

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MOTIVEPOWER, INC.,  
Petitioner,

v.

CUTSFORTH, INC.,  
Patent Owner.

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Case IPR2013-00272  
Patent 8,179,014 B2

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Before TRENTON A. WARD, MIRIAM L. QUINN, and  
CARL M. DeFRANCO, *Administrative Patent Judges.*

QUINN, *Administrative Patent Judge.*

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

## I. BACKGROUND

MotivePower, Inc., Petitioner, filed a Petition to institute an *inter partes* review of all the claims (1–16) (the “challenged claims”) of U.S. Patent 8,179,014 B2 (Ex. 1001, “the ’014 patent”) pursuant to 35 U.S.C. §§ 311–19. Paper 1 (“Pet.”). The Board granted the Petition and instituted trial for all asserted claims. Paper 7 (“Dec. on Inst.”). Although Petitioner proposed seven grounds of unpatentability, the panel instituted trial on the following grounds:<sup>1</sup>

- (1) Claims 1–16 anticipated by Kartman;
- (2) Claims 1–5 and 7–15 anticipated by Baylis;
- (3) Claims 6 and 16 obvious over Baylis and Kartman;
- (4) Claims 1, 3–5, and 7–9 anticipated by Bissett; and
- (5) Claims 1–16 as obvious over Bissett and Kartman.

During trial, Patent Owner, Cutsforth Inc., filed a Patent Owner Response relying on Declarations of Dr. Thomas A. Keim (Ex. 2024) and Mr. Dustin Cutsforth (Ex. 2050). Paper 12 (“PO Resp.”). Petitioner filed a Reply to Patent Owner’s Response. Paper 22 (“Pet. Reply”).

We granted Patent Owner’s motion requesting cancellation of claims 6 and 16 of the ’014 patent. Paper 13, Order on Mot. to Amend.

Additionally, an oral hearing was held on August 6, 2014, and a transcript of the hearing is included in the record. Paper 32 (“Tr.”).

We have 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.

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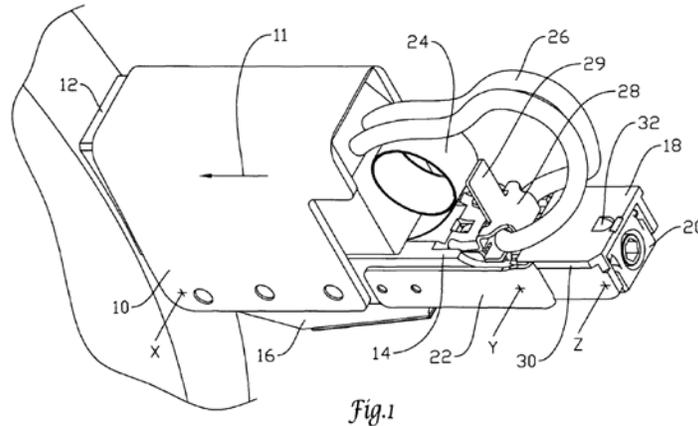
<sup>1</sup> U.S. Patent No. 5,043,619 (Ex. 1003) (“Kartman”); U.S. Patent No. 3,432,708 (Ex. 1004) (“Bissett”); and U.S. Patent No. 629,418 (Ex. 1005) (“Baylis”).

For the reasons that follow, we determine that Petitioner has met its burden to prove by a preponderance of the evidence that claims 1–5 and 7–15 of the '014 patent are unpatentable.

*A. The '014 Patent (Exhibit 1001)*

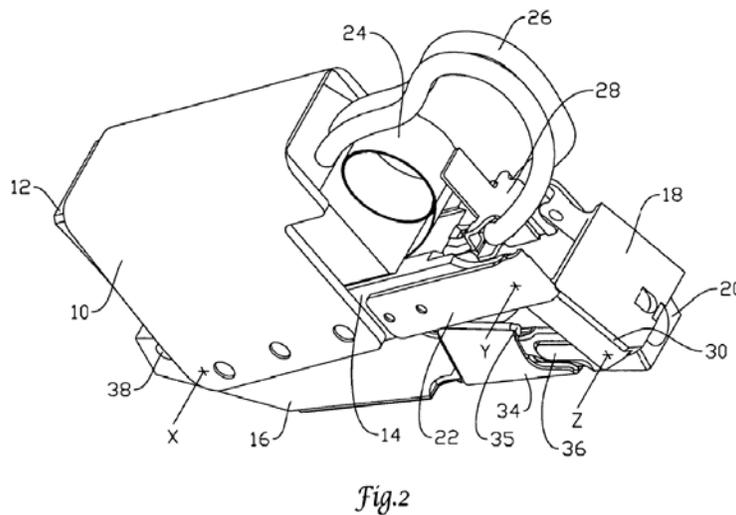
The '014 patent generally relates to a brush holder assembly for use in electrical devices and slip ring assemblies. Ex. 1001, col. 1, ll. 26–28. In particular, the patent describes that a brush is used in an electrical device to pass electrical current from a stationary contact to a moving contact surface, and vice versa. *Id.* at col. 1, ll. 42–47. Because the brush typically is in contact with a moving surface, the surface of the brush wears down, thus reducing the quality of the electrical contact. *Id.* at col. 1, ll. 47–63. The '014 patent describes that when the brush is so worn that it requires replacement, the moving contact surface may need to be halted, which may be difficult or expensive. *Id.* at col. 2, ll. 9–12. Alternatively, the '014 patent describes that maintaining the relative motion during replacement of the brush may be unsafe because of the risk of arcing and an accidental short circuit in the electrical components. *Id.* at col. 2, ll. 13–17. The patent thus describes that it would be an advantage to remove or replace a worn brush without stopping the moving parts involved. *Id.* at col. 2, ll. 16–20.

