose both "engine on" and "engine off" operation of a vehicle air conditioning system, as is recited in the preamble of each independent claim. PO Resp. 11:19 to 12:2; 14:1-3; 15:5-12. Berstrom further argues that, in Iritani's vehicle, while the engine is stopped and not running and the air conditioning

system is operating, the state of the vehicle's battery is monitored, and, if the stored charge of the battery decreases beyond a certain pre-set level, such as 30% of its full capacity, the electronics in the vehicle automatically start the engine to generate electrical power to recharge the battery. Ex. 1005 ¶ 0059. On that basis, Bergstrom argues that in Iritani, even when the engine is stopped and not running, it is not "off" as is required by the claims. PO Resp. 14:9-15.

We, however, already have discussed and rejected Bergstrom's interpretation of "engine off." Thus, Bergstrom's contention is unpersuasive.

Bergstrom further points out that in Iritani's system, the air conditioning system is operating only when the vehicle's ignition switch is in the on position, even if the engine is stopped and not running. PO Resp. 14:16 to 15:4. That fact does not help Bergstrom's position. It is of no moment that in Iritani's disclosed vehicle, the ignition switch is placed in the "on" position to activate the automatic controller that monitors the battery condition and decides when to start the engine. The claims do not require any particular placement of the vehicle's ignition switch. As we have explained above, "engine off" does not require the vehicle's electronics to be turned off.

C. Alleged Obviousness of Claims 5-7, 9, 11-16, and 20-23, over Erdman and Yoshida, under 35 U.S.C. § 103(a)

With regard to the alleged obviousness of claims 5-7, 9, 11-16, and 20-23, over Erdman and Yoshida, we have reviewed Idle Free's Petition, Bergstrom's Patent Owner Response, and Idle Free's Reply, as well as the evidence discussed in those papers. We are persuaded, by a preponderance of the evidence, that each of claims 5-7, 9, 11-16, and 20-23, is unpatentable, under 35 U.S.C. § 103(a), for obviousness over Erdman and Yoshida.

Erdman

Erdman discloses a refrigeration system comprising a compressor driven by a motor for circulating a suitable coolant, first, through a condenser, and then, through an evaporator disposed within a chamber or compartment to be cooled. Ex. 1007, Abstr.: 1-5. The system is adapted particularly for use (1) as an air conditioning system for automobiles and recreational vehicles, (2) as a portable refrigerating apparatus in recreational vehicles, and (3) as a refrigerating apparatus for trucks or other transport vehicles. *Id.* at Abstr.: 5-10; 1:17-23. Thus, Erdman describes use of its disclosed refrigeration system as an air conditioning system for automobiles and recreational vehicles.

Erdman expressly states: "[A] power source such as a battery, alternator, or generator (or rectified alternating current) serves to energize the motor." Ex. 1007, Abstr.: 10-12. It is not reasonably disputable, and Bergstrom does not dispute, that a vehicle alternator provides electric power from a vehicle's running engine. By describing that an alternator can serve as the compressor motor's power source, Erdman discloses that while the vehicle is being driven, the air conditioning system derives its input electrical power, at least in part, from the vehicle's alternator driven by the engine. Also, for the recreational vehicle embodiment, Erdman specifically describes that, while the vehicle is being driven, the refrigeration system is energized by the alternator. *Id.* at 13:19-23.

Erdman's disclosed compressor is a variable speed compressor, the speed of which is regulated to achieve a corresponding desired temperature. *Id.* at Abstr.: 19-21. Erdman also discloses that maximum compressor speed corresponds to maximum cooling capacity. *Id.* at 13:51-53. The sole criterion for governing the operative capacity or speed of the compressor in Erdman is the desired temperature to be achieved.

Erdman equates compressor speed to cooling capacity:

For example, on a hot, humid day, maximum motor speed (and thus capacity) would be desired to achieve satisfactory cooling and dehumidification. On the other hand, on a cool but humid day, the motor would be run at a slower speed to reduce the refrigeration capacity so that sufficient dehumidification may be accomplished without excessive cooling effect.

Id. at 13:51-57.

With respect to independent claim 1, Erdman does not describe running the compressor at a first capacity when the engine is running, and at a second capacity when the engine is not running.

With respect to independent claim 13, Erdman does not describe running the compressor at a first speed when the engine is running, and at a second speed when the engine is not running.

With respect to independent claim 17, the parties dispute whether Erdman describes operating its refrigeration system with stored electric power when the engine is not running, as a part of a method that also operates the system with at least electric power generated as a result of the engine running when the engine is running.

The issues identified above are discussed below, in the context of the claims which require their resolution.

Yoshida

Yoshida discloses an air conditioning system for use in electric cars having an electric motor-driven compressor. Ex. 1008, Claims 1-3; ¶ 0001. Yoshida describes that, because an electric car uses the battery as its power supply, the distance it can travel depends greatly on the battery capacity. *Id.* at ¶ 0003:1-7. Yoshida further describes that, because the power supply for the electric motor-

driven compressor is the same battery that powers the vehicle, operating the air conditioning system, without restriction, based on the remaining battery capacity, may deplete the battery at a much faster rate than anticipated and result in the electric car's running out of power before reaching the intended destination. Id. at \$0003:7-17.

