PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of **CERTAIN HIGH-PERFORMANCE GRAVITY-FED WATER FILTERS AND PRODUCTS CONTAINING THE SAME**	**Investigation No. 337-TA-1294**

COMMISSION OPINION

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I. INTRODUCTION

On June 28, 2023, the Commission determined to review in part the final initial determination ("ID") issued by the presiding administrative law judge ("ALJ") on February 28, 2023, finding a violation with respect to claims 1, 2-6 and 23 of U.S. Patent No. 8,167,141 ("the '141 patent"). 88 Fed. Reg. 42950-53 (July 5, 2023). On review, the Commission has determined to reverse the ID's finding that there has been a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337. Specifically, the Commission has determined to: (1) vacate the ID's construction of the claim term "filter usage lifetime claimed by a manufacturer or seller of the filter" and find that claim limitation indefinite; (2) reverse the ID's finding that the asserted claims are not invalid for lack of written description; (3) reverse the ID's finding that the asserted claims are enabled; (4) take no position on the ID's section 101 analysis and findings; (5) take no position on the ID's section 102 analysis and findings; and (6) take no position on the ID's findings on the economic prong of the domestic industry requirement. Because the Commission finds each of the asserted claims invalid, it accordingly finds no violation of section 337.

This opinion sets forth the Commission's reasoning in support of that determination. The Commission adopts the remainder of the ID that is not inconsistent with this opinion.

II. BACKGROUND

A. Procedural History

On January 31, 2022, the Commission instituted this investigation based on a complaint filed by Brita LP ("Brita") of Neuchatel NE, Switzerland. 87 Fed. Reg. 4913 (Jan. 31, 2022). The complaint, as supplemented, alleged violations of section 337 based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain high-performance gravity-fed water filters and products containing the

same by reason of infringement of claims 1-6, 20, 21, 23, and 24 of U.S. Patent No. 8,167,141 ("the '141 patent"). *Id.* The Commission's notice of investigation named nine respondents: Mavea LLC of West Linn, Oregon and Brita GmbH of Taunusstein, Switzerland (collectively, "the Mavea Respondents"); Ecolife Technologies, Inc. of City of Industry, California and Qingdao Ecopure Filter Co., Ltd. of Shandong Province, China (collectively, "the Aqua Crest Respondents"); Kaz USA, Inc. and Helen of Troy Limited, both of El Paso, Texas (collectively, "the PUR Respondents"); Zero Technologies, LLC of Trevose, Pennsylvania and Culligan International Co. of Rosemont, Illinois (collectively, "the ZeroWater Respondents"); and Vestergaard Frandsen Inc. of Baltimore, Maryland ("Vestergaard" or "LifeStraw"). *Id.* The Office of Unfair Import Investigations is not participating in this investigation. *Id.*

The Mavea Respondents were terminated from the investigation based upon settlement, and the Aqua Crest Respondents were terminated based upon withdrawal of the allegations in the complaint. Order No. 13 (May 3, 2022), *unreviewed by* Comm'n Notice (May 24, 2022); Order No. 43 (Sept. 22, 2022), *unreviewed by* Comm'n Notice (Oct. 11, 2022). Claims 20, 21, and 24 of the '141 patent were terminated from the investigation based upon withdrawal of the allegations in the complaint as to these claims. Order No. 19 (June 1, 2022), *unreviewed by* Comm'n Notice (June 21, 2022).

On June 2, 2022, the ALJ held a *Markman* hearing. The ALJ issued a *Markman* Order construing the claim terms in dispute on July 20, 2022. Order No. 30 (July 20, 2022).

The ALJ held an evidentiary hearing from August 17-19, August 22-23, and October 13, 2022, and received post-hearing briefs thereafter.

On February 28, 2023, the ALJ issued the final ID finding a violation of section 337. The ID found that by appearing and participating in the investigation, the parties have consented to

personal jurisdiction at the Commission. ID at 12. The ID further found that "because of importation stipulations of all Accused Products," the importation requirement under 19 U.S.C. § 1337(a)(1)(B) is satisfied and that the Commission has *in rem* jurisdiction over the accused products. *Id.* at 12-13. The ID found that Brita successfully proved that the accused products infringe the asserted claims of the '141 patent (claims 1-6 and 23). ID at 69-105. The ID further found that Respondents failed to show by clear and convincing evidence that the asserted claims are invalid for lack of written description (ID at 169-204), enablement (ID at 205-250), anticipation (ID at 153-169), or for reciting patent ineligible subject matter under 35 U.S.C. § 101 (ID at 250-269). Finally, the ID found that Brita proved the existence of a domestic industry that practices the '141 patent as required by 19 U.S.C. § 1337(a)(2). *Id.* at 105-117, 269-285.

