Filed on behalf of

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#### UNITED STATES PATENT AND TRADEMARK OFFICE

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# BEFORE THE PATENT TRIAL AND APPEAL BOARD

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GEP POWER PRODUCTS, INC., Petitioner,

v.

ARCTIC CAT INC.,
Patent Owner

Case IPR2016-01388 Patent 7,420,822

# PATENT OWNER ARCTIC CAT INC.'S NOTICE OF APPEAL TO THE U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT

GEP Power Products, Inc. v. Arctic Cat, Inc.

Pursuant to 35 U.S.C. §§ 141(c), 142, and 319, 37 C.F.R. §§ 90.2(a) and 90.3(a), Rule 4(a) of the Federal Rules of Appellate Procedure, and 28 U.S.C. §1292(c), Patent Owner Arctic Cat, Inc. hereby appeals to the United States Court of Appeals for the Federal Circuit from the Final Written Decision (Paper 31) entered by the Patent Trial and Appeal Board on December 5, 2017 (Attachment A). In particular, Patent Owner identifies the following issues on appeal:

- The Board's judgment that claims 1-10 of U.S. Patent No. 7,420,822 are unpatentable;
- The Board's determination that U.S. Patent No. 6,850,421 to Boyd ("Boyd") is "by another" under 35 U.S.C. § 102(e);
- The Board's determination that Patent Owner did not antedate Boyd;
- The Board's claims constructions; and
- Any Board finding, determination, judgment or order supporting or related to the Final Written Decision and decided adversely to Patent Owner.

Patent Owner is concurrently filing true and correct copies of this Notice of Appeal, along with the required fees, with the Director of the United States Patent and Trademark Office and the Clerk of the United States Court of Appeals for the Federal Circuit.

# IPR2016-01388

GEP Power Products, Inc. v. Arctic Cat, Inc.

Dated: February 2, 2018 Respectfully submitted,

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# **CERTIFICATE OF SERVICE**

I hereby certify that the foregoing Patent Owner Arctic Cat, Inc.'s Notice of Appeal to the U.S. Court of Appeals for the Federal Circuit was served via email on February 2, 2018 on the following:

Michael T. Griggs mtg@boylefred.com Eric J. Lalor ejl@boylefred.com Sarah M. Wong smw@boylefred.com BOYLE FREDRICKSON, S.C. 840 North Plankinton Ave. Milwaukee, WI 53203

Date: February 2, 2018 /Jason S. Jackson/

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# **ATTACHMENT A**

Paper No. 31 Entered: December 5, 2017

#### UNITED STATES PATENT AND TRADEMARK OFFICE

#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

GEP POWER PRODUCTS, INC., Petitioner,

v.

ARCTIC CAT INC., Patent Owner.

Case IPR2016-01388 Patent 7,420,822 B2

Before MICHAEL R. ZECHER, JENNIFER S. BISK, and JESSICA C. KAISER, *Administrative Patent Judges*.

KAISER, Administrative Patent Judge.

FINAL WRITTEN DECISION

Inter Partes Review

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

#### I. INTRODUCTION

GEP Power Products, Inc. ("Petitioner") filed a Petition pursuant to 35 U.S.C. §§ 311–19 requesting an *inter partes* review of claims 1–10 of U.S. Patent No 7,420,822 B2, issued on September 2, 2008 (Ex. 1001, "the '822 patent"). Paper 1 ("Petition" or "Pet."). Arctic Cat Inc. ("Patent Owner") filed a Preliminary Response. Paper 10 ("Prelim. Resp."). Applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we granted Petitioner's request and instituted an *inter partes* review of all challenged claims. Paper 12, 23–24.

Following institution, Patent Owner filed a Response to the Petition (Paper 14, "PO Resp."), and Petitioner filed a Reply (Paper 17, "Pet. Reply). In addition, Petitioner filed a Motion to Exclude Evidence. Paper 23 ("Mot. to Exclude"). Patent Owner filed an Opposition to the Motion to Exclude (Paper 24), and Petitioner filed a Reply in Support of its Motion to Exclude (Paper 26). A final oral hearing was held on September 27, 2017. A transcript of that hearing has been entered in the record. Paper 30 ("Hr'g Tr.").

For the reasons discussed below, Petitioner has shown by a preponderance of the evidence that all challenged claims of the '822 patent are unpatentable.

#### II. BACKGROUND

A. The '822 Patent (Ex. 1001)

The '822 patent is titled "Power Distribution Module for Personal Recreational Vehicle." The Abstract describes the subject matter as follows:

A power distribution module for a personal recreational vehicle includes a housing and a cover. The housing defines an interior and includes a wall having an array of receptacle openings. The receptacle openings are adapted to receive and secure electrical components inside the housing. A distribution harness includes a plurality of electrical conductors and is coupled to the housing wherein the electrical conductors are in electrical communication with the electrical components inside the housing. The power distribution module can optionally include a decal to assist quick and accurate placement of the electrical components during the manufacturing process. A method for producing a personal recreational vehicle having a standardized housing over a range of models. The housing includes a component arrangement guide for locating and installing electrical components.

#### Ex. 1001, Abstract.

The '822 patent states that "[a]ll personal recreational vehicles include some type of power distribution system for routing and control of power and signals throughout the vehicle." *Id.* at 1:56–58. According to the '822 patent, however, different types of components (e.g., fuses, diodes, and relays) must be housed in different locations. *Id.* at 1:58–62. The '822 patent also notes that standardization of components within and across a product line can reduce manufacturing costs. *Id.* at 1:52–55. Thus, the '822 patent states that "it is desirable to devise a means by which the power distribution module can be easily standardized for manufacturing," and "to have a power distribution module that includes components other than fuses." *Id.* at 1:63–67.

#### B. Illustrative Claim

Claims 1, 5, and 10 are independent claims. Claim 1 is illustrative of the claims at issue and is reproduced below:

1. A personal recreational vehicle comprising:

an electrical distribution system for distributing electrical signals and power, the electrical distribution system including a power distribution module, wherein at least a portion of the electrical signals and power passes through the power distribution module, the power distribution module including:

a housing having a plurality of receptacle openings in a substantially flat wall, the wall having a front side and a back side, wherein the receptacle openings are positioned in an array of at least three equally spaced-apart rows and at least three equally spaced-apart columns, the receptacle openings positioned to receive electrical components on the front side of the wall across any adjacent openings in at least one row of the array; and

a distribution harness on the backside of the wall opposite the receptacle openings, the distribution harness having a plurality of electrical conductor cables, wherein the electrical conductor cables electrically cooperate with the receptacle openings for receiving electrical components.

*Id.* at 7:7–27.

# C. Related Proceedings

Petitioner and Patent Owner identify a related litigation in the District of Minnesota involving the '822 patent titled: *Arctic Cat Inc. v. Polaris Industries Inc.*, No. 0:16-cv-00008-WMW-HB (D. Minn.). Pet. 1; Paper 7, 2. Petitioner indicates that it "supplies a power distribution module to [the defendant in that suit] that Patent Owner has accused of infringing the '822 patent." Pet. 1.