One embodiment of the '014 patent describes a brush holder assembly with a mounting bracket in an “engaged” configuration, relative to a lower mount block. *Id.* at col. 2, l. 66 – col. 3, l. 2. For example, Figure 1 of the '014 patent, reproduced below, illustrates an “engaged” configuration where brush 12, surrounded by brush box 10, is put in contact with a conducting surface because brush spring 24 pushes the brush toward the bottom edge of the box 10. *Id.* at Fig. 1; col. 4, ll. 27–34; col. 6, ll. 26–29.



According to Figure 1 above, brush box 10 is affixed to beam 14, which is affixed, via a hinged attachment, to the lower mount block 16. *Id.* at col. 4, ll. 34–41. In the “engaged” position, a conductive path is formed from brush 12 through brush conductor 26, terminal 28, and conductor strap 34 (shown in Figure 2, reproduced *infra*). *Id.* at col. 7, ll. 10–14.

The '014 patent further describes a “disengaged” configuration, shown in particular with respect to Figure 2, reproduced below.



As illustrated in Figure 2 above, a hinging action takes place at certain pivot lines, such as pivot line “X,” about which beam 14 moves with respect to lower

mounting block 16. *Id.* at col. 6, ll. 46–53. In the disengaged position, conductor strap 34 breaks contact with terminal 28, thus interrupting the current flow before the brush breaks contact with the conductive surface. *Id.* at col. 10, ll. 55–62.

### *B. Illustrative Claim*

Claims 1 and 10 of the '014 patent are the only independent claims at issue. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A brush holder assembly for holding a brush in contact with a conductive surface, the brush holder assembly comprising:
  - an elongate mounting block having an upper end and a lower end, and a front side and rear side opposite the front side; the rear side configured to face a stationary base of an electrical device;
  - a fastener extending from the rear side to secure the mounting block to the stationary base such that the entire mounting block is positioned on a single side of the stationary base; and
  - a brush holder component for removably mounting to the mounting block, the brush holder component comprising a brush box and a channel for receiving a portion of the mounting block therein.

## II. ANALYSIS

### *A. Claim Interpretation*

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 Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012). Claim terms also are 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). Also, we must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (“limitations are not to be read into the claims from the specification”).

In the Decision on Institution, we interpreted three claim terms of the '014 patent as follows:

**Table 1**

Term	Interpretation
“mounting block”	a base for affixing to another structure
“removably mounting”	mounting in a manner that is not permanent
“the rear side of the mounting block is pressed against a front side of the stationary base”	the rear side of the mounting block is pressed facing the front side of the stationary base

Dec. on Inst. 8–13. Patent Owner challenges our construction of the three terms identified above. PO Resp. 6–17. We turn to the analysis of each term in light of Patent Owner’s arguments.

*1. “mounting block”*

Patent Owner argues that the construction for “mounting block” must reflect the “specification’s requirement that the mounting block must be fixed to a location.” PO Resp. 7–8. The sought-after construction is relevant to Patent Owner’s arguments regarding how the prior art does not teach a “mounting block” that is “fixed,” i.e. non-moveable. *See id.* at 18–20 (arguing that Kartman’s

detachable connection means 42 is inherently moveable, and, therefore it is not a “fixed block”).

In support of this argument, Patent Owner relies on Figure 15B of the '014 patent as depicting that lower mounting block 16, i.e., the “mounting block,” is fixed in place to mount base 41 via bolts 43. *Id.* at 7. Patent Owner further points to descriptions of various embodiments of the attachment of the “mounting block” to a base or to a location. *Id.* at 8. Neither Figure 15B nor the statements in the specification identified by Patent Owner *require* the non-moveable, or “fixed,” aspect. Figure 15B does not show that the attachment excludes any ability to adjust the block. Indeed, the bottom surface of the mount is not depicted in Figure 15B, leaving us to speculate concerning the shape of mount holes 96 in that embodiment, because a round hole would suggest there is no adjustability, while a slotted or elongated hole would suggest adjustability. *But see* Ex. 1001, Fig. 9 (not cited by Petitioner, and confirming that elongated holes 96 are contemplated). The lack of description and depiction of the shape of the holes compels us to reject Patent Owner’s characterization of Figure 15B as supporting a “fixed” or non-moveable attachment. Furthermore, as for the descriptions of how the mount is attached, the specification uses the word “secure” and describes various embodiments of the attachment, none of which requires non-movability of the mount after the brush holder component is installed. *See* Ex. 1001, col. 16, ll. 28–31 (bolts and washers “*secure* the lower mount block 16 to a mount base” (emphasis added)); col. 14, ll. 62–64 (“mount holes 96 may include threading or other elements that allow for attachment to a mount base”); col. 16, ll. 32–34 (“in other embodiments, a welded, keyed, pinned or other attachment scheme may be used to *secure* the lower mount block 16 to a mount base” (emphasis added)). In

fact, the specification makes a point of not limiting the attachment of the mount to any particular method, fixed or not fixed. *See id.* at col. 12, ll. 44–47 (“or other attachment scheme may be used to secure the lower mount block 16 to a mount base near a moving conductive surface or in position to move relative to a conductive surface”). Nor does the language of the claim recite any method of attachment that limits the mounting block to something that cannot be adjusted, shifted, re-positioned, or otherwise moved, after attachment to the base.