The ID included the ALJ's recommended determination on remedy and bonding ("RD"). The RD recommended, should the Commission find a violation, the issuance of a limited exclusion order against all respondents and cease and desist orders against the PUR Respondents and LifeStraw. ID/RD at 258-291. The RD also recommended imposing a bond in the amount of one hundred percent (100%) of entered value for the PUR Respondents' and the ZeroWater Respondents' infringing products imported during the period of Presidential review and $6 per unit for infringing LifeStraw products imported during the period of Presidential review. *Id.* at 291-295.

On March 13, 2023, Respondents and Brita filed respective petitions for review of the

ID.[1] On March 21, 2023, the parties filed responses to the petitions.[2]

On May 24, 2023, Respondents moved for leave to file a notice of supplemental authority in support of their petition for review. Specifically, Respondents sought to submit the recent U.S. Supreme Court decision in *Amgen Inc. v. Sanofi*, No. 21-757 (May 18, 2023), as being directly relevant to the lack of enablement of the asserted claims in this investigation. On June 28, 2023, the Commission issued a Notice granting the motion. 88 Fed. Reg. 42951 (July 5, 2023).

In its Notice on June 28, 2023, the Commission also determined to review the final ID in part. *Id.* at 42950-53. Specifically, the Commission determined to review the following findings: (1) construction of the claim term "filter usage lifetime claimed by a manufacturer or seller of the filter," (2) written description, (3) enablement, (4) section 101, (5) anticipation, and (6) the economic prong of the domestic industry requirement. The Commission requested the parties to brief certain issues under review and requested the parties, interested government agencies, and other interested parties to brief the issues of remedy, the public interest, and bonding. *Id.*

On July 14, 2023, the parties filed initial submissions in response to the Commission's

[1] *See* Respondents' Petition for Review of the Final Initial Determination ("Resp. Pet."); Complainant Brita LP's Petition for Commission Review of Initial and Recommended Determination ("Brita Pet.").

[2] *See* Complainant Brita LP's Response to Respondents' Petition for Review of Initial Determination ("Brita Rep."); Respondents' Response to Complainant's Petition for Review ("Resp. Rep.").

request for briefing.[3] On July 21, 2023, the parties filed reply submissions.[4]

On July 24, 2023, Complainant Brita filed a motion to strike waived arguments and new evidence in Respondents' Reply in Response to the Commission Notice of Review.[5] Brita argues that Respondents added a new argument regarding the disputed claim construction for the "lifetime"[6] term that attempts to distinguish "claimed" and "validated." Motion to Strike at 3. Brita also argues that Respondents reference new evidence in the form of various lay dictionary definitions of the words "claim" and "validate" that were never cited during the investigation. *Id.* In addition, Brita argues that Respondents now contend, for the first time, that the RD's recommendation of a 100% bond for the PUR Respondents' and the ZeroWater Respondents' products should not be adopted because Brita did not show that a purported reasonable royalty from a license of the asserted patent was not a proper basis for a bond as to the PUR and ZeroWater Respondents. *Id.* at 5. Brita also argues that Respondents misrepresent the licensing agreement that they rely upon for a smaller bond, saying that Respondents assert that Brita is paid under the agreement, when in fact, it is a cross-license agreement where Brita pays the licensee for use of the licensee's patents. *Id.*

[3] *See* Complainant Brita LP's Statement on Remedy, the Public Interest, and Bonding ("Brita Sub."); Respondents' Response to the Commission Notice of Review ("Resp. Sub.").

[4] *See* Complainant Brita LP's Reply to Respondents' Statement on Remedy, the Public Interest, and Bonding ("Brita R. Sub."); Respondents' Reply in Response to the Commission Notice of Review ("Resp. R. Sub.").

[5] *See* Complainant Brita LP's Motion to Strike Waived Arguments and New Evidence in Respondents' Reply in Response to the Commission Notice of Review ("Motion to Strike").

[6] The term "lifetime" is used herein as shorthand for the claim limitation "filter usage lifetime claimed by a manufacturer or seller of the filter."

On August 3, 2023, Respondents filed an opposition to Brita's motion.[7] Respondents assert that "to the extent that pointing out well-known dictionary definitions is 'new,' it is directly responsive to the Commission's question, and the Commission may nonetheless examine these definitions to the extent necessary to confirm Brita is incorrect on this point." Opposition to Motion to Strike at 1-2. With respect to bond, Respondents contend that Brita misconstrues its own license agreement to make it seem irrelevant as to whether a reasonable royalty rate can be ascertained. *Id.* at 2.

On August 8, 2023, Brita moved for leave under Commission Rule 210.15(c) to file a reply to Respondents' opposition.[8] Brita contends that good cause exists "to address misstatements and baseless arguments in Respondents' Opposition." Reply to Opposition at 1. Specifically, Brita asserts that "Respondents falsely claim they were entitled to present these new arguments and evidence because Brita purportedly raised new arguments in its own briefing in response to the Commission's Notice." *Id.* at Attachment A.