# D. Level of Skill in the Art

Petitioner contends that "a person having ordinary skill in the art would have at least a bachelor of science degree in mechanical engineering with at least two to five years of work experience relating to designing electrical control system components." Pet. 16. Patent Owner does not address this definition of the person of ordinary skill in the art in its Patent

Owner Response. *See generally* PO Resp. Patent Owner's expert, Ralph Wilhelm, Jr. Ph.D., testifies that a person of ordinary skill in the art could have a bachelor's degree in either electrical or mechanical engineering with the same amount of experience proposed by Petitioner. Ex. 2001 ¶ 8. Because this definition of the level of skill in the art is consistent with the '822 patent and the asserted prior art, we agree with Patent Owner and determine a person of ordinary skill in the art would have at least a bachelor of science degree in mechanical engineering or electrical engineering with at least two to five years of work experience relating to designing electrical control system components. Thus, we adopt Patent Owner's definition and apply it to our evaluation below, but note that our conclusions would remain the same under Petitioner's definition.

#### E. References and Other Evidence

We instituted trial based on the following references:

- 1. "Svette" (U.S. Patent No. 5,354,211; issued Oct. 11, 1994) (Ex. 1005);
- 2. "Matsuoka" (U.S. Patent No. 6,121,548; issued Sept. 19, 2000) (Ex. 1003)
- 3. "Boyd" (U.S. Patent No. 6,850,421 B2; filed April 1, 2002; issued Feb. 1, 2005) (Ex. 1002).

In addition, Petitioner submitted an expert declaration from Mr. Lawrence R. Happ (Ex. 1006, "Happ Decl.").

Patent Owner relies on an expert declaration of Ralph Wilhelm, Jr. Ph.D. (Ex. 2001, "Wilhelm Decl."), and declarations of Darrel Janisch (the named inventor of the '822 patent), Del Christianson, and Kenneth Kalsnes (Ex. 2002; Ex. 2003; Ex. 2034 respectively) all filed with its Patent Owner Response. Patent Owner also filed a Second Declaration of Darrel Janisch

(Ex. 2036) in support of its Opposition to the Motion to Exclude. Excerpts from the deposition transcripts for Darrel Janisch (Ex. 1008) and Ralph Wilhelm, Jr. Ph.D. (Ex. 1009) have also been filed.

F. Grounds Asserted

Trial was instituted on the following grounds:

| Reference(s)        | Basis                           | Claims             |
|---------------------|---------------------------------|--------------------|
| Boyd                | 35 U.S.C. § 102(e) <sup>1</sup> | 1, 2, 5, 9, and 10 |
| Boyd and Svette     | 35 U.S.C. § 103(a)              | 3, 4, and 6–8      |
| Svette and Matsuoka | 35 U.S.C. § 103(a)              | 1–10               |

#### III. ANALYSIS

#### A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are construed according to their broadest reasonable interpretation in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016). Under that standard, claim terms are generally 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).

In our Institution Decision, we determined that the "distribution harness" as recited in the challenged claims does not encompass the wires

<sup>&</sup>lt;sup>1</sup> The Leahy–Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284 (2011) ("AIA"), amended 35 U.S.C. §§ 102 and 103. Because the '822 patent has an effective filing date before the effective date of the applicable AIA amendments, we refer to the pre–AIA versions of 35 U.S.C. §§ 102 and 103.

(i.e., the recited "conductor cables") standing alone, but that further construction of that term was not necessary at that stage of the proceeding. Paper 12, 5–7. We also determined that the preamble of independent claim 1 is not limiting. *Id.* at 7–8.

In its Patent Owner Response, Patent Owner again raises these two claim construction issues. PO Resp. 4–10. Beyond the two issues raised by Patent Owner, we determine explicit construction of any other term is not necessary to resolve the issues before us. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

#### 1. "distribution harness"

Patent Owner contends the recited "distribution harness" is more than a bundle of wires and should be construed as an "apparatus that holds wires together." PO Resp. 4. In support, Patent Owner relies on the claim language, which recites "a distribution harness . . . having a plurality of electrical conductor cables," and the '822 specification. *Id.* at 4–6. Patent Owner also relies on the testimony of its expert, Dr. Wilhelm. *Id.* at 6 (citing Ex. 2001 ¶ 17).

Petitioner contends that the recited "distribution harness" encompasses a bundle of wires for which an additional apparatus is not required. Pet. Reply 19–20. In support, Petitioner relies on a statement in the '822 specification that "[t]he distribution harness 260 includes a plurality of electrical conductors 262, which **optionally** can be housed within a sheath 269 to keep the conductors 262 in a bundle." *Id.* at 20 (quoting Ex. 1001, 5:18–20). Petitioner also states that the parties' constructions of this term

may be a "distinction without a difference" because Patent Owner's expert admitted that structures for securing wires were known at the time of the '822 invention and a person of ordinary skill in the art would have understood benefits of using a wire harness. *Id.* at 20–23 (citing Ex. 1009, 50:19–51:7, 59:4–24).

We determine that Patent Owner's proposed construction is consistent with our preliminary construction that a "distribution harness" does not encompass the wires standing alone, whereas Petitioner's proposed construction is not. As Patent Owner notes, independent claim 1 recites "a distribution harness . . . having a plurality of electrical conductor cables." Ex. 1001, 7:22–24. Independent claims 5 and 10 recite a similar limitation. *Id.* at 8:7–9, 8:39–40. Although the specification notes that "[t]he distribution harness 260 includes a plurality of electrical conductors 262, which *optionally* can be housed within a sheath 269 to keep the conductors 262 in a bundle" (Ex. 1001, 5:18–20 (emphasis added)), we agree with Patent Owner that construing the "distribution harness" as encompassing the wires (i.e., the recited "conductor cables") standing alone would render the term "distribution harness" superfluous.

Moreover, the '822 specification is consistent with Patent Owner's construction. Petitioner relies on the statement discussed above in the '822 specification that "[t]he distribution harness 260 includes a plurality of electrical conductors 262, which *optionally* can be housed within a sheath 269 to keep the conductors 262 in a bundle" in support of its proposed construction of a "distribution harness" as a "bundle of wires." Pet. Reply 20 (quoting Ex. 1001, 5:18–20). We note, however, that even without sheath 269, the wires in Figure 3 remain held together by other apparatuses

(e.g., cable ties 264, 266, and 268). Ex. 1001, Fig. 3, 5:30–44. At the oral hearing, Petitioner's counsel contended that twisting the wires together with no separate apparatus would be a "distribution harness," but did not provide any further support in the record for such a position. Hr'g Tr. 63:9–64:11. We find no support in the record for twisted wires standing alone being a "distribution harness."

For the reasons discussed above, we determine Patent Owner's proposed construction of "distribution harness" is consistent with our preliminary construction and with the intrinsic evidence. Accordingly, we construe the recited "distribution harness" as an apparatus that holds wires (i.e., the recited "conductor cables") together.