Patent Owner further proposes that the written description teaches that all embodiments include a “fixed” mounting block, and, therefore, the “mounting block” should be so construed. PO Resp. 8–10. The specification states: “with the lower mount block 16 being the only portion that must be ‘fixed’ to a location, attachment steps are simplified . . . .” Ex. 1001, col. 15, ll. 19–21. We are not persuaded by Patent Owner’s argument. Although the specification uses the word “fixed” with respect to lower mount block 16, that portion of the specification is focused on describing “the present embodiment” of a lower mount block shown in Figure 14, which illustrates a lower mount block “*for use in several embodiments,*” not *all* embodiments, as Patent Owner argues. Ex. 1001, col. 14, ll. 46–47, col. 15, ll. 18–23 (emphasis added). Moreover, that portion of the specification does not describe *the invention* as a fixed lower mount block. Indeed, Patent Owner’s characterization of the “fixed” lower mount block may stretch the specification too far, as it may be inferred by the use of the word “fixed,” shrouded in quotation marks, that its use in that passage is not to be taken literally.<sup>2</sup>

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<sup>2</sup> *See e.g.*, Chicago Manual of Style, 15<sup>th</sup> edition, Section 7.58 (“When a word or term is not used functionally but is referred to as the word or term itself, it is either italicized or enclosed in quotation marks.”).

In our Decision on Institution, we noted that the specification does not define the term “mounting block,” and that nothing in the claim language indicates that the term is used other than in accordance with its plain and ordinary meaning. Dec. on Inst. 8. We further noted that claims 1 and 10 recite that the “mounting block” has a “rear side configured to face a stationary base,” and that “a fastener . . . secure[s] the mounting block to the stationary base.” *Id.* Guided by evidence of the plain and ordinary meaning consistent with the specification, we determined that the word “block” means “a base, platform or supporting frame.”<sup>3</sup> *Id.* at 8–9. Patent Owner, however, objects to the word “base” as defining the “mounting block” because the claims recite another base, the “stationary base.” PO Resp. 10–12. Accordingly, to avoid confusion, Patent Owner proffers that the construction of “mounting block” should refer to a block, not a base. *Id.* at 11.

Petitioner argues that the proposal to define “block” to mean a block does not clarify any issues and that Patent Owner has not argued that the prior art does not disclose a “block.” Pet. Reply 4–5. Consequently, the clarification is unnecessary. We agree with Petitioner. Although the claims recite a “base” and a “block” distinctly, the claims, however, may recite these two terms in a synonymous ordinary meaning, to indicate that the two distinct structures have similar functions, as bases.

Therefore, we construe the term “mounting block” according to the ordinary meaning of the term to mean “a base for affixing to another structure.”

2. “*removably mounting*”

Claims 1 and 10 recite the term “removably mounting.” Patent Owner

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<sup>3</sup> *Block Definition (4)*, WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY, UNABRIDGED (1993) (Ex. 3001).

argues that our construction does not reflect the meaning the phrase would have to one skilled in the art at the time of the invention. PO Resp. 12. Specifically, Patent Owner proffers the Keim Declaration, various references, and the stated problems in the Background of the Invention to argue that the term “removable” means without requiring removal of attachment hardware like nuts and bolts. *Id.* at 12–13 (citing Ex. 2024 ¶¶ 81–85; Ex. 1001, col. 2, ll. 9–26; and Exs. 2004–5, 2010, 2020). We are not persuaded by Patent Owner’s argument and evidence.

First, the specification of the ’014 patent does not support Patent Owner’s contention that not removing hardware attachments results from the desire to provide safe, easy removal and replacement of the brush assembly while the machine is running. The embodiments in the ’014 patent describing the removal of the brush relate to the safety aspects of discontinuing the current when the device is in the disengaged position. *See* Ex. 1001, col. 10, ll. 51–67, col. 11, ll. 5–8. These embodiments do not describe, or even imply, in any way, that the “removably mounting” is accomplished because one can avoid the removal of nuts and bolts when disengaging the brush. Although the Summary section of the specification describes “readily” removing from service a brush “without removing attachment hardware such as nuts or bolts,” that description applies to “some example embodiments.” *Id.* at col. 2, ll. 23–26. That Summary also describes other reasons for ease of removal of the brush, for example, because the device is a “contained system” that is “easier to deal with and control during removal.” *Id.* at col. 2, ll. 29–37. Also instructive is the description of it “being useful to easily or reversibly disengage a brush from a commutator to determine the extent of wear and perform repairs.” *Id.* at col. 17, ll. 45–47.