On August 18, 2023, Respondents filed an opposition to Brita's motion, arguing that "Brita's Motion is devoid of 'good cause,' or any other justification needed to support its request to deviate from the standard motion practice and allowing the filing of a reply."[9]

[7] *See* Respondents' Opposition to Brita LP's Motion to Strike Waived Arguments and New Evidence in Respondents' Reply in Response to the Commission Notice of Review ("Opposition to Motion to Strike").

[8] *See* Complainant Brita LP's Reply in Support of its Motion to Strike Waived Arguments and New Evidence in Respondents' Reply in Response to the Commission Notice of Review ("Reply to Opposition").

[9] *See* Respondents' Opposition to Brita LP's Motion for Leave to Submit Reply in Support of Its Motion to Strike Waived Arguments and New Evidence in Respondents' Reply in Response to the Commission Notice of Review.

The Commission has determined to grant Brita's Motion to Strike as it pertains to Respondents attempt to introduce in their Reply certain dictionary definitions of "validate" and "claimed" for being waived. The Commission made clear in its notice that responses to its questions were limited to the existing evidentiary record. 88 Fed. Reg. at 42951. In addition, Respondents failed to present the dictionary definitions to the ALJ and failed to present them in their petition for review or initial submission to the Commission. The Commission has determined to deny Brita's motion as to Respondents' bond argument. Bond is determined by the Commission based on the full record of the investigation. The ALJ's bond recommendation in the RD includes findings based on evidence presented by the parties as well as the ALJ's recommendation as to bond amount. The Commission takes into account the RD, the arguments of the parties before the ALJ, and considers other information and arguments submitted into the record by the parties, interested government agencies, and other interested parties in response to the Commission's notice seeking submissions on remedy, bonding and the public interest. The Commission has also determined to reject Brita's motion for leave to file a reply to Respondents' opposition as unnecessary.

B. Overview of the Technology

The technology at issue generally relates to gravity flow water filtration systems used for removing undesirable contaminants. '141 patent (JX-0022); ID at 15-16. Two basic types of household water filter systems are known in the art: (1) a pressurized system, such as a filter mounted to a faucet; and (2) a low-pressure system that operates under the force of gravity as water flows through a filter into a water collection receptacle. ID at 16; '141 patent at 1:33-39. The patent relates to the second type.

The ’141 patent, entitled “Gravity Flow Filter,” was filed on September 9, 2008, as U.S. Patent Application No. 12/207,284 (“the ’284 application”). The patent issued on May 1, 2012, and names multiple inventors, including Elizabeth Knipmeyer, who testified on behalf of Complainants. ’141 patent. The patent “relates to carbon block and granular filters having rapid flow rates and excellent filtration performance.” ’141 patent at 1:16-18. The patent describes a gravity-fed carbon block water filter that utilizes “multiple sub-blocks each comprising filter media walls surrounding and defining a cavity receiving fluid.” ’141 patent, Abstract. “Each of the sub-blocks is connected to at least one other of the sub-blocks by filter media of which the filter block is made.” *Id.* The patent discloses that, “[i]n one approach, the filter media includes about 20-90 wt % activated carbon, and about 5-50 wt % binder” and that, “[i]n another approach, a lead concentration in a final liter of effluent water filtered by the filter is less than about 10 ug/liter after about 151 liters (40 gallons) of source water filtration, the source water having a pH of 8.5 and containing 135-165 ppb total lead with 30-60 ppb being colloidal lead greater than 0.1 um in diameter.” *Id.* In this investigation, Brita asserts independent claim 1 and dependent claims 2-6 and 23. ID at 4.

C. The Accused Products and Domestic Industry Products

The accused products are gravity flow water filtration systems that allegedly meet the limitations recited in the asserted claims. Brita accuses multiple products from each of the Respondents of infringing the asserted claims. A complete listing of which Respondents’ products are accused of infringing specific asserted claims can be found in the ID at pages 21-25.

For the domestic industry, Brita identifies its (i) Brita LongLast Product; and (ii) Brita LongLast+ Product (recently rebranded as “Elite”) as practicing the ’141 patent. ID at 25.

III. COMMISSION REVIEW OF THE ID

When the Commission reviews an initial determination, in whole or in part, it reviews the determination *de novo*. *Certain Soft-Edged Trampolines and Components Thereof*, Inv. No. 337-TA-908, Comm'n Op. at 4 (May 1, 2015). Upon review, the "Commission has 'all the powers which it would have in making the initial determination,' except where the issues are limited on notice or by rule." *Certain Flash Memory Circuits & Prods. Containing Same*, Inv. No. 337-TA-382, USITC Pub. No. 3046, Comm'n Op. at 9-10 (July 1997) (quoting *Certain Acid-Washed Denim Garments & Accessories*, Inv. No. 337-TA-324, Comm'n Op. at 5 (Nov. 1992)). With respect to the issues under review, "the Commission may affirm, reverse, modify, set aside or remand for further proceedings, in whole or in part, the initial determination of the administrative law judge." 19 C.F.R. § 210.45(c). The Commission also "may take no position on specific issues or portions of the initial determination," and "may make any finding or conclusions that in its judgment are proper based on the record in the proceeding." *Id.*; *see also Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984).