Yoshida discloses an electric power consumption management method that restricts the output of the air conditioning system based on the level of the remaining battery capacity. *Id.* at ¶ 0004. For instance, Yoshida states:

In cases of traveling under a high thermal load while operating the air conditioning system without output restrictions at 3.0 KW, the travel distance is about 140 km; if the distance to a destination exceeds that, for example, the car would stop before reaching the destination. Thus, setting the output of the air conditioning system to 3.0 kw up to the point where the remaining battery capacity is 20 kwh (point A), setting the output to 1.5 kw up to the point where the remaining battery capacity is 10 kwh (point B), and setting the output to 0 when the remaining battery capacity goes below 10 kwh, for example, can allow the car to reach the destination as shown in FIG. 2.

Id. at ¶ 0008:5-18. Figure 2 of Yoshida is reproduced below:

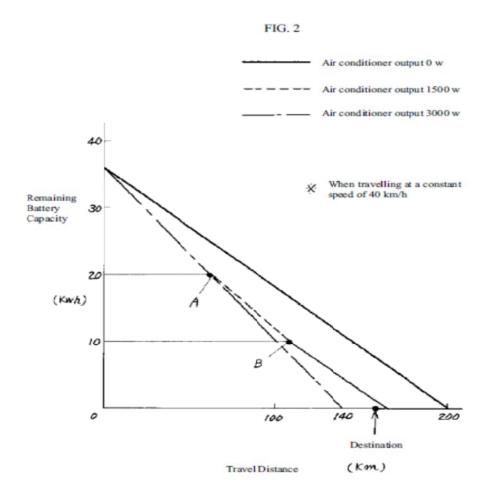


Fig. 2 illustrates the relationship between the remaining battery capacity and the reachable travel distance

As is evident from Figure 2, above, restricting the output or limiting the capacity of the air conditioning system at points A and B, based on the level of remaining battery capacity, can lengthen the distance reachable by the electric car before the battery dies.

Claims 5-7, 9, and 11-16 as Obvious over Erdman and Yoshida

Claims 5-7, 9, 11, and 12 each depend, directly or indirectly, from independent claim 1. Claims 14-16 each depend, directly or indirectly, from independent claim 13.

Considering the arguments and evidence presented by the parties, we conclude that in light of Yoshida's teachings on how to conserve the power of an electric car's battery by reducing the capacity of the vehicle's compressor, it would have been obvious to one with ordinary skill in the art to reduce the capacity of the compressor of the vehicle described in Erdman, based on the level of the remaining battery capacity, when the compressor is driven only by the battery. The rationale for doing so would be the same as that disclosed in Yoshida, *i.e.*, to lower the chance of completely depleting the battery, or lengthen the time until such depletion occurs. Because Erdman equates compressor capacity to speed, as discussed above, the same obviousness conclusion applies with regard to reducing the speed of the compressor, based on the level of the remaining battery capacity. The information presented in the claim chart appearing on pages 43-48 of the Petition is persuasive.

Bergstrom argues that Yoshida does not cure the deficiency of Erdman in not providing different capacities for the air conditioning system when the engine is running and when the engine is not running, because Yoshida does not tie capacity reduction to whether the engine is running. The argument is unpersuasive, because the rationale for reducing the capacity comes directly from Yoshida's teaching of reducing capacity when the system is powered by a battery, *i.e.*, stored electric power. It does not matter that Yoshida does not refer to operations with a running engine. Because the capacity is reduced when the air conditioning system draws power from the battery, there would be first and second capacities and first and second speeds of operation for the compressor. For the same reason, one of the two capacities would be less than the other, and one of the two speeds would be less than the other.

Bergstrom argues that it would not have been obvious to modify Erdman to change the capacity of its air conditioning system if the engine is not operating, because Erdman primarily describes a system that is particularly adapted for use in a portable refrigerator that requires temperature stability. The argument is unpersuasive. Erdman also states that its system "is particularly adapted for use as an air conditioning system for automobiles and recreational vehicles," in addition to being particularly adapted for use as a portable refrigerating apparatus, and as a refrigerating apparatus for trucks or other transport vehicles. Ex. 1007, Abstr.: 5-11.

Bergstrom argues that it would not have been obvious to modify Erdman to change the capacity of its air conditioning system if the engine is not operating, because Erdman discloses energizing the compressor to select its speed in accordance with the desired temperature. In that regard, Bergstrom notes that if the capacity of the compressor is reduced, Erdman will be unlikely to maintain the desired temperature. The argument is unpersuasive. One with ordinary skill in the art would have recognized that there is a trade-off between fully satisfying the cooling needs of the users of an air conditioning system and the need to conserve the electric power resource so that the air conditioning unit does not cease to operate earlier than anticipated. If the battery is depleted prematurely, the cooling needs of the user will not be satisfied whatever is the desired temperature. Bergstrom has not represented that exercising such trade-offs is beyond the level of ordinary skill in the art.

