

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SHARKNINJA OPERATING LLC,
SHARKNINJA MANAGEMENT LLC, and
SHARKNINJA SALES COMPANY,
Petitioner,

v.

BISSELL INC.,
Patent Owner.

IPR2022-01176
Patent 11,096,541 B2

Before WILLIAM V. SAINDON, BENJAMIN D. M. WOOD, and
CARL M. DEFRANCO, *Administrative Patent Judges*.

DEFRANCO, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

BISSELL Inc. (“Bissell”) is the owner of U.S. Patent No. 11,096,541 B2 (Ex. 1001, “the ’541 patent”). SharkNinja Operating LLC, SharkNinja Management LLC, and SharkNinja Sales Company (collectively, “SharkNinja”) filed a Petition requesting *inter partes* review of claims 1–20 of the ’541 patent. Paper 1 (“Pet.”). Bissell filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Because we determine that SharkNinja has demonstrated a reasonable likelihood that at least claim 1 of the ’541 patent is unpatentable, we institute an *inter partes* review of all claims as challenged in the Petition. See 35 U.S.C. § 314(a).

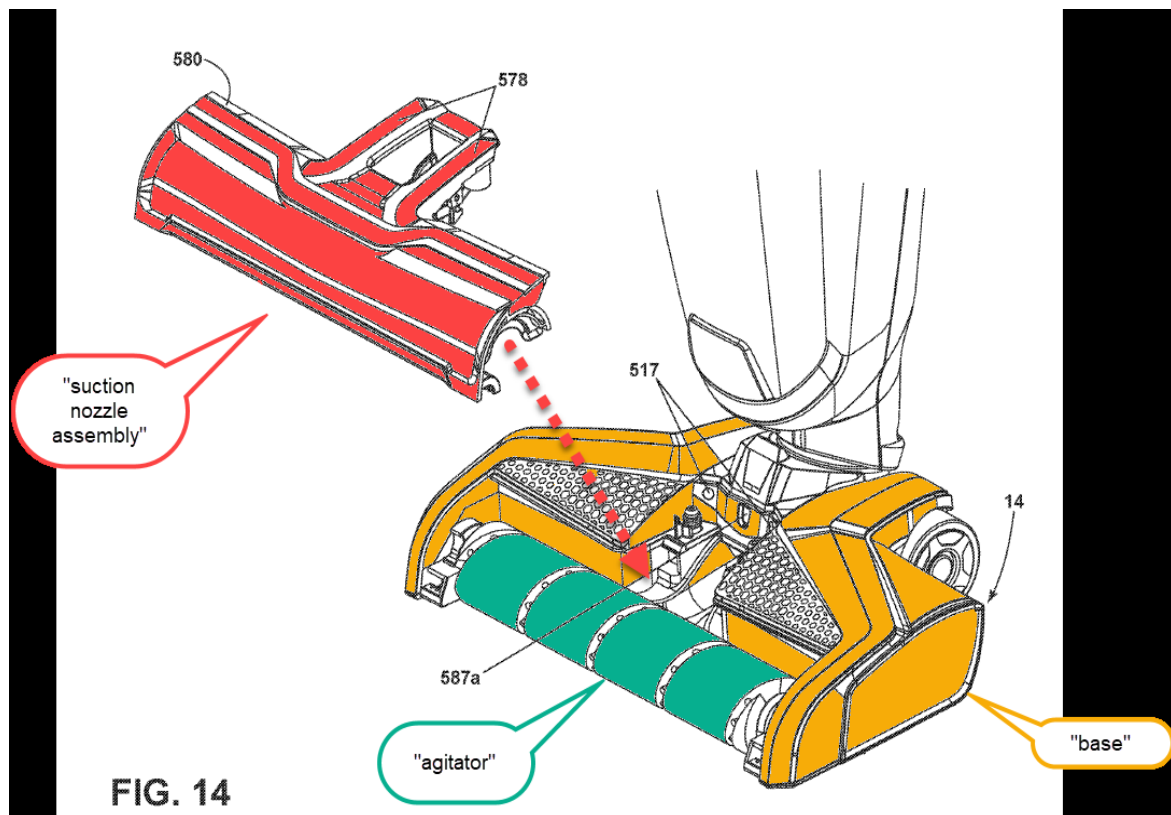
I. BACKGROUND

A. Related Matters

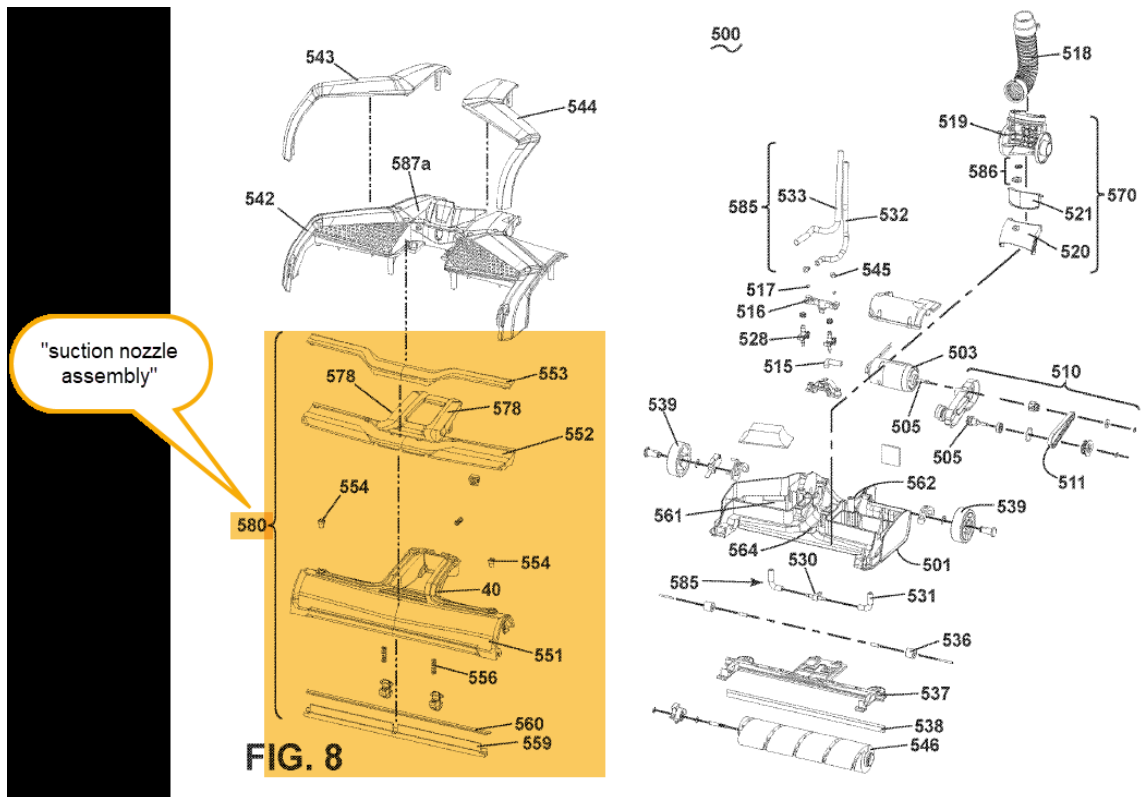
The ’541 patent is the subject of an infringement action filed May 20, 2022 in *BISSELL Inc. v. Tineco Intelligent Technology Co., Ltd.*, No. 1:22-cv-00150 (D. Del.). See Paper 4, 2. The ’541 patent is also the subject of International Trade Commission Investigation No. 337-TA-1304, filed by Bissell against Tineco. See *id.* In addition to the instant Petition, SharkNinja has also filed petitions challenging two related Bissell patents, namely, U.S. Patents 10,925,455 B2 (IPR2022-01175) and 11,096,542 B2 (IPR2022-01177). See Pet. vii.