IV. ANALYSIS

A. Issues Under Review

The Commission determined to review the *Markman* Order's construction of one claim limitation: "filter usage lifetime claimed by a manufacturer or seller of the filter." 88 Fed. Reg. 42950-53 (July 5, 2023). The Commission thus adopts the ID's construction of the other claim limitations in the *Markman* Order. As to invalidity, the Commission determined to review the ID's findings on written description, enablement, section 101, and section 102. *Id.* As discussed below, the Commission reverses the ID's findings as to written description and enablement, and takes no position on the ID's findings on sections 101 and 102. The Commission also determined to review the ID's findings on the economic prong of the domestic industry

requirement. *Id.* On review, the Commission takes no position on the ID's economic prong findings.

B. Claim Construction and Indefiniteness of the Claim Term "Filter Usage Lifetime Claimed by a Manufacturer or Seller of the Filter"

The Commission determined to review the ID's construction of the claim term "filter usage lifetime claimed by a manufacturer or seller of the filter." 88 Fed. Reg. 42950-53 (July 5, 2023). On review, the Commission has determined to vacate the ID's construction and find the claim limitation indefinite.[10]

Independent claim 1 recites:

> 1. A gravity-fed water filter, comprising:
>
> a filter media including at least activated carbon and a lead scavenger, wherein the filter achieves a Filter Rate and Performance (FRAP) factor of about 350 or less according to the following formula:
>
> $$FRAP = \frac{[V * f * c_e]}{[L * 2]}$$
>
> where:
>
> V = volume of the filter media (cm3),
>
> f = average filtration unit time over lifetime L (min/liter),
>
> c_e = effluent lead concentration at end of lifetime L when source water having a pH of 8.5 contains 90-120 ppb (µg/liter) soluble lead and 30-60 ppb (µg/liter) colloidal lead greater than 0.1 µm in diameter, and
>
> ***L = filter usage lifetime claimed by a manufacturer or seller of the filter (gallons)***.

[10] As set forth *infra*, n.11, Commissioner Stayin would affirm the ID's construction of this claim term, and the finding that the term is not indefinite.

'141 patent, claim 1 (emphasis added). The claim relates to FRAP performance testing and the definition of the variables that are used to calculate the FRAP value of a filter media. As noted, claims 2-6 and 23 depend from claim 1.

1. Legal Standard

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Claim construction is a question of law but may depend on "factual underpinnings" such as the understanding of a person of ordinary skill in art at the time of the invention. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331-32 (2015). Claim construction focuses on the intrinsic evidence, which consists of the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *Markman v. Westview Instr., Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc). The Federal Circuit explained in *Phillips* that tribunals must analyze the intrinsic evidence to determine the "ordinary and customary meaning of a claim term" as understood by a person of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1313. "Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001).

"Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claims terms." *Phillips*, 415 F.3d at 1314; *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) ("In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to 'particularly point [ ] out and distinctly claim [ ] the subject matter which the patentee regards as

his invention.'"). Further, "the specification 'is always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). "[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Id.* at 1316.

In addition to the claims and the specification, the prosecution history should be examined, if in evidence. *Phillips*, 415 F.3d at 1317. The prosecution history can "often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Phillips*, 415 F.3d at 1317; *see Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005). When the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence (*i.e.*, all evidence external to the patent and the prosecution history, including dictionaries, inventor testimony, expert testimony, and learned treatises) may be considered. *Phillips*, 415 F.3d at 1317. As the Supreme Court has explained, while claim construction is a question of law, it may depend on "factual underpinnings," such as the understanding of an ordinarily skilled artisan. *Teva*, 574 U.S. at 331-32.

If, however, a person of ordinary skill in the art reading the claim in light of the specification and prosecution history is unable to ascertain with "reasonable certainty" the scope of the invention, the patent claim is invalid for indefiniteness. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910-11 (2014). In other words, a patent claim must "inform

those skilled in the art about the scope of the invention with reasonable certainty" to avoid being indefinite. *Id*.