#### 2. Claim Preambles

The preamble of independent claim 1 recites "[a] personal recreational vehicle"; the preamble of independent claim 5 recites "[a]n electrical distribution module for a vehicle"; and the preamble of independent claim 10 recites "[a] power distribution module." Ex. 1001, 7:7, 7:41–42, 8:28. Patent Owner contends the preambles of independent claims 1, 5, and 10 are limiting for the following reasons: "(1) the specification consistently describes the invention of the '822 patent as a PDM [power distribution module] for a vehicle; (2) a [person of ordinary skill in the art] would understand the preambles as limiting in view of the specification; and (3) Petitioner treats the preambles as limiting." PO Resp. 7. In particular, Patent Owner contends "[t]he preambles recite limitations and give life, meaning and vitality to the claims, and so should be read as limiting." *Id.* In support, Patent Owner cites portions of the specification that mention a "personal recreational vehicle." *Id.* at 7–9 (providing numerous citations to

Ex. 1001). Patent Owner also contends Petitioner treats the claim preambles as limiting "by mapping the preambles to alleged prior art." *Id.* at 9. Patent Owner further relies on Dr. Wilhelm's testimony that "a person of ordinary skill in the art would give meaning to the 'vehicle' terms in the preambles in view of the specification." *Id.* at 10 (citing Ex. 2001 ¶ 22). Petitioner contends the claim preambles are not limiting and that Dr. Wilhelm's testimony does not support otherwise. Pet. Reply 27–28.

As an initial matter, in the claim construction section of its brief, Patent Owner directs its arguments to the preambles of all three independent claims. PO Resp. 7–10. In addressing Petitioner's unpatentability grounds, however, Patent Owner addresses only the preamble of independent claim 1. *Id.* at 37, 40–41. Thus, as we did in our Institution Decision, we determine we need address only whether the preamble of claim 1 is limiting. Paper 12, 7–8; *see Vivid Techs.*, 200 F.3d at 803 (holding that "only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy").<sup>2</sup>

"[A] preamble generally is not limiting when the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention." *Catalina Marketing Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 809 (Fed. Cir. 2002). In addition, "preambles describing the use of an invention generally

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<sup>&</sup>lt;sup>2</sup> We also note that Patent Owner's counsel conceded at the oral hearing that an independent claim in a related patent does not recite a personal recreational vehicle, and Patent Owner does not seek to read that limitation into that claim. Hr'g Tr. 55:4–56:9. We also find that neither claim 5 nor claim 10 recites a *personal recreational* vehicle, and we do not read any such limitation into either claim.

do not limit the claims because the patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure." *Id*.

We determined in our Institution Decision that the claim body of claim 1 describes a structurally complete invention. Paper 12, 7–8. We are not persuaded to disturb that determination here. In particular, claim 1 recites limitations including, *inter alia*, a housing, a plurality of receptacle openings, and a distribution harness having a plurality of electrical conductors. The body of that claim does not recite a personal recreational vehicle. Thus, we determine the claim body of claim 1 "describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention." *See Catalina*, 289 F.3d at 809.

We further find that Dr. Wilhelm's testimony is entitled to little weight in addressing this issue. Dr. Wilhelm testified that a person of ordinary skill in the art "would give meaning to the 'vehicle' terms in the preambles since the specification consistently describes the invention in the context of a recreational vehicle with a PDM or as a PDM for a recreational vehicle." Ex. 2001 ¶ 22. We find that whether a person of ordinary skill in the art would *give meaning* to terms in a preamble is not the proper inquiry to determine whether those terms in a preamble *limit* the scope of the claim. Mr. Wilhelm conceded at his deposition that he had not addressed in his declaration whether the claims recite structurally complete inventions. Ex. 1009, 36:17–25.

We are also not persuaded that we should alter our preliminary determination on this issue based on Petitioner's alleged treatment of the claim preambles as limiting "by mapping the preambles to alleged prior art," as Patent Owner contends. PO Resp. 9. We agree with Patent Owner that Petitioner has the burden of persuasion to establish unpatentability (*id.*), but we do not view Petitioner's treatment of the preambles in its analysis of its unpatentability grounds as a binding admission that those preambles are limiting.

Finally, we disagree with Patent Owner that the axiom that different words in a claim have different meanings requires us to find the preamble of claim 1 is limiting (*id.* at 10). Specifically, although we agree with Patent Owner that not all of the claim preambles recite a "vehicle" limitation (*id.*), the fact that the patent drafter chose to include this term in some claims and not others does not convert that preamble term into a claim limitation.

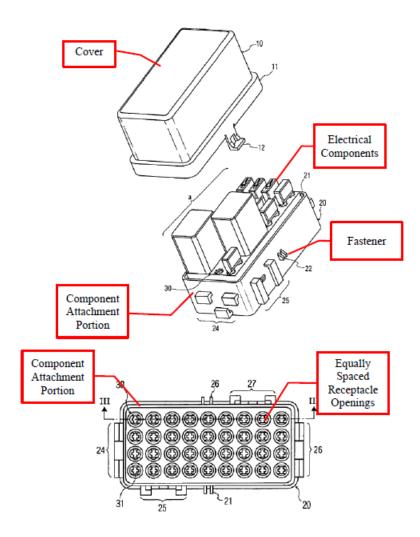
For the reasons discussed above, we conclude that the preamble of claim 1 is not limiting.

# B. Asserted Anticipation by Boyd

#### 1. Overview of Boyd

Boyd is titled "Fuse Relay Box Apparatus, Methods and Articles of Manufacture," and the application leading to Boyd was filed on April 1, 2002. Ex. 1002, at [54], [22]. Petitioner contends Boyd is prior art under 35 U.S.C. § 102(e). Pet. 11.

Boyd discloses a "fuse relay box" with a cover and base, where the base includes "a number of channels adapted for use by either a fuse or relay." Ex. 1002, Abstract. Figures 1 and 2 of Boyd as annotated by Petitioner (Pet. 12–13) are reproduced below.



Annotated Figure 1 of Boyd depicts a preferred embodiment of Boyd's fuse relay box with electrical components installed therein. Ex. 1002, 2:65–66. Annotated Figure 2 of Boyd depicts the underside of base 20 with a matrix of channels 30. *Id.* at 3:51–55.

# 2. Status of Boyd as Prior Art

Petitioner has the burden of persuasion to prove unpatentability by a preponderance of the evidence, and that burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). Petitioner also has the burden to show that a reference is

prior art to certain claims under a relevant section of 35 U.S.C. § 102. *Id.*Here, it is undisputed that Boyd has a filing date of April 1, 2002, and the '822 patent has an effective filing date of October 29, 2002. Ex. 1001, at [63]; Ex. 1002, at [22]; Pet. 10; PO Resp. 11. In addition, Petitioner acknowledges that the Examiner issued a rejection over Boyd during the prosecution of the '822 patent. Pet. 5. In response to that rejection, Patent Owner submitted a declaration from the named inventor of the '822 patent, Darrel Janisch, under 37 C.F.R. § 1.131, allegedly swearing behind Boyd. Ex. 1007, Aug. 6, 2007 Janisch Decl. In the Petition, Petitioner alleged that this declaration is insufficient. Pet. 10–11. We determine that Petitioner met its initial burden by alleging Boyd is prior art under 35 U.S.C. § 102(e) and calling into question the sufficiency of Mr. Janisch's declaration.

Following institution, Patent Owner contends that Boyd is not prior art because (1) Patent Owner can antedate Boyd and (2) Boyd was not created "by another" under 35 U.S.C. § 102(e). PO Resp. 11–37. We address each of these contentions below.