Accordingly, the specification of the ’014 patent describes various ways to

accomplish safety and ease of removal, but does not require that such removal be accomplished without removal of attachment hardware. Patent Owner's arguments focus on exemplary embodiments, which we are careful not to incorporate into the claims. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (warning "against confining the claims to those embodiments."). Furthermore, we note that the specification describes attachment of a "*removal tool*" for "disengagement manipulation." *See* Ex. 1001, Fig. 9, col. 11, ll. 54–58, col. 12, ll. 18–26 (emphasis added). The removal tool engages a retractable catch pin into a pin seat in the beam of the device and by pulling a release tab with the thumb, the catch pin disengages, thereby attaching and removing a catch pin into the device in order to remove the brush holder. *See id.* at col. 11, ll. 54–58. The embodiments of the removal tool further confirm that the '014 patent does not contemplate the exclusion of all hardware attachments from the removal process and that by describing how the insertion and release of a pin is used in removing the brush holder, the specification does not exclude using similarly functioning structures, such as nuts.

Second, with regard to the extrinsic evidence allegedly showing evidence that the term "removably mounting" would have the meaning proffered by Patent Owner, we are not persuaded by that evidence. First, the Keim Declaration, in the passages cited, attempts to support Patent Owner's construction by referring to the benefit of using one versus two hands when removing a brush. Ex. 2024 ¶ 83. The specification, however, does not mention, or even imply, that the objective of the safe removal is to avoid using two hands. Second, the remaining passages of the Keim Declaration do not persuade us that the term "removable" had the meaning Patent Owner argues. For example, the argument that in 1976 an article referred to

a brush holder as “removable with an insulated handle” does not support the contention that the word “removable” means without having to remove attachment hardware such as nuts and bolts. *See* Ex. 2024 ¶¶ 83–85 (relying on references that use the word “removable” in connection with brush holders). Patent Owner has not shown that the articles relied on address the claim term “removably mounting,” much less that the word “removable” somehow is unique to the situation where a brush holder is mounted in such a manner that it can be removed without removing attachment hardware. The more reasonable interpretation of those articles is that the word “removable” is used in the plain and ordinary sense of the word as known to laypersons, and not the special circumstances alleged by Patent Owner. Absent a special definition set forth in the specification and given the evidence of the broadest reasonable interpretation of the term, we are not persuaded that “removably mounting” has a different meaning to those of ordinary skill in the art. *See E-Pass Technologies, Inc. v. 3Com Corporation*, 343 F.3d 1364, 1368 (Fed. Cir. 2003) (Where no explicit definition for the term “electronic multi-function card” was given in the specification, this term should be given its ordinary meaning and broadest reasonable interpretation; the term should not be limited to the industry standard definition of credit card where there is no suggestion that this definition applies to the electronic multi-function card as claimed, and should not be limited to preferred embodiments in the specification.).

As stated in our Decision on Institution, the claim language and the specification are evidence of the plain and ordinary meaning. In the claim language, the specific structures associated with the function of “removably mounting” include a brush holder component “for removably mounting to the mounting block.” Claim 1 further recites the brush holder component’s

relationship with the “mounting block”; it recites that the brush holder component comprises a “channel for receiving a portion of the mounting block therein.” The specification describes several embodiments describing the interaction between the beam (described as having a “channel-like structure”) and the mounting block, such as the “engaged” position, the “disengaged” position, and intermediate stages. *See* Ex. 1001, col. 4, ll. 27–30; *see also* col. 14, ll. 7–21; Figs. 13A–13C (illustrating a disengaged position of beam 132 having a pivot point “X” coupled with the lower mount 130 through the groove there shown). Furthermore, “[i]n several embodiments, the beam 14 may be completely removed/separated from the lower mount block 16.” *Id.* at col. 4, ll. 41–45. These positions and the described removal of the beam 14 are consistent with the *removability* of the beam with respect to the lower mount block. That is, the beam is mounted on the mounting block in a manner that is not permanent so it can be removed as needed.

Based on the foregoing, we conclude that the construction proffered by Petitioner is consistent with the plain and ordinary meaning of the term “removably mounting”: “mounting in a manner that is not permanent.”

### 3. “*pressed against*”

Claims 8 and 10 recite the phrase “the rear side of the mounting block pressed against a front side of the stationary base.” In our Decision on Institution, we stated that “pressed against,” as recited and described in the specification, denotes the sense of direction along which the sides are pressed for securing lower mount block 14 to base 41. Dec. on Inst. 12. Patent Owner seeks clarification of the phrase to mean “pressed into contact with.” PO Resp. 15. Patent Owner supports its proposal with a different dictionary definition and argument that because claim 1 recites the word “facing,” it is redundant to interpret “pressed

against” to do the same. *Id.* at 15–16. Additionally, Patent Owner relies on various uses of the word “against” from the specification to argue that direct contact is within the scope of the claim. *Id.* at 16–17.

We are not persuaded by Patent Owner’s argument. First, that claim 1, from which claim 8 depends, recites “the rear side configured to face a stationary base” does not render superfluous the further requirement of claim 8 that the recited surfaces that are oriented “facing” each other, and are also pressed in the direction in which they face. Second, none of Patent Owner’s statements in the specification using language similar to “pressed against” refer to the mounting block attachment to the stationary base.