With regard to claims 5, 9, and 16, Bergstrom makes no additional argument. With regard to claims 6, 7, 11, 12, 14, and 15, which recite various requirements with respect to setting the compressor to operate at a certain speed in certain circumstances, Bergstrom asserts that Erdman refers not to setting or

selecting the speed of the compressor, but merely to changing the "number of revolutions." That argument is unpersuasive, because, as discussed above, Erdman equates compressor speed to cooling capacity. Ex. 1007, 13:51-57.

We regard the various "speed" limitations in these claims as being met by the disclosure of a corresponding "capacity" of the compressor or air conditioning system, and do not rely on Erdman's disclosure of various "number of revolutions" to meet any limitation on speed. We agree with Bergstrom that Idle Free has not established that the term "number of revolutions" refers to speed.

Claim 7 of the '303 patent requires its own discussion because it recites a "minimum speed" of operation. Specifically, it recites:

wherein the step of operating the air conditioning system at the speed lower than a maximum speed when the engine is not running comprises the step of operating at least one of an interior compartment fan and a compressor of the air conditioning system at a minimum speed when the engine is not running.

Neither Idle Free nor Bergstrom has interpreted "minimum speed." In light of the specification of the '303 patent, it is clear that the term "minimum speed" is not used to refer to the lowest possible absolute operating speed of the compressor below which the compressor cannot provide an output. Rather, in the context of the disclosure of the '303 patent, which makes use of a variable speed compressor, it means an operating speed that is capable of being set for running the compressor at a level and capacity lower than it can otherwise be, such that until reset, it is the lowest speed reached by the compressor. In that regard, note boxes 62 and 64 of Figure 4 of the '303 patent as reproduced below:

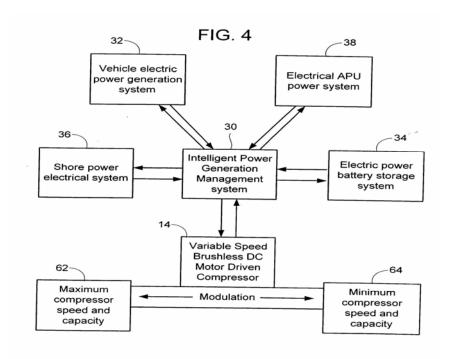


Figure 4 is a block diagram illustrating compressor capacity modulation provided by an embodiment of the invention

There appears to be no absolute value requirement in the '303 patent for what constitutes "minimum speed," and Bergstrom has identified none.

Consequently, when the capacity of the compressor has been lowered, it is operating at a minimum speed, as Idle Free asserts, until it is reset again. That is the broadest reasonable interpretation of the term in the context of the specification of the '303 patent. Bergstrom has not argued otherwise.

Claims 20-23 as Obvious over Erdman and Yoshida

Claims 20-23 each depend, directly or indirectly, from independent claim 17. Claim 17 recites two steps for operating a vehicle air conditioning system:

(1) operating the air conditioning system with at least electric power generated as a result of the engine running when the engine is running; and (2) operating the air conditioning system with stored electric power when the engine is not running.

Considering the arguments and evidence presented by the parties, we conclude that in light of Yoshida's teachings on how to conserve the power of an electric car's battery by reducing the compressor capacity, it would have been obvious to one with ordinary skill to reduce the capacity or speed of the compressor described in Erdman, based on the level of the remaining battery capacity, when the compressor is driven by the battery. In particular, the information presented in the claim chart appearing on pages 50-51 of the Petition is persuasive.

Bergstrom makes some of the same arguments it has made with regard to claims 5-7, 9, and 11-16. Those arguments already have been discussed and rejected above. Bergstrom makes an additional argument, however, that applies only to claims 20-23, which, as noted, depend from independent claim 17.

With regard to claim 17, Bergstrom does not contest that above-identified step (1), *i.e.*, operating the air conditioning system with at least electric power generated as a result of the engine running when the engine is running, is disclosed by Erdman. Erdman specifically discloses that its air conditioning system, while the vehicle is being driven, is energized electronically by the vehicle alternator. Ex. 1007, 13:15-25. Bergstrom argues, however, that Erdman does not describe the above-identified step (2), *i.e.*, operating the air conditioning system with stored electric power when the engine is not running. The argument is unpersuasive.

Erdman states that a power source, such as a battery, alternator, generator, or rectified alternating current, serves to energize the motor. Ex. 1007, Abstr.: 10-12. Erdman also states that, when the vehicle is parked, the air conditioning system may be energized, through a step-down transformer and rectifying circuit or battery charger, from a standard 115-volt, 60-cycle outlet. *Id.* at 13:15-25. Elsewhere in its disclosure, Erdman again states that the power source for the air

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conditioning system may be embodied "as a battery, alternator, generator, and so forth." *Id.* at 9:51-53. Referring to such disclosures in Erdman, Mr. Williams, technical witness for Idle Free, explains:

The battery disclosed by Erdman powers the air conditioning system when the alternator or battery charger (i.e., shore power) are not available. Thus, Erdman discloses switching from engine driven electrical power to the battery when the vehicle is parked and the engine is turned off and, no battery charger or shore power is available.