B. The ’541 Patent

The ’541 patent is directed to a multi-surface vacuum cleaning apparatus that includes a suction nozzle assembly provided on the base in fluid communication with a suction source. Ex. 1001, 1:47–53. Annotated Figure 14 of the ’541 patent, reproduced below, depicts the various components of the vacuum cleaning apparatus.



As shown above, the vacuum cleaning apparatus comprises a suction nozzle assembly, a base, and an agitator. As for the suction nozzle assembly, it is an assembly of parts that includes, for example, a nozzle housing, nozzle cover, fluid delivery channels, fluid dispensers, spray tips, a nozzle cover, and wipers. *Id.* at 8:14–36. Annotated Figure 8 of the '541 patent, reproduced below, depicts the exemplary parts of the suction nozzle assembly.



As shown above, annotated Figure 8 is an exploded view of the suction nozzle assembly (highlighted), as well as the base and agitator of the cleaning apparatus. According to the '541 patent, the suction nozzle assembly enhances cleaning in two ways. First, the suction nozzle assembly draws “soiled cleaning fluid and dirt” into the apparatus for simultaneous disposal. *Id.* at 14:64–15:1. The dual removal of fluid and dirt by the suction nozzle assembly works to “prevent streaking on the surface as well as to prevent dry debris scatter while agitator is activated.” *Id.* at 2:54–64. Second, the suction nozzle assembly enhances fluid distribution by providing fluid delivery channels 40 with spray tips 554 mounted horizontally along the suction nozzle assembly 580 “in order to wet the entire length of the brushroll 546.” *Id.* at 11:45–58.

C. The Asserted Challenges

Claims Challenged	35 U.S.C. §	Basis
1–20	102	Beskow ¹
1–20	103	Beskow
1–20	103	Beskow, Li ²

In further support of these challenges, SharkNinja submits the declaration of Richard Figliola, Ph.D. *See* Ex. 1003. Bissell responds with the declaration of Craig R. Forest, Ph.D. *See* Ex. 2001.

D. The Challenged Claims

Claim 1, reproduced below, is the sole independent claim:

1. A surface cleaning apparatus, comprising:
 - a housing including an upright handle assembly and a base operably coupled to the upright handle assembly;
 - an agitator mounted within the base;
 - a suction source;
 - a suction nozzle assembly provided on the base and defining a suction nozzle in fluid communication with the suction source;*
 - a fluid delivery system provided on the housing and comprising:
 - a fluid supply chamber adapted to hold a supply of liquid;
 - a fluid dispenser provided on the base in fluid communication with the fluid supply chamber; and
 - a fluid delivery pathway between the fluid supply chamber and the fluid dispenser; and
 - a dual wiper configuration provided with the base and comprising a first wiper adapted to contact the agitator and a second wiper at least selectively adapted to contact a surface to be cleaned.

Ex. 1001, 16:14–33 (emphasis added).

¹ US 7,979,952 B2, iss. July 19, 2011 (Ex. 1004, “Beskow”).

² US 10,136,781 B2, iss. Nov. 27, 2018 (Ex. 1005, “Li”).

II. ANALYSIS

A. Level of Ordinary Skill in the Art

SharkNinja submits that one skilled in the art would have had “a Bachelor’s degree in Mechanical Engineering (or an equivalent discipline) or equivalent work experience, and at least one year’s worth of experience in research, design and/or development related to vacuum cleaners (or other comparable industrial design).” Pet. 14. Bissell responds that “a more appropriate level of skill would include at least 1-2 years of professional work experience” and “need not be as industry-specific as Petitioner asserts,” but nonetheless acknowledges that “the disputes in this proceeding do not turn on the differences between Petitioner’s and Patent Owner’s proposals” and that its arguments “apply with equal force irrespective of which level of skill is applied.” Prelim. Resp. 2. Accordingly, at this stage, we adopt the level of skill in the art as articulated by SharkNinja.