2. The ID

The ALJ found that the language of the claims and the specification support Brita's proposed construction of "filter usage lifetime claimed by a manufacturer or seller of the filter" to mean "[t]he total number of gallons of water that a manufacturer or seller has validated can be filtered before the filter is replaced." *Markman* Order (Order No. 30) at 14. In construing the limitation, the ALJ noted that, consistent with the specification, "[c]laim 1 defines the filter usage lifetime in gallons ('L=filter usage lifetime claimed by a manufacturer or seller of the filter (gallons)).'" *Id.* at 14-15 (citing '141 patent at 34:25-26; 12:27-28; 26:6-8 (reciting "lifetime … is defined as the total number of gallons that can be effectively filtered..."), 23:26-32 (reciting the filters "have been found to perform effectively in water filtration, including obtaining lead removal results that meet the recent NSF Standard 53 for lead in drinking water")). The ALJ further noted that "[t]he '141 patent describes the NSF/ANSI 53 standard, where it can be located, and the purpose of incorporating by reference to provide 'FRAP performance testing' that may use the 'requirements and procedures' of the standard to calculate the lifetime as part of the FRAP formula" and that "[b]ecause the NSF/ANSI 53 standard is incorporated by reference, it is also intrinsic evidence available for claim construction." *Id.* at 15 ("This is incorporation by reference with sufficient particularity.") (citing '141 patent at 26:22-29); *Zenon Env't, Inc. v. U.S. Filter Corp.*, 506 F.3d 1370, 1378-79 (Fed. Cir. 2007)).

The ALJ rejected Respondents' argument that "the lifetime limitation is indefinite because a method of calculating a filter's lifetime is not described in the '141 patent," finding that "[b]ecause the NSF/ANSI 53 standard is incorporated by reference, the patent explains at least a default method to calculate the lifetime as described in the NSF/ANSI 53 standard." *Id.* at

16-17 (citing JXM-0003.082 at § 7.4.3.6 (describing a protocol test of lead reduction claims)). The ALJ further found that "a person having ordinary skill in the art would understand the NSF/ANSI 53 standard and understand the meaning of 'lifetime,' and determine a method of determining the lifetime." *Id.* at 17.

3. Analysis

The Commission finds that the scope of the claim term, "filter usage lifetime claimed by a manufacturer or seller of the filter," cannot be determined with reasonable certainty and that, as a result, claims 1-6 and 23 are indefinite.[11]

[11] Commissioner Stayin would affirm the ID's construction of "filter usage lifetime claimed by a manufacturer or seller of the filter," and the related finding that the term is not indefinite. In his view, Respondents waived any objection to the adopted construction. During the *Markman* proceedings, Respondents argued the term was indefinite, but did not offer a contrary construction. *See* Resps.' Joint *Markman* Br. at 15-19; *cf. id.* at 9-14 (arguing the term "volume of the filter media" is indefinite and proposing a construction in the alternative). On reply, Respondents offered a single sentence regarding Complainants' construction. Resps.' Joint *Markman* Reply in Support of Indefiniteness at 12-13 ("Brita's proposed definition is seemingly broader, inserting the term "validated" into its construction . . . which does not appear whatsoever within the '141 patent."). The majority offers no explanation for setting aside the adopted construction despite this waiver, or otherwise crediting arguments that were not presented to the ALJ (including new dictionary definitions). *Cf. Certain Smart Thermostat Sys., Smart HVAC Sys., Smart HVAC Control Sys., & Components Thereof*, Inv. No. 337-TA-1258, Comm'n Op., 2022 WL 2915250, at *10 (July 19, 2022) ("In any event, the Commission also finds that Complainant waived any reliance on its proposed construction . . . for failing to present it before the ALJ.").

Evaluating the "lifetime" term as construed by the *Markman* Order, Commissioner Stayin would affirm the ALJ's finding that the term is not indefinite. The specification identifies one method that may be used to determine the lifetime of a filter, namely the NSF/ANSI 53 protocol. The majority takes issue with the fact that this standard is not *required* by the patent, but the Federal Circuit has held that even if there are multiple measurement techniques, "the mere *possibility* of different results from different measurement techniques" does not render a claim indefinite. *Takeda Pharm. Co. v. Zydus Pharms. USA, Inc.*, 743 F.3d 1359, 1366 (Fed. Cir. 2014) (emphasis added). Respondents offered mere speculation that using the NSF/ANSI 53 protocol for different contaminants *might* result in different lifetimes, but provide no concrete examples. *See Markman* Order at 17. The only example offered by the majority, filter PT3-6 from Table 5 of the '141 patent, at most shows the lifetime stated in the patent was incorrect, not that a person of ordinary skill could not determine the lifetime of that filter. Moreover, this example was raised by Respondents for the very first time in their reply submission to the

As noted above, the ALJ construed the claim limitation "filter usage lifetime *claimed* by a manufacturer or seller of the filter" to mean "[t]he total number of gallons of water that a manufacturer or seller has *validated* can be filtered before the filter is replaced." *Markman* Order at 14 (emphasis added). As an initial matter, the Commission notes that the difference between the filter usage lifetime being "claimed" and the filter usage lifetime being "validated" is apparent from the plain meaning of those words, and a person of ordinary skill in the art would not exchange those terms as equivalent in meaning without specific guidance or reason to do so from the patent.[12] The ID found reasons to do so in the patent, but the Commission does not find the intrinsic evidence to support this meaning.