Ex. 1002 ¶ 50.

The testimony of Mr. Williams is supported by the cited disclosure of Erdman. Idle Free simply urges a plain reading of Erdman's disclosure, that the power source can be an alternator, generator, rectifier, or battery, as meaning that any of the identified sources can be used, especially if the others are not available.

Bergstrom contends the opposite, relying, in part, on the following testimony from the first declaration of its own technical witness, Mr. Michael D. Leshner:

- 17. Erdman does not tie the selection of the power source to the engine state of a vehicle. In particular, Erdman [sic] does not disclose how any particular engine state would result in the selection of any particular power source, or even whether the state of a vehicle engine would affect which alternative power source is used to power the refrigeration system.
- 18. Moreover, Erdman does not tie the use of a battery to any particular condition. Rather, a battery is simply listed as one of several distinct and alternative power source options, devoid of explanation of when or how the battery would be selected. For example, Erdman mentions batteries in only two instances, describing that "the power source 36 [] may illustratively be embodied as a battery, alternator, generator, and so forth," and that "a power source such as a battery, alternator, or generator (or rectified alternating current) serves to energize the motor." Erdman, Ex. 1007, 9:51-53, Abstract. Nowhere is the selection of a battery conditioned on or

otherwise tied to the availability or unavailability of other power sources, let alone to any particular engine state.

21. Because Erdman does not condition the use of a battery on engine state, Erdman does not disclose a method of operating a vehicle air conditioning system that uses engine power when the engine is running and stored electric power (e.g., battery power) when the engine is not running.

Ex. 2001 ¶¶ 17, 18, 21.

The above-quoted testimony is unpersuasive. At the outset, it is important to note that the claim limitation at issue is using stored electric power, *i.e.*, battery power, when the engine is not running, to drive the air conditioning system. At issue is not a complex limitation involving highly sophisticated conditions in various different combinations. It is, simply, to use the battery when the vehicle engine is not running, *i.e.*, when there is no output from the vehicle alternator. Mr. Leshner's testimony appears to be focused on something other than the precise claim feature at issue. Therefore, we credit the testimony of Mr. Williams over that of Mr. Leshner.

The above-quoted testimony of Mr. Leshner, itself, recognizes that Erdman describes the vehicle alternator and a battery as "alternative" power source options. "Alternative" has a clear and unambiguous meaning in ordinary usage of the English language, *i.e.*, applicable in place of another, in the sense of providing an option. Mr. Leshner does not address whether one with ordinary skill in the art would understand Erdman as using a battery when its vehicle is parked and the engine is not running to drive an alternator. We note that Erdman specifically contemplates operation of its refrigeration system while the vehicle is parked rather than driven. Ex. 1007, 13:15-19.

In paragraph 20 of his first declaration (Ex. 2001), Mr. Leshner explains his observation that nowhere in the entire disclosure of Erdman is a description of the

circumstance that the vehicle is parked and the engine is not running, at a location where shore power via an electrical utility outlet is unavailable. Certain fundamental truths, however, need not be described expressly in a patent specification, which is read from the perspective of one with ordinary skill in the art. That not every location where a vehicle is parked may have an electrical utility outlet to supply electric power to the vehicle is one such basic fact known not only to one with ordinary skill in the art, but also to a layperson without ordinary skill. Mr. Leshner does not explain why one with ordinary skill in the art would not have recognized that, because Erdman does not limit the parking locations to those places with an electrical utility outlet, Erdman's reference to parking refers to parking at locations that may, or may not, have an electrical utility outlet. The testimony of Mr. Leshner, in paragraph 20 of his first declaration (Ex. 2001), is unpersuasive.

Bergstrom's contention is essentially that Erdman nowhere states that the battery is to be used when the vehicle engine is not running and there is no electrical utility outlet. The key, however, lies in the understanding of one with ordinary skill in the art, with regard to what is disclosed by Erdman, not what is stated, literally, by Erdman.

Bergstrom asserts that the testimony of Mr. Williams should not be credited, because the credibility of Mr. Williams has been compromised by impermissible conversation with Idle Free's counsel during a break in the taking of his cross-examination testimony. PO Resp. 10 n.1. A review of the pertinent portions of the deposition transcript reveals:

(1) during a break in his deposition, Mr. Williams had a conversation with his counsel;

- (2) in that conversation, they talked in generalities about a single question; Mr. Williams was reminded by counsel on how to answer questions; and they talked about nothing else; and
- (3) as a result of that conversation, Mr. Williams did change an answer he had previously given, because he thought he had misspoken and given an incomplete answer.

Ex. 2005, 102:22 to 103:22; 111:5-15.