B. Claim Construction

We apply the claim construction standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). That is, “the words of a claim ‘are generally given their ordinary and customary meaning’ . . . that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at 1312–13; *see also* 37 C.F.R. § 42.100(b). Here, SharkNinja maintains that “no construction of any claim term is necessary” because the challenged claims are unpatentable “under any reasonable construction.” Pet. 4–5. Bissell responds that “express interpretations of the challenged claims are not necessary for the resolution of any disputes, and that the claims should be given their ordinary meaning.” Prelim. Resp. 2–3.

At this stage, the specification and prosecution history of the '541 patent, as well as the asserted prior art, adequately inform us as to the plain and ordinary meaning of the claim terms. Thus, for now, we do not perceive the need to expressly construe any claim terms, as we can decide the threshold question of institution without further construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (approving Board decision not to construe claim language where the construction is not material to the dispute).

C. SharkNinja's Challenge of Independent Claim 1 Based on Beskow

We begin with SharkNinja's challenge that claim 1 is unpatentable as anticipated and/or rendered obvious by Beskow. *See* Pet. 14. In challenging claim 1, SharkNinja submits a detailed mapping of how Beskow satisfies each of the recited claim elements. *See id.* at 20–36. Bissell responds by disputing SharkNinja's showing of how Beskow discloses the claimed “suction nozzle assembly.” *See* Prelim. Resp. 11–27. Bissell does not dispute SharkNinja's showing with respect to the other limitations of claim 1, including the claimed “dual wiper configuration.”³ *See id.* Thus, at this stage, we focus on the question of whether Beskow discloses what appears to be the sole claim limitation in dispute, namely, “a suction nozzle assembly provided on the base and defining a suction nozzle in fluid communication with the suction source.”

³ Indeed, Bissell appears to have admitted in a prior unrelated IPR proceeding that Beskow's front edge 1708 as depicted in Figure 17A is a wiper. *See* Ex. 1009, 19, 27–45; *see also* Ex. 1004, Figs. 7A, 14A, 14B (depicting front edge 732 as the wiper).

To meet the disputed “suction nozzle assembly” limitation, SharkNinja points to Beskow’s disclosure of “a base (cleaning head 102) having a suction nozzle assembly with suction nozzles (debris inlet 724 and/or fluid inlet 726) in fluid communication with the suction source (vacuum source 108).” Pet. 25. SharkNinja explains that “[b]ecause there is a direct airflow connection between the vacuum source and the debris and fluid inlets, the nozzle defined by debris inlet 724 and/or fluid inlet 726 is in fluid communication with the suction source.” *Id.* SharkNinja’s declarant likewise explains that “[t]he nozzles formed by the debris inlet and the fluid inlet are part of the ‘suction nozzle assembly’ as claimed.” Ex. 1003 ¶ 77 (citing Ex. 1004, Fig. 7A). Finally, SharkNinja submits annotated Figures 1A and 7A of Beskow to show how Beskow’s suction nozzle assembly (debris and fluid inlets 724, 726) are part of a larger assembly that includes components corresponding to the claimed “base” (element 102), “suction source” (element 108), and “agitator” (element 110). *See id.* at 23, 24, 26.