Reviewing the specification to derive the appropriate plain and ordinary meaning, we note that the specification neither defines nor describes the precise scope of “pressing against.” Uses of the similar words in unrelated embodiments are inconclusive of requiring direct contact, contrary to what Patent Owner urges. For example, the embodiment of safety catch 22 being forced against ledge 30 is described as follows: “part of the safety catch 22 engages a ledge 30 of the upper beam 18 at place A.” Ex. 1001, col. 11, ll. 19–21. That engagement is shown as a notch in safety catch 22. There is no requirement of direct contact at the point in which place A and ledge 30 engage. The specification does not describe this “engagement” in any more detail. Furthermore, from the operation of the pivoting movement described as safety catch 22 is forced against ledge 30, we interpret this movement as referring to the direction in which safety catch 22 will be forced, in relation to ledge 30. Although we recognize that the resistance to movement by safety catch 22 may result from some part of the notch contacting a portion of ledge 30, the direction of the engagement of these parts explains their operation

also. Therefore, we do not agree with Patent Owner that all uses of “against” refer to direct contact between elements. *See* PO Resp. 16 (citing Ex. 2024 ¶¶ 88–92).

As we stated in our Decision on Institution, Figure 15B, exemplifies the attachment of the mounting block to the base, e.g., a pair of bolts pass through mount holes 96 of lower mount block 16, and, using nuts and washers, lower mount block 16 is secured to a mount base. Ex. 1001, col. 16, ll. 28–31. That attachment is not limited to either the use of bolts or the arrangement shown in Figure 15B because the specification describes that “in other embodiments, a welded, keyed, pinned or *other attachment scheme may be used* to secure the lower mount block 16 to a mount base . . . .” *Id.* at col. 16, ll. 31–35. Such broad disclosure of other attachment schemes does not support a conclusion that being “pressed against” necessarily means *direct* contact between the attached things.

Furthermore, Figure 15B does not show the underside of lower mount block 16. And thus we can only guess whether the depicted attachment scheme is one that may result in direct contact. What is clear from Figure 15B and the corresponding description is that, regardless of the fastener used to attach depicted lower mount block 16 to base 41, the attachment is predicated on each of the two sides being pressed in a specific direction, i.e., facing each other. The plain and ordinary meaning of the disputed claim language is consistent with this broad, but reasonable interpretation. That is, an interpretation of “pressed against” that comports with the manner in which lower mount block 14 and base 41 interact with each other does not necessarily hinge on whether there is direct contact.

Rather, the interpretation of “pressed against” is more consistent with the sense of *direction* along which the sides are pressed for securing lower mount block 14 to base 41. Evidence of that interpretation is a definition of “against” that

denotes direction: “directly opposite: in front of: *facing*.” *See Against Definition (prep, 1a)*, WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY UNABRIDGED (1993) (Ex. 3002). Figure 15B is in accord with this definition. For example, the underside of lower mount block 16 is pressed (via the screws 43 being tightened with nuts 45) in a direction facing front side of base 41. To put it another way, when attaching the underside of lower mount block 16, it is pressed with the underside directly opposite to the front side of base 41. Moreover, claim 10 also is in accord because it requires a rear side of the mounting block “configured to face a stationary base of an electrical device.”

Accordingly, we conclude that the plain and ordinary meaning of “the rear side of the mounting block is pressed against a front side of the stationary base” is that “the rear side of the mounting block is pressed facing the front side of the stationary base.”

#### *B. Patentability of Claims*

To prevail in its challenges to the patentability of claims, the Petitioner must establish facts supporting its challenges by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). A claim is anticipated, and, thus, unpatentable, if a single prior art reference discloses each and every element of the claimed invention. *See Schering Corp. v. Geneva Pharm.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003).

We analyze the instituted grounds of unpatentability in accordance with the above-stated principles.

#### *C. Anticipation by Kartman*

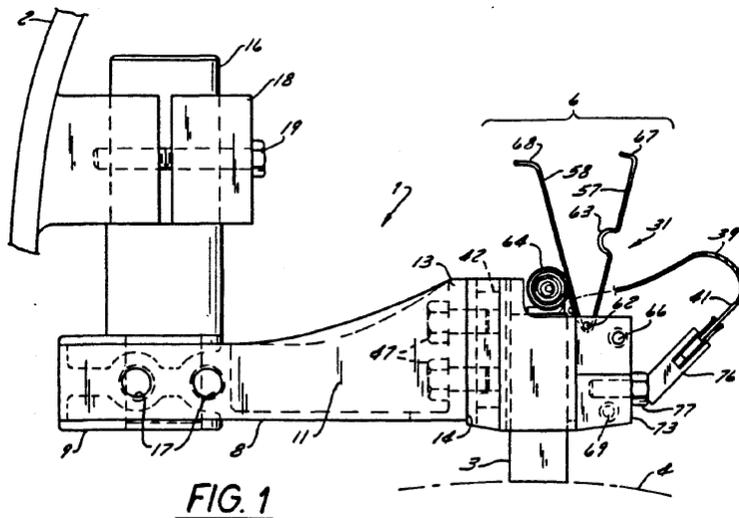
With respect to the alleged ground of unpatentability based on anticipation by Kartman, we have reviewed the Petition, the Patent Owner Response, and Petitioner’s Reply, as well as the relevant evidence discussed in each of those

papers. We are persuaded, by a preponderance of the evidence, that claims 1–5 and 7–15 are anticipated by Kartman under 35 U.S.C. § 102(b).