# a. Antedating Boyd

Patent Owner contends Boyd is not prior art because it can antedate Boyd. PO Resp. 11–25. After Petitioner met its initial burden to show Boyd is prior art, as discussed above, the burden of production shifts to Patent Owner to argue or produce evidence that the asserted reference is not prior art. *Dynamic Drinkware*, 800 F.3d at 1380. If Patent Owner meets that burden of production, the burden shifts back to Petitioner. *Id.* We emphasize that the ultimate burden of establishing unpatentability always remains with Petitioner.

To antedate, Patent Owner contends Darrel Janisch, the named inventor of the '822 patent, conceived of the inventions claimed in the '822 patent prior to Boyd's filing date (PO Resp. 12–20) and that Mr. Janisch was diligent in reducing these inventions to practice through the constructive reduction to practice date (*id.* at 20–25). We have reviewed both parties' arguments and evidence, and we determine, viewing the record as a whole, that the evidence supports a determination that Patent Owner has not antedated Boyd.

An inventor may swear behind a reference if he was the first to conceive of an invention, and then connects the conception of his invention with its reduction to practice by reasonable diligence on his part, such that conception and diligence are substantially one continuous act. Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1577 (Fed. Cir. 1996). A party alleging diligence must account for the entire critical period. Griffith v. Kanamaru, 816 F.2d 624, 626 (Fed. Cir. 1987); Gould v. Schawlow, 363 F.2d 908, 919 (CCPA 1966). While "[a] patent owner need not prove the inventor continuously exercised reasonable diligence throughout the critical period[,] it must show there was reasonably continuous diligence." Perfect Surgical Techniques, Inc. v. Olympus Am., Inc., 841 F.3d 1004, 1009 (Fed. Cir. 2016) (citing Tyco Healthcare Grp. v. Ethicon Endo-Surgery, Inc., 774 F.3d 968, 975 (Fed. Cir. 2014); Monsanto Co. v. Mycogen Plant Sci., Inc., 261 F.3d 1356, 1370 (Fed. Cir. 2001)). For reasonably continuous diligence, an inventor is not required to work on reducing his invention to practice every day during the critical period, and periods of inactivity are not automatically fatal to a patent owner's claim of reasonable diligence. *Id.* The Federal Circuit has also counseled that the point of this analysis is not to scour patent owner's corroborating evidence to identify gaps in activity, but rather to view the evidence as a whole to assure that the invention was not abandoned or unreasonably delayed. *Id*.

A party alleging diligence, however, must provide corroboration with evidence that is specific both as to facts and dates. *Gould*, 363 F.2d at 920; *Kendall v. Searles*, 173 F.2d 986, 993 (CCPA 1949). A "rule of reason" analysis is applied to determine whether the inventor's testimony has been corroborated, and under such an analysis, "[a]n evaluation of *all* pertinent evidence must be made so that a sound determination of the credibility of the inventor's story may be reached." *Price v. Symsek*, 988 F.2d 1187, 1195 (Fed. Cir. 1993). The rule of reason, however, does not dispense with the need for corroboration of diligence that is specific as to dates and facts. *Gould*, 363 F.2d at 920; *Kendall*, 173 F.2d at 993; *see Coleman v. Dines*, 754 F.2d 353, 360 (Fed. Cir. 1985).

Patent Owner provides a declaration from Mr. Janisch that addresses both conception and diligence in reducing the inventions covered by the claims of the '822 patent to practice. Ex. 2002. Mr. Janisch testifies that he conceived of the PDM described and claimed in the '822 patent at least as early as April 1, 2002. During the relevant time period, Mr. Janisch was an employee at Arctic Cat, and he testifies that Arctic Cat contracted with Tyco Electronics, Inc. to manufacture the PDM according to his designs. *Id.* ¶ 11. For conception, Mr. Janisch provides a table that correlates some of the claim limitations to statements in Patent Owner's exhibits. *Id.* ¶ 14. Mr. Janisch further contends that the PDM was diligently reduced to practice from just before April 1, 2002 until October 29, 2002, the constructive reduction to practice of his inventions. *Id.* ¶¶ 15, 16. He testifies that he,

and others at Arctic Cat, directed Tyco to diligently reduce the PDM to practice. *Id.* ¶ 17. Mr. Janisch provides a table showing activities for date ranges covering the entire critical period. *Id.* ¶ 19.

Patent Owner also provides declarations from two Arctic Cat employees, Mr. Christianson and Mr. Kalsnes. Regarding diligence, Mr. Christianson testifies:

I worked with Darrel [Janisch] and his team from just before April 1, 2002 through October 29, 2002. During that time, I observed Darrel and his team diligently work on the PDM and use Tyco to make and test prototypes and various components. I participated in shop discussions, saw technical drawings, and was involved in testing for Darrel's PDM prototypes during that time.

Ex. 2003 ¶ 14. Mr. Kalsnes' testimony does not mention Tyco. *See* Ex. 2034. He testifies that: "I worked with Darrel [Janisch] and his team from before April 1, 2002 through October 29, 2002. I observed Darrel and his team diligently work on the PDM during that time. I participated in discussions and meetings and reviewed layouts regarding the PDM." *Id.* ¶ 9. Patent Owner further submits a number of documents that it alleges corroborate Mr. Janisch's conception and diligence to reduction to practice. *See* Exs. 2004–2033.

We determine Patent Owner's evidence is insufficient to show reasonably continuous diligence throughout the entire critical period. In particular, Mr. Janisch's declaration purports to show continuous diligence during the critical period in the table in paragraph 19 (Exhibit 2002). However, each row in that table refers to a date range and generally describes documents that bookend the date range, without sufficiently

detailed explanation of events occurring between the bookend communications.

For example, for the period of April 1, 2002 to April 29, 2002, Mr. Janisch cites documents dated April 1 (Ex. 2013), April 2 (Ex. 2014), and April 29 (Ex. 2015). In Exhibit 2013 (April 1), Mr. Janisch sends Tyco approval for a PDM specification and test proposal dated March 15, 2002. The record does not include that specification and proposal, but Mr. Janisch testifies "that further testing was conducted." Ex. 2002 ¶ 19. Exhibit 2014 reflects a drawing dated April 2, 2002, which Mr. Janisch testifies shows an embodiment "that was being developed at that time," but other than further testing, Mr. Janisch does not identify any development activities that were occurring. In Exhibit 2015 (April 29), Tyco sends Mr. Janisch results of "preliminary heat rise tests of Arctic Cat PDM, sealed unit, STL sample." Mr. Janisch testifies that Exhibit 2015 shows that "Tyco had been diligently testing the PDM at my request, such as testing heat given off by the PDM." Ex. 2002 ¶ 19. Other than the above, Mr. Janisch testifies generally that he "continued to work on developing the PDM both internally and with Tyco." *Id.*; see Pet. Reply 7–9. Because Mr. Christianson's and Mr. Kalsnes' testimony is not specific as to facts and dates, neither provides additional details on any activities occurring at Arctic Cat or Tyco from April 1 to April 29, 2002. See Ex. 2003, 2034.