Bissell raises three arguments in disputing Beskow’s disclosure of the claimed “suction nozzle assembly.” *See* Prelim. Resp. 11–12. *First*, Bissell faults SharkNinja for “not identify[ing] a suction nozzle assembly on the base in [Beskow]” and instead “argu[ing] that the alleged base itself, as well as other components located within the base, are the suction nozzle assembly.” *Id.* at 11. According to Bissell, that “cannot be the case, because the base cannot be ‘on’ itself, nor can components within the base be considered ‘on’ the base if the base itself is part of the assembly.” *Id.* *Second*, Bissell contends SharkNinja’s mapping of the claimed “suction nozzle assembly” falls short because “[t]he petition only identifies a single

part in Beskow as a ‘suction nozzle’—an inlet—and a single part cannot be an assembly.” *Id.* *Third*, Bissell argues that “because the prior art does not disclose an ‘assembly,’ it also cannot disclose a ‘suction nozzle’ that is *defined* by a suction nozzle ‘assembly’ as required by the challenged claims.” *Id.*

At this stage, we disagree with Bissell on all counts. At the outset, we note that Bissell misreads SharkNinja’s mapping of Beskow to the claimed “suction nozzle assembly.” Based on our review, SharkNinja does not allege that Beskow’s “base” is part of the suction nozzle assembly; rather, SharkNinja posits that Beskow’s cleaning head 102 corresponds to the claimed “base” and identifies Beskow’s “debris inlet 724 and fluid inlet 726” as defining a suction nozzle assembly, which, in turn, is mounted on Beskow’s base 102 for fluid communication with suction source 108. *See* Pet. 11; *see also* Ex. 1003 ¶ 77 (explaining that “[t]he nozzles formed by the debris inlet and the fluid inlet are *part of* the ‘suction nozzle assembly’ as claimed” and that the nozzles “comprise air passages through the cleaning head 102 that lead from the area adjacent the agitator 110 to a cleaning head outlet 1408”). Indeed, Beskow’s Figure 7A, and associated description, support that debris inlet 724 defines one nozzle part distinct from the base and that fluid inlet 726 defines another nozzle part distinct from the base.⁴ As such, we reject Bissell’s attempt to read SharkNinja’s mapping of the claimed “suction nozzle assembly” as necessarily including the base.

⁴ Beskow explicitly discloses that fluid inlet 726 may be formed as “an enclosed passageway,” vis-a-vis the open-top passageway depicted in Figure 7A. Ex. 1004, 20:34–35.

Also, contrary to Bissell’s argument, SharkNinja does not identify “a single part in Beskow” as corresponding to the claimed “suction nozzle assembly,” but rather, as discussed above, identifies at least two distinct parts—Beskow’s debris inlet 724 *and* fluid inlet 726—as meeting this claim element. *See* Pet. 11; *see also* Ex. 1003 ¶ 77 (identifying same, as well aspects of agitator 110). Beskow explains that debris inlet 724 performs the distinct function of removing “larger objects,” while fluid inlet 726 performs the distinct function of removing “fluid and smaller debris.” Ex. 1004, 19:15–34. Moreover, Beskow explicitly states that suction inlets 724, 726 “may be formed *entirely* . . . as a removable inlet tray 730” or “may be *separately* removable from the cleaning head 102.” *Id.* at 20:6–31 (emphases added). That Beskow’s suction inlets 724, 726 may be formed as a single tray of integral inlets, in our view, constitutes an assembly of distinct parts. As such, we reject the notion that Beskow’s debris and fluid inlets 724, 726 connected-integrally into single tray 730 “cannot be considered an ‘assembly.’”⁵ Prelim. Resp. 23–24.

We also find unpersuasive Bissell’s assertion that Beskow’s nozzle assembly as defined by removable inlet tray 730 is not “provided on the base,” as required by claim 1. *See* Prelim. Resp. 13–23. According to Bissell, Beskow’s removable inlet tray 730 is “not ‘on’ the base,” but instead “sits inside of the alleged base (i.e., inside of cleaning head 102).” *Id.* at 17; *see also id.* at 17–18 (“A tray inserted inside of a base cannot be understood

⁵ That suction inlets 724 and 726 may be formed as either separate pieces or as individual pieces brought together would appear to be entirely within the level of ordinary skill in the art, as evidenced by the lack of specific manufacturing instructions in the ’541 patent and the prior art.