Conversing with counsel about any particular question was impermissible and should not have taken place, because Idle Free does not indicate that the conversation about the specific question was for determining whether to exercise a privilege or how to comply with a Board order. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,772 (Aug. 14, 2012). However, the witness testified that he and counsel talked only in generalities, and we do not know the specific content of the conversation. The scope of "discrediting," which we take to mean giving the testimony no weight, is too broad. On this record, the witness could have been reminded simply of answering questions truthfully and completely. We note also that the witness was not evasive when inquired about the conversation with counsel, and that Bergstrom has not articulated how the one changed answer affects any issue of contention.

For the foregoing reasons, we decline to "discredit," entirely, i.e., giving it no weight, the testimony of Mr. Williams, including his testimony about why Erdman discloses using a battery to run its refrigeration system when the vehicle engine is not running and there is not an electrical utility outlet where the vehicle is parked. Instead, we have considered the conversation between Mr. Williams and his counsel, and taken it into account generally in assessing his credibility.

In any event, the alleged ground of unpatentability asserted against claims 20-23 is for obviousness, rather than anticipation. It would have been obvious to one with ordinary skill in the art that at some parking locations, an electrical utility outlet may not be provided, and thus Erdman's battery would be used in that instance, when the vehicle is parked and not running. One with ordinary skill in the art possesses ordinary creativity and is not an automaton. *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 421 (2007).

D. Bergstrom's Renewed Motion to Amend Claims

Bergstrom filed a first motion to amend claims (Paper 22), which was dismissed by the Board in a decision (Paper 26) providing specific guidance on the requirements of a proper motion to amend claims. In a renewed motion to amend claims (Paper 29), Bergstrom proposes three substitute claims 24-26, specifically, claim 24 for patent claim 17, claim 25 for patent claim 18, and claim 26 for patent claim 19. The renewed motion ("Mot.") is contingent, meaning that a proposed substitute claim is at issue and would be considered only if the original patent claim it replaces is unpatentable. Bergstrom has conceded the unpatentability of claims 17-19. Therefore, the contingency has materialized, and, thus, we consider the renewed motion on the merits.

As the moving party, Bergstrom bears the burden of proof to establish that it is entitled to the relief requested. 37 C.F.R. § 42.20(c). The proposed amendment is not entered automatically, but only upon Bergstrom's having demonstrated the patentability of those substitute claims.

Each of the proposed substitute claims 24-26 is reproduced below, with bracketed text indicating material deleted relative to the respective claim it would replace, and underlined text indicating material inserted relative to that claim:

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24. A method of operating a vehicle air conditioning system, the vehicle having an engine, to provide engine on and engine off operation, comprising the steps of:

operating the air conditioning system with at least electric power generated as a result of the engine running when the engine is running and stored electric power from a battery is available; [and]

operating the air conditioning system with stored electric power from the battery when the engine is not running; and

upon simultaneously receiving at the air conditioning system electric power from the battery and shore power to run the air conditioning system, automatically prioritizing use of shore power over battery power.

25. The method of [claim 17] <u>claim 24</u>, wherein the step of operating the air conditioning system with at least electric power generated as a result of the engine running when the engine is running comprises the step of operating the air conditioning system at a first capacity, and wherein the step of operating the air conditioning system with stored electric power when the engine is not running comprises the step of operating the air conditioning system at a second capacity, wherein the prioritizing further comprises:

using priority logic to select power from one of: power generated as a result of the engine running; shore power; an auxiliary power unit; and the battery, based on each of these sources availability.

26. The method of [claim 18] <u>claim 25</u>, wherein the step of operating the air conditioning system at the second capacity comprises the step of operating the air conditioning system at the second capacity lower than the first capacity, wherein using the priority logic <u>comprises</u>:

using the priority logic to select power from one of: power generated as a result of the engine running; shore power; the auxiliary power unit; and the battery, in that order, based on each of these sources availability.

1. No Broadening of Scope

Proposed substitute claims may not enlarge the scope of original patent claims. 35 U.S.C. § 316(d)(3); 37 C.F.R. § 42.121(a)(2)(ii). The proposed substitute claims 24-26 merely add features to the claims for which they substitute, respectively, and do not remove any limitation therefrom. Accordingly, no issue exists with regard to the prohibition against broadening original patent claims.

2. Written Description Support

On page 5 of its motion, Bergstrom explains how the subject matter of its proposed substitute claims have written description support in the specification of Application 11/332,006 ("the '006 application") which issued as the '303 patent, as filed. With regard to the added limitation in proposed substitute claim 34, Bergstrom relies, in part, on Figure 1 and paragraph 0039 of the '006 application. Mot. 5. Bergstrom points out that paragraph 0039 of the '006 application states that while the system is operating from battery storage system 34, if the vehicle is connected to shore power electrical system 36, controller 30 will sense the availability of this new power source and begin utilizing that source to the exclusion of battery system 34. *Id*.