As another example, Mr. Janisch includes rows in his table for August 16, 2002 to October 18, 2002; October 18, 2002 to October 29, 2002; and October 29, 2002. Ex. 2002 ¶ 19. In these rows, Mr. Janisch cites

communications dated August 16, October 18, and October 28. *Id.*<sup>3</sup> In Exhibit 2021 (August 16), Mr. Janisch sends Tyco approval for product specifications and design objectives, and authorizes Tyco to proceed with testing. In Exhibit 2022 (October 18), Tyco provides Arctic Cat with a quotation for PDM bases and covers. In Exhibit 2023 (October 28), Tyco sends Mr. Janisch PDM drawing files. Constructive reduction to practice occurred on October 29, 2002, when the application leading to the '822 patent was filed. Ex. 1001, at [63]. Other than the facts in the three exhibits discussed above, Mr. Janisch testifies for this time period that "Tyco diligently performed testing on PDMs"; he "continued to integrate the PDM design into [Arctic Cat's] vehicle harness designs . . . [which] included electrical wire routing to and from the PDM, and location and mounting of the PDM within various vehicle chassis"; and he "continued to test and develop the PDM." Ex. 2002 ¶ 19; see Pet. Reply 11–12.

We highlight these two exemplary time periods, not to scour the record for gaps in activity, but rather to highlight the character of Patent Owner's evidence. The critical period in this case spans 211 days (April 1, 2002 to October 29, 2002), and the two exemplary time periods above account for 102 days of the critical period, or almost half. During these two time periods, Patent Owner presents evidence that Tyco was performing testing on the PDM, but the record contains little evidence of what that testing entailed and no evidence of the amount of time any testing was

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<sup>&</sup>lt;sup>3</sup> Patent Owner also cites to Exhibit 2033 as evidence of diligence during this time period. PO Resp. 21. Exhibit 2033, however, is dated September 25, 2001 (not 2002). Mr. Janisch's declaration includes the correct date for this exhibit and relies on that document as evidence of conception, not diligence. See Ex. 2002 ¶ 14.

expected to take. For example, the record does not include the PDM specification and test proposal or the PDM development timeline referenced in Exhibit 2013, the test results referenced in Exhibit 2015, or the product specifications and design objectives referenced in Exhibit 2021. We find that, in this case, the lack of explanatory documents coupled with the lack of testimony as to facts and dates leaves large periods during the critical period for which only generalized explanations are provided. In other words, Mr. Janisch's testimony summarizes the corroborative documents, but provides little additional information for the time periods between those documents. We also find the documents themselves provide insufficient information for us to infer what activities were occurring in the time periods between those documents (and whether such activities were expected to account for those time periods). As noted above, the testimony of the other two Arctic Cat employees is not sufficiently specific as to facts and dates to be helpful.

Thus, viewing the record as a whole and applying the rule of reason, we find not credible Mr. Janisch's testimony that there were no gaps in diligence during the critical period. We acknowledge that Mr. Janisch's testimony in Exhibit 2002 relates to events occurring approximately 15 years earlier. However, we note that Mr. Janisch submitted a declaration in 2007 during prosecution of the application leading to the '822 patent, only about five years after the critical period, and Mr. Janisch did not include additional facts and dates in that declaration. Ex. 1007, Aug. 6, 2007 Janisch Decl.

We also determine that Mr. Janisch's testimony fails to show his invention was not delayed unreasonably. As discussed in detail above, Mr. Janisch provides only general explanations of what activities occurred between the corroborative documents: e.g., "I continued to work on

developing the PDM both internally and with Tyco," and "Tyco [or Tyco and Arctic Cat] continued to test and refine various aspects of the PDM at my request." Ex. 2002 ¶ 19. Declarations fail in their purpose when they merely make unsupported conclusory statements. *See In re Wright*, 999 F.2d 1557, 1563 (Fed. Cir. 1993); *In re Brandstadter*, 484 F.2d 1395, 1405 (CCPA 1973). Mr. Janisch's conclusory explanations, which lack specifics as to facts and dates, are insufficient to show the invention was not delayed unreasonably.

At the oral hearing, Patent Owner's counsel contended that the evidence discussed above met Patent Owner's burden of production, and that the burden of production then shifted back to Petitioner; Patent Owner's counsel further argued that Petitioner failed to meet that burden by not offering rebuttal evidence and instead "picking at the evidence of record." Hr'g Tr. 34:1–17. Even if we accept Patent Owner's contention that its evidence met its burden of production and the burden of production shifted to Petitioner, we determine that Petitioner met its burden by highlighting deficiencies in Patent Owner's evidence. See Pet. Reply 5–12. In particular, we find persuasive Petitioner's arguments that "Mr. Janisch's testimony that he 'continued to work on developing the PDM' . . . without offering any specific details as to what he was doing or any corroborating evidence, falls far short of the evidence required to establish diligence." Pet. Reply 9; see id. at 10–12. We disagree with Patent Owner that Petitioner was required to put in additional evidence to rebut Mr. Janisch's testimony. Instead, we determine Petitioner has met its burden to show Boyd is prior art by relying on Boyd itself and showing that Patent Owner's evidence is insufficient to

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establish reasonably continuous diligence throughout the entire critical period.

Viewing the record as a whole, and applying the rule of reason, we find the evidence does not show reasonably continuous diligence throughout the entire critical period. Thus, we determine Patent Owner has not antedated Boyd.

b. "By another" under 35 U.S.C. § 102(e)

Patent Owner also contends Boyd is not prior art under 35 U.S.C. § 102(e) because it is not "by another." PO Resp. 25–37. In particular, Patent Owner contends the portions of Boyd on which Petitioner relies actually describe Janisch's own work. *Id.* at 25.

35 U.S.C. § 102(e) states in relevant part: "A person shall be entitled to a patent unless — . . . (e) the invention was described in — . . . (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent." The '822 patent lists Darrel Janisch as the only named inventor, and Boyd lists Kenneth S. Boyd as the only named inventor. Ex. 1001, at [75]; Ex. 1002, at [75]; Pet. Reply 18. Thus, Boyd on its face is "by another" because the '822 patent and Boyd list different inventors.

#### Patent Owner contends we

'must look beyond the superficial fact that the references were issued to different inventive entities. What is significant is not merely the differences in the listed inventors, but whether the portions of the reference relied on as prior art, and the subject matter of the claims in question, represent the work of a common inventive entity.'

PO Resp. 25 (quoting *Riverwood Int'l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1356 (Fed. Cir. 2003) (citing *In re DeBaun*, 687 F.2d 459, 462 (CCPA

1982))). Petitioner contends that the "by another" clause of § 102(e) is satisfied because "there is no overlap between the legal inventive entities of the two patents." Pet. Reply 18. Petitioner further contends that Mr. Janisch might have a claim for correction of inventorship of the Boyd patent, but such a claim would "not affect the current legal status of the inventive entity of Boyd." *Id.* We agree with Patent Owner that overlap in inventive entities is not required to find that a reference is not "by another" under § 102(e).