1. Overview of Kartman (Ex. 1003)

Kartman discloses a brush holder assembly for use in a dynamoelectric machine, such as a motor or generator. Ex. 1003, Abstract, col. 3, ll. 33–34. The assembly is mounted on a frame of the machine such that the brushes engage with the machine’s rotatable commutator. *Id.* at col. 3, ll. 35–36. The components of the brush holder assembly are concentrated in a central location and in closely spaced relation to each other to allow for fast and safe service, such as adjustment or removal of the brush or brush holder. *Id.* at col. 3, ll. 37–41; col. 4, ll. 25–31; col. 5, ll. 46–51. Furthermore, the brush holders are attached, side-by-side, to the assembly, each by a detachable connection that permits their individual replacement. *Id.* at Abstract.

One embodiment of the Kartman brush holder assembly 1 mounted on frame 2 of a machine is depicted in Figure 1, reproduced below.



As shown in Figure 1, the brush holder assembly 1 comprises a casting 8 with a mounting surface 14, “to which a plurality of individual brush holders are detachably connected.” *Id.* at col. 3, ll. 42–52. Each individual brush holder 31 is connected—detachably, mechanically, and electrically—to the mounting surface 14. *Id.* at col. 3, ll. 62–64. The brush holder 31 slideably receives brush 3, which is held in the operative position against the curved surface of commutator 4 by constant brush force applying means 54 that includes force spring 64. *Id.* at col. 4, ll. 32–36, 45–48.

An exploded view of the brush holder assembly 1, illustrating details of brush holder 31, brush 3, and constant brush force applying means 54, is shown in Figure 3, reproduced below.

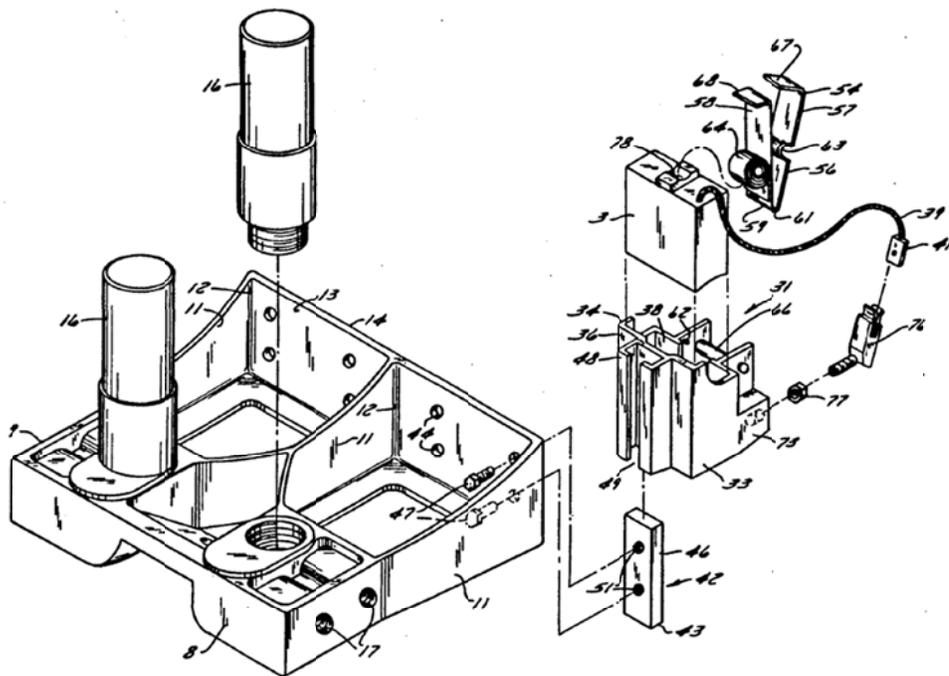


FIG. 3

Figure 3 further depicts in detail detachable connecting means 42 for connecting brush holder 31 to mounting surface 14. *Id.* at col. 3, l. 62 – col. 4, l. 2.

The means 42 comprises quick-release clamp bar 46, having a pair of threaded apertures 51 that align with the pair of vertically spaced-apart holes 44 on mounting surface 14. *Id.* at col. 4, ll. 9–16 Sliding quick-release clamp bar 46 into rear channel 48 of brush holder 31 and tightening cap screws 47 through threaded apertures 51 results in a compressive force on clamp bar 46 that secures brush holder 31 to casting 8 of brush holder assembly 1. *Id.* at col. 4, ll. 19–26. Unscrewing slightly cap screws 47 to an unclamped position releases clamp bar 46 from the compressive force, thus permitting the adjustment or removal of the brush box. *Id.* at col. 4, ll. 26–31.