Figure 1 of the '006 application is reproduced below:

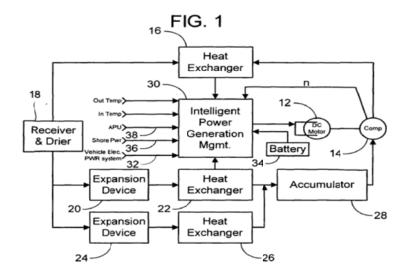


Figure 1 is a block diagram illustrating system component interconnections and coolant flow in an embodiment of the invention

As shown above in Figure 1, and as indicated in paragraph 0037 of the '006 application (Ex. 2003), intelligent power generation management controller 30 is a component of the overall air conditioning system. It monitors various system parameters and the availability of power sources on the vehicle. Ex. 2003 ¶ 0031. Controller 30, as shown in Figure 1, is configured to receive power from a plurality of power sources, including battery 34, vehicle electrical power system 32, shore power source 36, and auxiliary power unit 38, such as a generator. Controller 30 is also operative to select which power source to draw from to supply power to motor 12, which drives compressor 14. *Id.* at ¶¶ 0031-32. The evidence presented by Bergstrom is sufficient, if unrebutted, to show written description support for proposed substitute claims 24-26.

Idle Free asserts that Bergstrom has shown inadequate written description support for the limitation of "simultaneously receiving at the air conditioning system electric power from the battery and shore power." Paper 36, 7-14.

According to Idle Free, relying on paragraph 19 of the declaration of Mr. James G.

Rice (Ex. 1013), the disclosure of the '006 application, as filed, describes only the controller sensing the availability of shore power and then using shore power to the exclusion of the battery, and thus the air conditioning system may not actually "receive" shore power until the battery has been disconnected. For reasons discussed below, the testimony of Mr. Rice is not explained adequately, and Idle Free's argument is unpersuasive.

Mr. Rice states that there is no disclosure of the battery and shore power being simultaneously received at the air conditioning system, that the disclosure only describes that the controller will sense the availability of shore power and then switch the power source from battery to shore power, and that the controller may not "receive" shore power until after the battery has been disconnected. Ex. 1013 ¶¶ 19-21. However, Mr. Rice does not discuss Figure 1 of the '006 application, reproduced above, or Figure 4 of the '006 application, reproduced below:

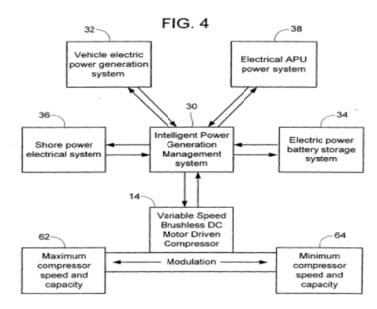


Figure 4 is a functional block diagram illustrating power source utilization and compressor modulation by controller 30

Both Figures 1 and 4 show a direct connection from controller 30 to battery 34 and to shore power electrical system 36. Mr. Rice does not explain why one with ordinary skill in the art would not understand the drawings as disclosing that so long as shore power is present and can be sensed by the controller, it already is connected to controller 30. Also, Mr. Rice does not explain why it is not the case that controller 30 senses the availability of shore power by being connected to and by receiving shore power. Mr. Rice has not identified any way, disclosed in the disclosure of the '006 application, for controller 30 to sense the availability of shore power, other than through the connection to shore power electrical system shown in the above-reproduced drawings.

We conclude that Bergstrom's motion has made a sufficient showing that proposed substitute claims 24-26 have written description support in the disclosure of the '006 application, as filed.

3. Patentability over Prior Art

According to Bergstrom, with regard to proposed substitute independent claim 24, Erdman fails to disclose the last element in claim 24, *i.e.*, "upon simultaneously receiving at the air conditioning system electric power from the battery and shore power to run the air conditioning system, automatically prioritizing use of shore power over battery power." Mot. 7-8. Bergstrom's contention relies, in part, on its assertion that Erdman does not describe that the two power sources, *i.e.*, shore power and battery power, ever are received simultaneously by the air conditioning system. Mot. 9. We are persuaded by these contentions about Erdman's disclosure. Erdman does not describe that both shore power and battery power are received simultaneously by the refrigeration system. Erdman also does not describe automatically prioritizing either shore power or battery power over the other, when both are received simultaneously at its

refrigeration system. This difference between the invention of proposed substitute claim 24 and Erdman's disclosure is made up by neither Iritani nor Yoshida.

Bergstrom alleges another difference between the invention of independent claim 24 and the disclosure of Erdman, *i.e.*, prioritization of three or more power sources including engine power, battery power, and shore power. Mot. 9. That assertion, however, is not supported by the record. Claim 24 does not require prioritization of three power sources including engine power, battery power, and shore power. Bergstrom does not explain where such a feature is recited in claim 24. Prioritizing shore power over battery power, as recited in claim 24, is not the same as prioritizing among three power sources. Neither is the feature of operating the air conditioning system with at least electric power generated as a result of the engine running when the engine is running and stored electric power from a battery is available. The latter is not prioritization of even two power sources, because the term "at least" means electric power from the battery can be used along with power from the vehicle's alternator.