In *In re Mathews*, 408 F.2d 1393, 1393–94 (CCPA 1969), the court addressed the question of whether a rejection under 35 U.S.C. § 102(e) could be overcome by an affidavit from the inventor of the asserted prior art reference "averring that the relevant, unclaimed subject matter disclosed in his patent was not invented by the patentee[,] but was first disclosed to him by the appellant, particularly in light of certain acknowledgments in the patent and in the instant application." There was no overlap in the inventive entity between the pending application (Mathews) and the asserted reference (Dewey). *Id.* at 1393. The court, however, found that Mathews had presented sufficient evidence to show that the relevant disclosure in Dewey was a disclosure of Mathews' invention. *Id.* at 1396. In particular, Mathews provided an affidavit from Dewey, Mathews' co-worker, averring that Dewey did not invent the description of Mathews' invention in Dewey's application, that Mathews disclosed that device to Dewey, that Dewey did not know of that device prior to Mathews' disclosure to him, that the disclosure was included in Dewey's application only to comply with the requirements of 35 U.S.C. § 112, and that Dewey had not claimed the description of Mathews' invention. *Id.* at 1394. The court found that this affidavit along with statements in both Mathews' application and Dewey

were sufficient to show that the relied-upon disclosure in Dewey actually disclosed Mathews' own invention. *Id.* at 1394–96.

Neither party addresses *Mathews* in its papers. However, we determine that case supports Patent Owner's position that there need not be overlap in inventorship for us to consider whether portions of a reference are actually "by another" as required by § 102(e).

Nevertheless, we determine the evidence presented in this case supports that Boyd qualifies as "by another" under 35 U.S.C. § 102(e). As discussed above, the '822 patent lists Darrel Janisch as the only named inventor, and Boyd lists Kenneth S. Boyd as the only named inventor. Ex. 1001, at [75]; Ex. 1002, at [75]. Because "the inventors named on the issued patent are presumed to be correct," *Shum v. Intel Corp.*, 633 F.3d 1067, 1083 (Fed. Cir. 2010), Boyd's listing of only Boyd is itself evidence that patent is "by another."

To determine that the relied-upon portions of Boyd<sup>4</sup> are not "by another," the evidence must show that those portions of Boyd are in fact Janisch's invention and *not Boyd's*. *See Mathews*, 408 F.2d at 1036 (finding the record showed that "Dewey derived his knowledge from Mathews who is 'the original, first, and sole inventor'"). The record here does not include sufficient evidence to make such a finding. Patent Owner's contentions focus on Mr. Janisch's inventions covered by the '822 patent and his communications to Boyd and others at Tyco. *See* PO Resp. 26–37. Patent Owner's contentions that Boyd did not himself know about the disclosures

<sup>&</sup>lt;sup>4</sup> Petitioner relies on the following disclosures in Boyd for its anticipation ground: Figures 1–3, Abstract, 1:11–40, 2:65–3:3, 3:44–54, 4:19–21, 4:41–46. Pet. 27–30.

in his patent prior to Janisch's disclosures are limited to its contentions that: (1) "Darrel Janisch invented the claimed PDM because he could not find what he wanted in the market, including at Tyco" (*id.* at 26); (2) "Tyco recognized Arctic Cat's ownership of Janisch's design" (*id.*); and (3) "[s]ince Tyco was manufacturing the PDM for Arctic Cat, Boyd and others at Tyco necessarily received full details of Janisch's PDM design, and the evidence of record establishes that those details formed the basis for the Boyd patent" (*id.* at 28). We find the evidence of record does not support these contentions.

First, to support that "Darrel Janisch invented the claimed PDM because he could not find what he wanted in the market, including at Tyco" (*id.* at 26), Patent Owner cites Exhibit 2033 as showing Darrel Janisch stated on September 25, 2001: "No existing PDM has the content flexibility and that is why we have decided to design a completely new PDM, different than anything now available on the open market." However, at the oral hearing, Patent Owner's counsel agreed that there is no evidence in the record establishing the identity of the recipient of the email in Exhibit 2033 or to whom "we" refers in the statement quoted above. Hr'g Tr. 28:1–29:3. In addition, we find that the lack of availability of a product on the "open market" provides little, if any, evidence about Mr. Boyd's own knowledge, for example, of products not yet commercialized.

Patent Owner further cites Mr. Kalsnes' testimony, but that testimony does not mention Tyco or Mr. Boyd. *See* Ex. 2034. Patent Owner also cites Mr. Christianson as testifying that "Arctic Cat approached Tyco[,] but they didn't have anything like Janisch's PDM." PO Resp. 26 (citing Ex. 2003 ¶ 12). Mr. Christianson, however, does not so testify. Instead, he testified:

"I observed group discussions at Arctic Cat about approaching Tyco Electronics ('Tyco') to see if they had anything like Darrel's PDM, of if they could manufacture one. Arctic Cat had Tyco tool and manufacture the PDM for Arctic Cat based on Darrel's designs." Ex. 2003 ¶ 12. This testimony supports that Arctic Cat employees talked about approaching Tyco, but not the substance of any conversations between Tyco and Arctic Cat, including whether Tyco (and specifically Mr. Boyd) already had anything like Mr. Janisch's designs before discussions with Mr. Janisch commenced.

We further find that Patent Owner's contention that "Tyco recognized Arctic Cat's ownership of Janisch's design" (PO Resp. 26) is irrelevant to the issue of whether the relied-upon portions of Boyd are "by another." In particular, Patent Owner cites Exhibits 2030 and 2032, which show that in 2003 and 2004 (after Boyd's filing date), Tyco requested permission from Arctic Cat to sell a PDM to other non-competing customers. The cited correspondence provides only limited information about a commercial arrangement between the two firms after the relevant time period. We find that alleged commercial ownership of a product's design after the relevant time period, without more, does not provide persuasive evidence of who invented that product in the first place.

Patent Owner contends that, "[s]ince Tyco was manufacturing the PDM for Arctic Cat, Boyd and others at Tyco necessarily received full details of Janisch's PDM design, and the evidence of record establishes that those details formed the basis for the Boyd patent." PO Resp. 28. We disagree because the record does not include evidence of what formed the basis of the Boyd patent. We note that the record does not include testimony from Mr. Boyd or anyone at Tyco. As support for its statement, Patent

Owner relies on the similarity between Figure 9 of a related patent,<sup>5</sup> Figure 2 of Boyd, and a February 6, 2002 drawing made by Tyco (Ex. 2011) as "clearly show[ing] that the relevant features of the Boyd patent came from Janisch." PO Resp. 28–31 (citing Ex. 2002 ¶¶ 31–32). We agree that the drawings have similarities, but disagree that such similarities necessarily show Janisch *and not Boyd* invented those features.

In sum, for the relied upon disclosures to not be "by another" under § 102(e), those disclosures must have the same inventive entity as the challenged patent, namely Janisch and only Janisch. We determine the preponderance of the evidence shows that the relied upon disclosures in Boyd are "by another" because the contrary evidence provided by Patent Owner addresses only what Janisch invented and communicated to Boyd and others at Tyco, but does not address persuasively whether Boyd was a prior or joint inventor of those disclosures.

For the reasons discussed above, we determine Petitioner has shown that Boyd is available as prior art under 35 U.S.C. § 102(e).

# 3. Anticipation

Petitioner contends that claims 1, 2, 5, 9, and 10 are anticipated by Boyd. Pet. 25–30. We have reviewed the information provided by Petitioner, including the relevant portions of the supporting Happ Declaration (Ex. 1006), and are persuaded that Petitioner has demonstrated by a preponderance of the evidence that claims 1, 2, 5, 9, and 10 are unpatentable as anticipated by Boyd.