## 2. *Comparison of Kartman and Claims 1 and 10*

Petitioner alleges that claims 1–16 are anticipated by Kartman. Pet. 8–20. As an alternative ground, Petitioner further alleges that claims 8 and 10–16 would have been obvious over Kartman and Bissett. *Id.* at 20–23.

### a. *Independent Claim 1*

Concerning independent claim 1, Petitioner has shown that Kartman discloses a stationary mounting surface 14 (corresponding to the recited “stationary base”), a detachable connecting means 42 (corresponding to the “elongate mounting block”), the brush holder 31 (corresponding to the “brush holder component”), the rear channel 48 (corresponding to the “channel”), the cap screws 47 (corresponding to the “fastener”); and brush holder 38 (corresponding to the “brush box”). Pet. 9–11. Petitioner has further shown that Kartman’s brush holder 31 is “detachably connected mechanically and electrically to the mounting surface 14 of the support cross beam 13,” and that rear channel 48 at the rear end of the brush box slideably receives clamp bar 46. *Id.* at 10. Clamp screws 47 pass into threaded apertures 51 in clamp bar 46. *Id.* Therefore, Kartman discloses a

brush holder 31 (“brush holder component”) for *removably mounting* to clamp bar 46 of detachable connecting means 42 (“mounting block”) because the brush holder attaches to clamp bar 46 of detachable connecting means 42 in a non-permanent manner.

Patent Owner challenges Petitioner’s evidence of anticipation by Kartman, arguing that Kartman does not disclose the “mounting block,” “removably mounting,” and “fastener” limitations. PO Resp. 18–26. Patent Owner’s arguments rely on claim construction positions we did not adopt, and, therefore, the arguments are unpersuasive.

i. Mounting Block Limitation

Specifically, with regard to the “mounting block,” Patent Owner argues that because Kartman employs a clamping mechanism, clamp bar 46 is inherently moveable. PO Resp. 18–19. But we have determined that “mounting block,” based on the plain and the ordinary meaning of the term, does not mean that the block must be fixed or non-moveable. *See* Section II.C.1, *supra*. Accordingly, this argument is not persuasive.

Instead, we find that Kartman discloses a “mounting block” because clamp bar 46 is a base for affixing brush holder 31 to mounting surface 14. *See* Ex. 1003, col. 3, l. 62 – col. 4, l. 2; Fig. 3. We find that clamp bar 46 has a rectangular shape which fits in channel 48 such that the rear surface of the bar faces in the direction of the surface 14, thereby disclosing that the rear side of the mounting block “is configured to face a stationary base of an electrical device.” *See* Ex. 1003, Fig. 3 (illustrating Kartman’s clamp bar 42 fitting in channel 48 and aligned such that the rear surface aligns with surface 14).

ii. Removably Mounting Limitation

With regard to the “removably mounting” limitation, Patent Owner focuses on the word “mount” and argues that Kartman’s brush holder is not mounted on the clamp bar, and, therefore, the brush holder is not “removably mount[ed] to the mounting block,” as recited. PO Resp. 20–23. According to Patent Owner, Kartman discloses that brush holder 31 is mounted to the support casting, not to the clamp bar. *Id.* at 23. We do not agree with Patent Owner’s characterization of Kartman.

First, Patent Owner attempts to rewrite the claims with the argument that Kartman’s brush holder is not mounted “on” the clamp bar. *See* PO Resp. 20 (arguing that Kartman’s brush holder 31 is mounted *with* (or *via*) clamp bar 46). Kartman’s clamp bar 46 fits inside rear channel 48 of brush holder 31. *See* Ex. 2001, Fig. 3. When clamp bar 46 locks the channel into position (*id.* at col. 5, ll. 16–16), the brush holder 31 is mounted to the clamp bar 46. Without the clamp bar, the brush holder cannot be mounted to the support casting, contrary to Patent Owner’s argument. Second, Patent Owner’s analogy of two pieces of wood coupled together with nails does not persuade us to recast the arrangement of Kartman’s clamp bar as a mere fastener. *See* PO Resp. 21–22 (arguing that the function of a nail coupling two pieces of wood performs the same function as Kartman’s clamp bar). The clamp bar itself has a body and integral function within the cavity of the channel: to exert a detachable compressive force. *See* Ex. 1003, col. 4, ll. 26–31. That is, the clamp bar can be quickly released from binding the brush holder to the mounting surface, something a nail coupling two pieces of wood cannot do. The second example Patent Owner provides, modifying Kartman

to use nuts instead of a clamp bar, is likewise unpersuasive. There is more to the operation of Kartman's clamp bar that Patent Owner and its declarant do not credit.

Third, the claim language does not recite with specificity the manner in which the brush holder component is mounted to the mounting block. Patent Owner's arguments comparing Kartman's clamp bar operation to the over-center locking mechanism of the '014 patent do not persuade us that the claims encompass a way of mounting the recited brush holder component to the mounting block "independently" of affixing the mounting block to the stationary base. *See* PO Resp. 22–23 (arguing that the '014 patent describes the manner of mounting and affixing independently). That is, the claims are broad enough to encompass mounting to the mounting block and affixing to the stationary base using the clamping mechanism.