Citing paragraph 17 of a second declaration of Mr. Leshner (Ex. 2007), Bergstrom explains that by automatically prioritizing shore power over battery power, when power from both of these sources is received simultaneously, as is recited in the last element of proposed substitute claim 24, the air conditioning system takes advantage of a reliable and substantially inexhaustible power source, *i.e.*, shore power, to preserve an exhaustible power source, *i.e.*, a battery, for later use. Mot. 7.

Bergstrom further explains another benefit for automatically prioritizing shore power over the battery, when both sources are available, by noting that such automatic prioritization is simpler to operate because a user simply can connect the air conditioning system to shore power, and then the system automatically will do

the prioritization to preserve the battery, also citing paragraph 17 of the second declaration of Mr. Leshner (Ex. 2007). Mot. 7-8.

Distinguishing the proposed substitute claims only from the prior art references applied to the original patent claims, however, is insufficient to demonstrate general patentability over prior art. An *inter partes* review is neither a patent examination proceeding nor a patent reexamination proceeding. The proposed substitute claims are not entered automatically and then subjected to examination. Rather, the proposed substitute claims will be added directly to the patent, without examination, if the patent owner's motion to amend claims is granted. As the moving party, a patent owner bears the burden to show entitlement to the relief requested. 37 C.F.R. § 42.20(c).

For a patent owner's motion to amend claims, 37 C.F.R. § 42.20(c) places the burden on the patent owner to show general patentability over prior art. That means Bergstrom is not rebutting a rejection in an Office Action, as though this proceeding is patent examination or reexamination. Instead, Bergstrom bears the burden of proof in demonstrating patentability of the proposed substitute claims over the prior art in general, and thus entitlement to add these proposed substitute claims to its patent.

Bergstrom is not assumed to be aware of every item of prior art presumed to be known to a hypothetical person of ordinary skill in the art. Nevertheless, Bergstrom can, and is expected to, set forth what it does know about the level of ordinary skill in the art, and what was previously known, regarding each feature it relies and focuses on for establishing patentability of its proposed substitute claims.

In Paper 26, dated June 11, 2013, on pages 7-8, Bergstrom was given specific notice of the following:

A patent owner should identify specifically the feature or features added to each substitute claim, as compared to the challenged claim it replaces, and come forward with technical facts and reasoning about those feature(s), including construction of new claim terms, sufficient to persuade the Board that the proposed substitute claim is patentable over the prior art of record, and over prior art not of record but known to the patent owner. The burden is not on the petitioner to show unpatentability, but on the patent owner to show patentable distinction over the prior art of record *and also prior art known to the patent owner*. Some representation should be made about the specific technical disclosure of the closest prior art known to the patent owner, and not just a conclusory remark that no prior art known to the patent owner renders obvious the proposed substitute claims.

A showing of patentable distinction can rely on declaration testimony of a technical expert about the significance and usefulness of the feature(s) added by the proposed substitute claim, from the perspective of one with ordinary skill in the art, and also on the level of ordinary skill, in terms of ordinary creativity and the basic skill set. A mere conclusory statement by counsel, in the motion to amend, to the effect that one or more added features are not described in any prior art, and would not have been suggested or rendered obvious by prior art, is on its face inadequate.

Id. at 7-8 (emphasis added).

Bergstrom does state that in its view Erdman constitutes the closest prior art. Nevertheless, that alone is insufficient and not meaningful, without discussing the level of ordinary skill in the art, and what was previously known, with respect to each added feature, including the ordinary skill set possessed by such a hypothetical person. For claim 24, Bergstrom focuses on this added feature: "upon simultaneously receiving at the air conditioning system electric power from the battery and shore power to run the air conditioning system, automatically prioritizing use of shore power over battery power." However, Bergstrom reveals

little, if anything, about the level of ordinary skill and what was previously known with respect to that feature.

For instance, Bergstrom does not represent that, to its knowledge, it was the first to have shore power and battery power simultaneously received at an air conditioning system of a vehicle, or any electrical system located on or off a vehicle. Bergstrom also does not represent that it was the first to prioritize, automatically, shore power and battery power, or any two or more sources of electrical power, on or off a vehicle.

If Bergstrom is not the first to have made such arrangements, then it should have revealed, in its motion, what would have been known to one with ordinary skill in the art, or otherwise within the ordinary creativity and skill set of one with ordinary skill in the art, about: (1) simultaneously receiving electrical utility power and battery power at one electrical device, not necessarily an air conditioning system for a vehicle, and (2) automatically prioritizing two electrical power sources, which are received simultaneously at one electrical device, not necessarily in an air conditioning system, particularly where electrical utility power and/or battery power is involved.

In the context of the claim elements added by Bergstrom, it is essential to know whether such methods of operations pre-existed, in other contexts, and, if so, how they worked. The scope of what constitutes pertinent prior art also is not limited to just air conditioning systems on vehicles. Although Bergstrom is not expected to know of all pre-existing prior art, it is expected, reasonably, to indicate that it is unaware of the two above-noted manners of operation, in any context, if in fact it is unaware. Otherwise, it is expected, reasonably, to explain such pre-existing manners of operation, and why it would not have been applicable to render

the invention of claim 24 obvious to one with ordinary skill in the art. Bergstrom has failed to do either.