<sup>&</sup>lt;sup>5</sup> The '822 patent issued from a continuation of the application leading to U.S. Patent No. 7,072,188 ("the '188 patent"). Ex. 1001, at [63]. Patent Owner cites Figure 9 of the '188 patent.

To establish anticipation, each and every element in a claim, arranged as recited in the claim, must be found in a single prior art reference. *See 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). Although the elements must be arranged or combined in the same way as in the claim, "the reference need not satisfy an *ipsissimis verbis* test," i.e., identity of terminology is not required. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009); *accord In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

Petitioner's anticipation analysis, as supported by the Happ Declaration, demonstrates where each element of the challenged claims is disclosed in Boyd. Pet. 25–30. We agree with and adopt Petitioner's analysis as our own. For example, Petitioner contends Boyd teaches a wall with equally-spaced receptacle openings (i.e., channels 30) in a 4 by 9 matrix. *Id.* at 26 (citing Ex. 1002, Fig. 2, 3:52–54; Ex. 1006 ¶ 67). Petitioner also contends Figure 1 of Boyd shows "electrical components *a* bridging across channels 30." *Id.* (citing Ex. 1002, Fig. 1; Ex. 1006 ¶ 68). Petitioner further contends Boyd discloses the recited "distribution harness" because Boyd states that wires may be grouped together "by way of [a] harness." *Id.* (citing Ex. 1002, 4:19–21; Ex. 1006 ¶ 69).

Petitioner further provides a claim chart detailing where it contends each limitation of claims 1, 2, 5, 9, and 10 is disclosed in Boyd. *Id.* at 27–30. We have reviewed Petitioner's evidence and argument, and find that Petitioner has shown Boyd discloses each limitation of the challenged claims.

In the Patent Owner Response, Patent Owner contends Boyd is not prior art. PO Resp. 11–37. For the reasons discussed above, we determine that Boyd qualifies as prior art, and do not find Patent Owner's contentions persuasive. Patent Owner does not present further arguments regarding this unpatentability ground.

For the reasons discussed above, we determine Petitioner has shown by a preponderance of the evidence that claims 1, 2, 5, 9, and 10 are unpatentable as anticipated by Boyd.

- C. Asserted Obviousness Over Boyd and Svette
  - 1. Overview of Svette

Svette is titled "Alignment Overlay for Connector Housing Block" and issued on October 11, 1994. Ex. 1005, at [54], [45]. Svette "relates to an electrical connector assembly," which has "a multi-cavity connector housing block, a plurality of electrical devices connected to terminals carried in the cavities of the housing block and an alignment overlay adhesively attached to the block to ensure that the electrical devices are properly oriented and attached to the proper terminals in the housing block." *Id.* at 1:5–13. Figure 1 of Svette is reproduced below.

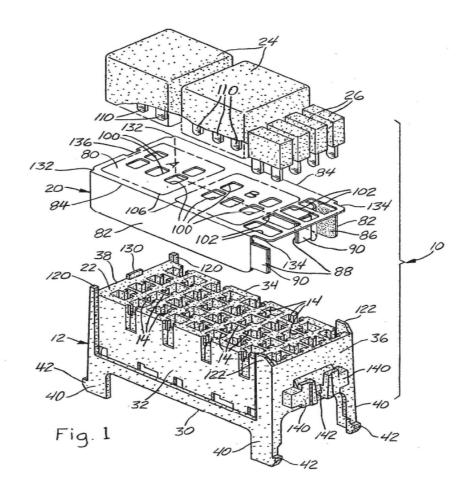


Figure 1 of Svette depicts electrical connector assembly 10, including connector housing 12, alignment overlay 20, and electrical devices 24 and 26. *Id.* at 2:12–23. The connector housing has a plurality of cavities 14 for receiving prongs 110 of the electrical devices. *Id.* at 2:12–23, 3:23–37.

#### 2. Obviousness

A claim is unpatentable under 35 U.S.C. § 103(a) if 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. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying

factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in the record, objective evidence of nonobviousness.<sup>6</sup> *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). In that regard, an obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418.

Petitioner contends that claims 3, 4, and 6–8 would have been obvious over Boyd and Svette. Pet. 30–32. We agree with and adopt Petitioner's analysis as our own. In particular, we have reviewed the information provided by Petitioner, including the relevant portions of the supporting Happ Declaration (Ex. 1006), and are persuaded that Petitioner has demonstrated the unpatentability of these claims by a preponderance of the evidence.

Specifically, Petitioner relies on Svette's overlay as teaching the additional limitations of the dependent claims in this ground, and asserts that a person of ordinary skill would have found it obvious to modify Boyd's fuse box with Svette's overlay to avoid improper connection of electrical components. Pet. 30–31 (citing Ex. 1006 ¶ 74). Petitioner provides further analysis of these challenged claims in a claim chart detailing where it contends each limitation of these claims is disclosed in Boyd and/or Svette.

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<sup>&</sup>lt;sup>6</sup> Neither party introduced objective evidence of non-obviousness or argued that the existence of secondary considerations affects this Decision's obviousness analysis. Accordingly, our analysis is based upon the first three of the four *Graham* factors.

*Id.* at 31–32. We have reviewed Petitioner's evidence and argument, and find that Petitioner has sufficiently shown the cited references teach each limitation of the challenged claims, and that Petitioner has provided a sufficiently persuasive rationale for combining those teachings. *Id.* at 30–32.

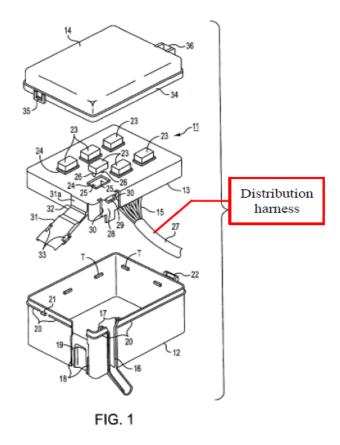
In the Patent Owner Response, Patent Owner contends Boyd is not prior art. PO Resp. 11–37. For the reasons discussed above, we determine that Boyd qualifies as prior art, and do not find Patent Owner's contentions persuasive. Patent Owner does not present further arguments regarding this unpatentability ground.

For the reasons discussed above, we determine Petitioner has shown by a preponderance of the evidence that claims 3, 4, and 6–8 are unpatentable based on obviousness over Boyd and Svette.

# D. Asserted Obviousness Over Svette and Matsuoka

# 1. Overview of Matsuoka

Matsuoka is titled "Electrical Connection Box" and issued on September 19, 2000. Ex. 1003, at [54], [45]. Petitioner relies on Matsuoka as teaching a wire harness as shown in annotated Figure 1 below (Pet. 13–14).



Annotated Figure 1 of Matsuoka depicts electrical connection box 11 with electrical components 23 mounted on electrical component mounting block 13, and wire harness bundle 27 bundled with bundling tape. Ex. 1003, 3:7–49, Fig. 1.