Commission, and not before the ALJ or in Respondents' petition for review. Likewise, although the NSF/ANSI 53 protocol has changed over time, neither Respondents nor the majority offer a single concrete example of a filter for which the infringement determination would change depending on the version of the standard used to determine the lifetime. Indeed, the Commission appears to invert the burden of proof by faulting Complainants for not proving the protocol has been consistent over time. *Compare infra*, at 25-26, *with Takeda*, 743 F.3d at 1366 ("As always, the party challenging the patent bears the burden of proving invalidity by clear and convincing evidence."). Accordingly, Commissioner Stayin would find Respondents failed to meet their burden to prove that the asserted claims are invalid, and thus would affirm the ALJ as to that issue.

[12] While the Commission has determined to reject Respondents' attempt to introduce the dictionary definition of "validate" and "claimed" from certain dictionaries, the Commission takes judicial notice of the following definitions of "claimed" and "validate" from the Oxford English Dictionary and the American Heritage Dictionary of the English Language to underscore the plain meaning of "claimed" and "validate." Oxford defines the term "validate" as "[t]o examine for incorrectness or bias; to confirm or check the correctness of"; and the term "claimed" as "[o]ften loosely used (esp. in U.S.) for: Contend, maintain, assert." *validate*. 2023. In *OED.com*. Retrieved September 5, 2023, from oed.com/dictionary/validate; *claimed*. 2023. In *OED.com*. Retrieved September 5, 2023, from https://www.oed.com/dictionary/validate. American Heritage defines "validate" as "to establish the soundness, accuracy, or legitimacy of"; and "claimed" as "to state to be true, especially when open to question." *validate*. 2023. In *ahdictionary.com*. Retrieved September 5, 2023, from https://www.ahdictionary.com/dictionary/validate; *claimed*. 2023. In *ahdictionary.com*. Retrieved September 5, 2023, from https://www.ahdictionary.com /dictionary/validate. *See Philips*, 415 F.3d at 1322–23 (explaining that courts are "free to consult dictionaries . . . at any time . . . and may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of

Starting with the language of the claim, the Commission notes that the patentees chose to use the phrase "claimed by," which is subjective language,[13] in the limitation reciting "L-filter usage lifetime *claimed by* a manufacturer or seller of the filter (gallons)." '141 patent at 34:25-26 (emphasis added). The language of claim 1, however, does not specify the sources from which the claimed lifetime must be ascertained or how the claimed lifetime must be determined. In addition, claim 1 does not use the objective word, "validate" or a similar term, which would imply checking the claimed usage lifetime against a standard, benchmark, or other measure.

The specification provides additional information and specifically defines the "lifetime filter usage," stating the "filter usage lifetime (L) is defined as the total number of gallons that can be effectively filtered according to *claims presented* by the manufacturer or seller of the filter." '141 patent at 26:6-8 (emphasis added). The specification then explains where those "claims" by the manufacturer or seller may be found, stating that "*[t]ypically* these *claims* are present on the product packaging in the form of instructions to a consumer as to a quantity of water that can be filtered before the filter should be changed. The lifetime *claims* may also be presented in the manufacturer's or seller's advertising." '141 patent at 26:8-13.

The '141 patent specification describes that there may be a "substantiation process" to determine the lifetime: "*Typically*, filter usage lifetime claims require a substantiation process, and in some cases, a competitor may be able to challenge such claims in a judicial or non-judicial

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the patent documents"); *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1348 (Fed. Cir. 2010) ("[I]n determining the ordinary and customary meaning of the claim term as viewed by a person of ordinary skill in the art, it is appropriate to consult a general dictionary definition of the word for guidance."). There is no indication from the intrinsic record that the terms "validate" or "claimed," as used in the '141 patent, are intended to have anything other than their plain and ordinary meaning as reflected in these dictionary definitions.

[13] *See supra* note 12 (defining the term "claim").

process." '141 patent at 26:14–15 (emphasis added)). This description of a substantiation process, however, is permissive according to the specification, and is not required by claim 1.

Further, the specification identifies a protocol that may be used for FRAP performance testing (which requires the measurement of the filter usage lifetime), and while the protocol is incorporated by reference, the protocol is also permissive:

> FRAP performance testing *may be* conducted according to the NSF/ANSI 53 protocol. Requirements and procedures of the NSF/ANSI 53 protocol are available in a document entitled "Drinking water treatment units—Health effects", available from NSF International, 789 North Dixboro Road, P.O. Box 130140 Ann Arbor, Mich. 48113-0140, USA (Web: http://www.nsf.org), and which is herein incorporated by reference.