For claim 25, which depends from claim 24, Bergstrom focuses on this added feature: "using priority logic to select power from one of: power generated as a result of the engine running; shore power; an auxiliary power unit; and the battery, based on each of these sources availability." This added feature requires capability of the priority logic to select one of four potentially available power sources, engine power, shore power, auxiliary power, and battery power. But Bergstrom reveals little, if anything, about the level of ordinary skill in the art and what was previously known with respect to that added feature.

For instance, Bergstrom does not represent that to its knowledge, it was the first to have all four power sources, *i.e.*, engine power, shore power, auxiliary power, and battery power, made available at the same time to an air conditioning system or any electrical system located on or off a vehicle. Bergstrom also does not represent that it was the first to use priority logic to select one power source from among multiple power sources, particularly if the multiple power sources include electrical power resulting from a running engine.

If Bergstrom is not the first to have made such arrangements, then it should have revealed, in its motion, what would have been known to one with ordinary skill in the art, about: (1) making two, three, or four power sources all available at the same time to any electrical system, not necessarily an air conditioning system of a vehicle, particularly if the power sources include engine power, auxiliary power, shore power, and/or battery power; (2) using priority logic to select one power source from among multiple power sources, particularly if the power sources include electrical power resulting from a running engine; and (3) whether it was common for freight trucks to carry a power generator as an auxiliary power

source, and, if so, how was power from such a generator delivered or prioritized, compared to engine power, shore power, and battery power.

In the context of the claim element added by Bergstrom, it is essential to know whether such methods of operations pre-existed in other contexts, and, if so, how they worked. Although Bergstrom is not expected to know of all pre-existing prior art, it is expected, reasonably, to indicate that it is unaware of the above-noted manners of operation in any context, if in fact it is unaware. Otherwise, it is expected, reasonably, to explain such pre-existing manners of operation, and why it would not have been applicable to render the invention of claim 25 obvious to one with ordinary skill in the art. Bergstrom has failed to do either.

For claim 26, which depends from claim 25, Bergstrom focuses on this added feature: "wherein using the priority logic comprises: using the priority logic to select power from one of: power generated as a result of the engine running; shore power; the auxiliary power unit; and the battery, in that order, based on each of these sources availability." It is essentially the same feature as that added for claim 25, except that claim 26 further sets forth the specific order of priority for the four power sources. For the same reasons as discussed above, in the context of the feature added for claim 25, Bergstrom reveals little, if anything, about the level of ordinary skill and what was previously known with respect to the added feature of claim 26. Additionally, Bergstrom has not discussed what one with ordinary skill in the art would have known about prioritizing any one of the listed power sources, such as battery power, relative to the other listed power sources, in any environment.

Without having discussed sufficiently, in its motion, the level of ordinary skill in the art and what was previously known regarding the features on which Bergstrom focuses for establishing patentability, Bergstrom has not, in its motion,

set forth a prima facie case for the relief requested or satisfied its burden of proof. Consequently, consideration of Idle Free's Opposition and Bergstrom's Reply, on the issue of patentability over prior art, is unnecessary.

Bergstrom's Renewed Motion to Amend Claims is denied.

E. Bergstrom's Motion to Exclude Evidence

By this motion (Paper 52), Bergstrom seeks to exclude the entirety of the testimony of the expert witness of Idle Free, Mr. Mark D. Williams, including the initial declaration of Mr. Williams (Ex. 1002) and his cross-examination testimony (Ex. 2005). The alleged basis is the same as that which Bergstrom raised in support of its contention that the Board should discredit the testimony of Mr. Williams. For essentially the same reasons expressed above that we decline to discredit, entirely, the testimony of Mr. Williams, we also decline to exclude the testimony of Mr. Williams.

Bergstrom's Motion to Exclude Evidence is denied.

CONCLUSION

Idle Free has shown by a preponderance of the evidence that claims 5-7, 9, 11-16, and 20-23 of the '303 patent are unpatentable (1) under 35 U.S.C. § 102(e) over Iritani; and (2) under 35 U.S.C. § 103(a) over Erdman and Yoshida.

Bergstrom has conceded the unpatentability of claims 1-4, 8, 10, and 17-19 of the '303 patent. Paper 26.

Bergstrom has not shown that its proposed substitute claims 24-26 are patentable over prior art.

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It is

ORDERED that claims 1-23 of the '303 patent are CANCELLED; FURTHER ORDERED that Bergstrom's Renewed Motion to Amend

Claims is denied; and

FURTHER ORDERED Bergstrom's Motion to Exclude Evidence is denied.

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For PETITIONER:

Howard N. Shipley FOLEY & LARDNER LLP msmith-PRPS@foley.com hshipley@foley.com

For PATENT OWNER

Dion M. Bregman
Jason C. White
MORGAN, LEWIS & BOCKIUS LLP
bergstrom.service@morganlewis.com
padocketingdepartment@morganlewis.com
dbregman@morganlewis.com
jwhite@morganlewis.com