#### 2. Obviousness

Petitioner contends that claims 1–10 would have been obvious over Svette and Matsuoka. Pet. 24–25; *see id.* at 16–24. We agree with and adopt Petitioner's analysis as our own. Specifically, Petitioner contends that, to the extent Svette does not disclose a distribution harness as properly construed, "[i]t would have been obvious for a person having ordinary skill in the art to use the distribution harness disclosed in Matsuoka with the distribution module of Svette, which is nothing more 'than the predictable use of prior art elements according to their established functions." *Id.* at 25

(citing *KSR*, 550 U.S. at 416; Ex. 1006  $\P$  65). Mr. Happ further provides reasons why a person of ordinary skill in the art would have found it obvious to use a wire harness with a power distribution module, such as that taught in Svette, including bundling the wires to prevent fraying and to organize the wires in an orderly manner. Ex. 1006  $\P$  65. Petitioner relies on the analysis presented in its (not instituted) anticipation ground based on Svette for all of the other limitations of claims 1–10. Pet. 25.

Petitioner's obviousness analysis, as supported by the Happ Declaration, demonstrates where each element of the challenged claims is taught by the combination of Svette and Matsuoka. Pet. 16–25. For example, Petitioner contends Svette's cavities 14 teach the recited receptacles or receptacle openings and that those cavities are equally spaced apart and arranged in a 4 by 9 array. *Id.* at 17–18 (citing Ex. 1005, Fig. 1; Ex. 1006 ¶ 56). Petitioner further provides a claim chart detailing where it contends each limitation of claims 1–10 is disclosed in Svette, and, as discussed above, explains why a person of ordinary skill would have found it obvious to use a distribution harness, such as taught in Matsuoka, with Svette's distribution module. *Id.* at 21–25. We have reviewed Petitioner's evidence and argument, and find that Petitioner has shown Svette discloses each limitation of the challenged claims, other than the recited distribution harness as properly construed. We further find Petitioner has presented sufficient reasoning why a person of ordinary skill would have found it obvious to use a distribution harness such as taught in Matsuoka with the distribution module in Svette.

Patent Owner argues that Petitioner has not shown how Svette and Matsuoka disclose the location of the distribution harness as recited in claims 1–9. PO Resp. 39–40. Specifically, independent claim 1 recites "a distribution harness on the backside of the wall opposite the receptacle openings." Ex. 1001, 7:22–23. Independent claim 5 recites a similar limitation. *Id.* at 8:7. Patent Owner contends the Petition "fails to specifically show how the references disclose this 'opposite wall' element of claims 1–9 in view of the construction for 'distribution harness' proposed by Patent Owner or adopted by the Board." PO Resp. 39.

As we noted in our Institution Decision (Paper 12, 15), for the recited distribution harness, Petitioner points to electrical conductor 70 in Figure 3 of Svette. Pet. 18 (citing Ex. 1005, Fig. 3, Abstract; Ex. 1006 ¶ 58), 21–23 (citing Ex. 1005, Fig. 3, 1:5–18, 2:45–56). Figure 3 of Svette is reproduced below.

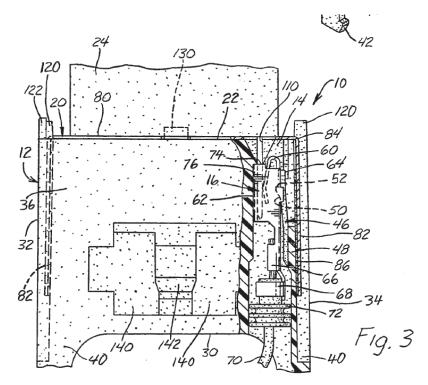


Figure 3 shows a side view of connector housing 12 with cavity 14 for connecting electrical device 24 on one wall (mating end 22) and wire 70

connected through the opposite end (cable receiving end 30). Ex. 1005, Fig. 3, 2:12–44.

Petitioner then combines Svette's teachings with Matsuoka's wire harness bundle 27. Pet. 14 (citing Ex. 1003, Fig. 1). Matsuoka Figure 1 (depicted above) shows "the upper surface of electric component mounting block 13 [] provided with an electric component mounting area 24 for mounting respective electric components 23 such as relays," and a lower (i.e., opposite) surface of the electrical component mounting block from which the wire harness extends. Ex. 1003, Fig. 1, 3:33–49. In its Reply, Petitioner contends that "when incorporating the distribution harness configuration into Svette, the wires of Svette – which extend in a vertical direction beneath the wall with the receptacles – would be directed in a horizontal direction and bundled as disclosed in Matsuoka, resulting in a distribution harness on the back side of the wall." Pet. Reply 24–25. We determine Petitioner has shown the combination of Svette and Matsuoka teach the recited location of the distribution harness. We do not find Patent Owner's arguments to the contrary persuasive because they address Svette and Matsuoka individually (PO Resp. 40), rather than the combined teachings discussed above. See In re Keller, 642 F.2d 413, 426 (CCPA 1981).

Patent Owner further contends that the Petition fails to show the combination of Svette and Matsuoka teaches the preamble of claims 1–4. PO Resp. 40–41. As discussed above in our claim construction section, however, we determine the preamble is not limiting. *See supra* Section III.A.2.

Finally, Patent Owner argues that this ground is deficient because Petitioner did not articulate a sufficient rationale to combine the teachings of Svette and Matsuoka. PO Resp. 41–42. As discussed above, however, Petitioner contends that "[i]t would have been obvious for a person having ordinary skill in the art to use the distribution harness disclosed in Matsuoka with the distribution module of Svette, which is nothing more 'than the predictable use of prior art elements according to their established functions." Pet. 25 (citing KSR, 550 U.S. at 416; Ex. 1006 ¶ 65); see Pet. Reply 28 (citing Ex. 1006 ¶ 65). Mr. Happ further provides reasons why a person of ordinary skill in the art would have found it obvious to use a wire harness with a power distribution module, such as that taught in Svette, including bundling the wires to prevent fraying and to organize the wires in an orderly manner. Ex. 1006 ¶ 65. Petitioner also cites the testimony of Patent Owner's expert, Dr. Wilhelm, who testified that such advantages of bundling wires were known. Pet. Reply 28 (citing Ex. 1009, 759:4-24). We find this rationale persuasive.

For the reasons discussed above, we determine Petitioner has shown by a preponderance of the evidence that claims 1–10 are unpatentable as obvious over Svette and Matsuoka.

#### IV. MOTION TO EXCLUDE

Petitioner moves to exclude Patent Owner's Exhibits 2004–2033 as unauthenticated, hearsay, or both. Mot. to Exclude 1. Because the outcome

<sup>&</sup>lt;sup>7</sup> We understand Petitioner's citation to Exhibit 1010 to be a typographical error because Petitioner filed excerpts of Dr. Wilhelm's deposition transcript as Exhibit 1009 in this proceeding.

of this trial would not change based on whether or not we exclude those exhibits, we dismiss Petitioner's Motion to Exclude as moot.

#### V. CONCLUSION

Petitioner has demonstrated by a preponderance of the evidence that:

- A. Claims 1, 2, 5, 9, and 10 are unpatentable as anticipated by Boyd;
- B. Claims 3, 4, and 6–8 are unpatentable as obvious over Boyd and Svette; and
- C. Claims 1–10 are unpatentable as obvious over Svette and Matsuoka.

#### VI. ORDER

It is, therefore,

ORDERED that claims 1–10 of the '822 patent are *unpatentable*; FURTHER ORDERED that Petitioner's Motion to Exclude is *dismissed*; and

FURTHER ORDERED that, because this is a Final Written Decision of the Board under 35 U.S.C. § 328(a), parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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