'141 patent at 26:22-29 (emphasis added). Thus, the Commission finds that nothing in the specification requires substantiation or validation thus undermining the ALJ's construction of the "lifetime" term to require validation. The Commission also notes that nothing in the prosecution history sheds light on the meaning of the term.

In short, because the patentees chose to use the subjective phrase "claimed by," and nothing in the intrinsic record correlates that term with "validation" or requires substantiation,[14] the plain meaning of the language that the patentees deliberately chose to define their invention must be given effect, even if as discussed below it renders the claims indefinite. *White v. Dunbar*, 119 U.S. 47, 52 (1886) ("The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import

[14] As Respondents point out, the evidence shows that in an internal Brita memorandum (CX-0139C), named inventor, Dr. Knipmeyer, proposed a definition that, on its face, would have expressed an objective validation requirement: "filter usage lifetime is defined as the total number of gallons that can be filtered before the filter requires replacement." Tr. (Knipmeyer) at 223:24-224:25); Resp. R. Sub. at 3-4. The patentees, however, chose not to include this type of language in either the specification or the claims.

of its terms."); *Chef Am., Inc. v. Lamb Weston, Inc*., 358 F.3d 1371, 13734 (Fed. Cir. 2004) ("[C]ourts may not redraft claims, whether to make them operable or to sustain their validity."); *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) ("In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to 'particularly point [ ] out and distinctly claim [ ] the subject matter which the patentee regards as his invention.'").

The Commission finds the claim, when given its plain meaning, is indefinite because the claim recites a subjective term "lifetime *claimed* by a manufacturer" and neither the intrinsic of the patent nor extrinsic evidence provides an adequate basis to determine the scope of the claim limitation with reasonable certainty. *See, e.g.*, *Dow Chem. Co. v. Nova Chems. Corp. (Canada)*, 803 F.3d 620, 634-35 (Fed. Cir. 2015) ("the existence of multiple methods leading to different results without guidance in the patent or the prosecution history as to which method should be used renders the claims indefinite."); *Datamize, LLC v. Plumtree Software, Inc.*, 417 F. 3d 1342, 1353 (Fed. Cir. 2005) (holding that a claim limitation fails to provide sufficient notice of its scope if it depends "on the unpredictable vagaries of any one person's opinion" and is "purely subjective."); *Morton Int'l, Inc. v. Cardinal Chem. Co.*, 5 F.3d 1464, 1470 (Fed. Cir. 1993) ("[C]laims ... [must be] sufficiently precise to permit a potential competitor to determine whether or not he is infringing."); *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 ("Where, as here, we are faced with a 'purely subjective' claim phrase, we must look to the written description for guidance," and finding the claim indefinite because "sufficient guidance is lacking in the written description of the asserted patents."). While the specification provides additional information, the specification does not provide an adequate basis to determine the scope of the claim limitation with reasonable certainty. In particular, the specification states that

the "filter usage lifetime (L) is defined as the total number of gallons that can be effectively filtered according to claims presented by the manufacturer or seller of the filter." It goes on to state that "*[t]ypically* these claims are present on the product packaging in the form of instructions to a consumer as to a quantity of water that can be filtered before the filter should be changed" and that "the lifetime claims may also be presented in the manufacturer's or seller's advertising." '141 patent at 26:6-13. These locations are permissive, not mandatory, and the specification leaves open the possibility that the claimed lifetimes may be "presented" in other places or not "presented" at all. In addition, as noted above, while the specification states that FRAP performance testing *may be* done using the NSF/ANSI 53 protocol, nothing in the specification requires use of that protocol.

The ID's rationale for why the "lifetime" limitation is not indefinite provides no reasonable certainty as to the meaning of this limitation. The ALJ, at the suggestion of Brita, relied on the '141 specification's explanation regarding substantiation and its explanation that "FRAP performance testing may be conducted according to the NSF/ANSI 53 protocol" in order to find that the claim is not indefinite. '141 patent at 26:22-29. The ALJ found that "[b]ecause the NSF/ANSI 53 standard is incorporated by reference, the patent explains at least a default method to calculate the lifetime as described in the NSF/ANSI 53 standard." *Markman* Order at 16-17 (citing JXM-0003.082 at § 7.4.3.6 (describing a protocol test of lead reduction claims)). However, as discussed below, the NSF/ANSI 53 standard is insufficient for an ordinarily skilled artisan to ascertain the scope of the limitation with reasonable certainty. JXM-0003.