As an alternative argument, Patent Owner argues that under its construction of "removably mounting," Kartman does not disclose the limitation. Because we have not adopted Patent Owner's proposed construction—to include that removal be performed without adjusting attachment hardware—we find this argument unpersuasive.

### iii. Fastener Limitation

With regard to the "fastener" limitation, Patent Owner argues that Kartman does not "secure the mounting block to a stationary base" because Kartman's clamping mechanism does not attach firmly clamp bar 46 to cross beam 13 and mounting surface 14. PO Resp. 24–26. We are not persuaded because the claims are silent concerning any permanence or firmness of the attachment of the mounting block to the stationary base. Specifically, the claim recites a "fastener member . . . *securing* the mounting block to a stationary base." Ex. 1001, col. 18,

ll. 15–16 (emphasis added). Patent Owner does not explain how the word “securing” involves *firm* attachment or any fastening that precludes the ability to reposition the mounting block on the stationary base. The claim language requires neither permanence nor any specific firmness of attachment at all times. Kartman’s clamping mechanism secures, as recited in claim 4, the clamp bar inside the channel of the brush box to “lock it into position against the mounting surface 14.” Ex. 1003, col. 5, ll. 16–19. We find that Kartman discloses the recited “fastener member” because the cap screws, when tightened, i.e., at least during operation, press the clamp bar in the direction of surface 14 such that the clamp bar is secured to that surface.

*b. Independent Claim 10 and Dependent Claim 8*

Independent claim 10 recites the same limitations recited in claim 1, with the addition of the following limitation: “the rear side of the mounting block pressed against a front side of the stationary base.” Dependent claim 8 also recites this limitation. Petitioner shows that Kartman’s Figure 2 depicts the detachable connecting means 42 of Kartman being “pressed against” the support surface 14. Pet. 13–14. In particular, we find that Kartman describes that when attached to the stationary surface 14, the rear side of the clamp bar 46 (part of the detachable connecting means 42) is pressed against the surfaces 13, 14 through an intermediary structure (e.g., cap screws 47 or rear channel 48). *Id.*

Patent Owner argues that Kartman does not disclose the mounting block “pressed against a front side of the stationary base” because clamp bar 46 is not pressed in contact with surface 14. PO Resp. 26–28. This argument is predicated on a construction of “pressed against” that requires direct contact, a construction we did not adopt. *See* Section II.C.3, *supra*.

We find that Kartman teaches the limitation of the “rear side of the mounting block pressed against a front side of the stationary base.” The clamp bar is pressed in the direction facing surface 14. Ex. 1003, Fig. 3; col. 5, ll. 16–19. The interaction of portions of the channel placed in between the clamp bar and surface 14 does not affect our finding because the clamp bar is forced against surface 14, indirectly coupling these surfaces through the compressive forces caused by tightening the clamp screws. *Id.*; Ex. 1003, col. 4, ll. 26–31.

Accordingly, for the foregoing reasons, we find that Petitioner has proven by a preponderance of the evidence that claims 10 and 8 are anticipated by Kartman.

*c. Dependent claims 2–5, 7, 9, and 11–15*

We have reviewed the evidence presented by Petitioner regarding Kartman’s disclosure of the further limitations recited in dependent claims 2–5, 7, 9, and 11–15. Pet. 11–20. We find that, with regard to the requirement of claim 2 that the fastener extend through an aperture in the mounting block and the requirement of claim 3 that the fastener is a threaded bolt, Kartman discloses the recited “aperture” and “threaded bolt” by describing apertures 51 and cap screws 47. *See* Pet. 11; Ex. 1003, col. 3, l. 62 – col. 4, l. 31, col. 4, ll. 19–23, Figs 2–3. We further find that Figure 2 of Kartman shows that the side surfaces of the detachable means 42 (actually pointing to quick-release clamp bar 46) are slideably disposed within rear channel 48 of the brush holder 31, thereby disclosing the structures and arrangements recited in claims 4, 7, 9, 11, 12, and 13. Pet. 12–14, 18, and 19. Concerning the recited “spring,” we find that Kartman’s removably coupled recoil spring 64 biases a brush 3 into contact with the commutator 4, as required by claims 5 and 15. *Id.* at 12, 19–20. And finally, we find that, as to claim 14, Kartman’s detachable connecting means 42 is positionable on a single side of

surface 13, 14. *Id.* at 19. Patent Owner has not challenged the evidence presented with regards to these dependent claims.

Therefore, we find that Petitioner has proven by a preponderance of the evidence that dependent claims 2–5, 7, 9, and 11–15 are anticipated by Kartman.

### III. CONCLUSION

Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–5 and 7–15 of the '014 patent are anticipated by Kartman. Because claims 1–5 and 7–15 are unpatentable as anticipated by Kartman, we need not decide whether the claims are unpatentable also under the additional grounds for which we had instituted the *inter partes* review.

This is a final written decision of the Board under 35 U.S.C. § 318(a). Parties to the proceeding seeking judicial review of this decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

### IV. ORDER

Accordingly, it is hereby:

ORDERED that, as set forth in Section III above, claims 1–5 and 7–15 of the '014 patent have been shown to be unpatentable.

FURTHER ORDERED that the parties to the proceeding seeking judicial review of this Final Written Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2013-00272

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