as provided ‘on the base’ as required by the challenged claims.’’). We are not persuaded by this argument for the simple reason that Bissell applies an overly narrow and unreasonable meaning to the term “provided on,” indeed, a meaning that is inconsistent with the Specification of the ’541 patent. In particular, the Specification expressly contemplates that the preferred embodiment’s suction nozzle assembly 580 “is configured to be *received in* the upper cover 542,” which is part of “base 14.” Ex. 1001, 10:52–54 (emphasis added); *see also id.* at 8:12–13 (“Upper cover 542 can be configured to releasably receive the suction nozzle assembly 580.”). That description, in our view, is no different than saying the nozzle assembly sits within the base. Thus, the Specification of the ’541 patent itself supports that Beskow’s disclosure of inlet tray 730 being received within base 102 necessarily means it is “provided on the base,” as claimed.⁶ *See* Ex. 1004, 20:12–15. Thus, we reject Bissell’s repeated arguments to the contrary. *See* Prelim. Resp. 13–23.

As for Bissell’s final argument, it is predicated on Beskow not disclosing an “assembly” (Prelim. Resp. 12), which, as discussed above, Beskow clearly does. In fact, Beskow’s suction nozzle assembly, i.e., removable inlet tray 730, defines a dual set of suction nozzles—debris inlet 724 and fluid inlet 726. As such, we are not persuaded by Bissell’s assertion that Beskow’s suction nozzle assembly does not meet the claim limitation of “defining a suction nozzle.”

⁶ We note that the claim language further supports this construction by defining that claim 1’s recitation of “a fluid dispenser provided on the base” also encompasses the fluid dispenser being “in the base,” as recited by dependent claim 6. *Compare* Ex. 1001, 16:26, *with id.* at 16:49–51.

Having reviewed the preliminary record, including SharkNinja's showing of how Beskow discloses the disputed claim limitation of "a suction nozzle assembly provided on the base," we conclude that SharkNinja demonstrates a reasonable likelihood that at least claim 1 of the '541 patent is unpatentable as anticipated by and/or obvious over Beskow.

D. SharkNinja's Challenge of Dependent Claims 2–20 Based on Beskow

With respect to SharkNinja's challenge of the dependent claims as being anticipated and/or rendered obvious by Beskow alone, Bissell simply asserts that SharkNinja's failure to show that Beskow discloses the "suction nozzle assembly" of claim 1 "is fatal to its petition" as to "all the challenged claims." Prelim. Resp. 27. At this preliminary stage, because SharkNinja demonstrates a reasonable likelihood of prevailing with respect to at least independent claim 1, we do not see the need here to further address the dependent claims. Instead, we proceed with institution of all the claims as challenged on the basis of Beskow alone. *See SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018).

E. SharkNinja's Challenge of Claims 1–20 Based on Beskow and Li

SharkNinja also challenges claims 1–20 as being rendered obvious by Beskow and Li. Pet. 59–69. Bissell responds that SharkNinja's showing "fails for the same reasons discussed with respect to Ground 1." Prelim. Resp. 27. We believe that further analysis of this obviousness challenge is best left for trial after full development of the record. Because "[e]qual treatment of claims and grounds for institution purposes has pervasive support in *SAS*," we institute on the Beskow/Li challenge as raised in the Petition. *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018).

III. CONCLUSION

For the above reasons, we determine that the information presented in SharkNinja’s Petition shows a reasonable likelihood that at least claim 1 of the ’541 patent is unpatentable as anticipated by and/or obvious over Beskow. Because SharkNinja demonstrates that at least one claim of the ’541 patent meets the threshold for institution, we institute an *inter partes* review of all claims as challenged in the Petition. See 37 C.F.R. § 42.108(a) (“When instituting . . . review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.”).

IV. ORDER

Accordingly, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–20 of the ’541 patent is *instituted*; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), notice is hereby given of the institution of trial, which will commence on the entry date of this Decision.

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