First, Brita fails to rebut Respondents' showing that a person of ordinary skill in the art would not interpret the "lifetime" claim term as mandating that manufacturers and sellers must implement the NSF/ANSI 53 protocol in their "claimed" filter usage lifetime. Brita asserts

before the Commission that "[u]sers [] rely on the lifetime rating to know when to replace their filters" and that "[u]nder the NSF/ANSI 53 (2007) standard, manufacturers are required to provide a 'rated service life' or 'capacity' for a filter." Brita Rep. at 69 (citing CX-0010.088–089, 092, 120). Brita further contends that "[f]ilters are required to maintain adequate lead reduction performance through the end of their rated service life or capacity" "[a]nd the standard prohibits manufacturers or sellers from 'claim[ing] a capacity or service life greater than the least reduction capacity or service life that has been verified through testing to NSF/ANSI 53.'" *Id.* (citing CX-0010.080, 086, 089). According to Brita, "[t]he NSF standard confirms that the 'lifetime claimed by a manufacturer or seller' recited in the '141 patent refers to a performance claim—such as lead reduction through the rated lifetime—that must be 'verified and substantiated by test data generated under the requirements of NSF/ANSI 53" and that "[v]alidation of filter performance claims throughout a specified lifetime is standard practice in the water filtration industry, as reflected in the '141 patent itself." *Id.* at 69-70 (citing JX-0022 (26:14–17) (noting that "filter usage lifetime claims require a substantiation process"); CX-0010.012, 121). Brita's conjecture as to how a manufacturer or seller might "claim" any particular filter usage lifetime, however, cannot override the intrinsic evidence of the patent, and particularly the language of the claim term "lifetime," which does not require compliance or adoption of the NSF/ANSI 53 protocol in a manufacturer's or seller's "claim." Nor did Brita ever present evidence or argument that a person of ordinary skill in the art would interpret the "lifetime" claim term as mandating that manufacturers and sellers must implement the NSF/ANSI 53 protocol in their "claimed" filter usage lifetime, even if one were to accept Brita's premise that such a skilled artisan reading the claims in light of the specification might consult

the NSF/ANSI 53 protocol to understand the meaning of the "lifetime" limitation, especially because it was incorporated by reference.

Second, Brita has failed to establish that the 2007 version of NSF/ANSI 53 protocol, the evidence upon which Brita relies for its argument, is in fact the version of the NSF/ANSI 53 protocol to which the specification refers. This calls into question the relevance of the evidentiary basis for its argument, particularly in view of the priority dates that Brita claims for its invention. Brita's and the *Markman* Order's reliance on the 2007 version of the NSF/ANSI 53 protocol cannot be squared with the ID's finding that the earliest priority date to which the '141 patent is entitled predates the 2007 version of the protocol. The ID, at Brita's urging, found that "[t]he earliest priority date of the '141 patent is July 25, 2006, as evidenced by actual reduction to practice of the '141 patent claims" and that "[t]he '141 patent also is entitled to a priority date of September 19, 2006, which is the date of a memorandum that Dr. Knipmeyer created expressly articulating the FRAP factor." ID at 120. However, the later priority date of September 19, 2006, upon which Brita relies for the priority date for these claims, predates the NSF/ANSI 53 (2007) protocol. Brita, however, provides no explanation as to why the evidence it offered, *i.e.,* the 2007 version of the NSF/ANSI 53 protocol, must be the default methodology, when it has not been established that the 2007 version of the methodology was actually used to test the filters disclosed in the patent.[15] *See, e.g.*, '141 patent, Table 5.

Brita's evidentiary basis is further undermined because testing under the 2007 NSF/ANSI 53 protocol leaves an embodiment disclosed in the '141 patent that is outside the scope of the claim limitation. *See SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1378-79 (Fed. Cir.

[15] Brita also never argued that a person of ordinary skill in the art would employ the NSF/ANSI 53 protocol that was in place at the time the patent was filed.

2013) ("A claim construction that excludes the preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support."). Specifically, as Respondents point out, Table 5 of the '141 patent (depicted below) discloses an embodiment, PT3-6, with a lifetime of 40 gallons. Resp. R. Sub. at 3. Yet, this embodiment "could not have a lifetime of 40 gallons if validation were required based upon NSF 53 (2007) lead reduction testing because the c_e of 13.3 µg/L would exceed the 10.0 µg/L imposed by the standard." *Id.*; JXM-0003.094.

TABLE 5

	L (gallons)	f (min/liter)	V (cm^3)	C_e (mg/liter)	FRAP Factor
Filter Multiple-Core:					
PA3-5	40	4.6	89	9.5	58.6
PA3-8	40	4.4	89	7.5	45.7
PT3-4	40	4.2	89	6.3	38.7
PT3-6	40	4.6	89	13.3	78.5
PT3-4 alternate housing	40	4.6	89	1.3	16.6
PT3-11	40	4.4	89	8.5	51.2
PT3-13	40	4.2	89	9.2	52.7
PT3-51	40	5.7	89	3.8	36.2
PT3-53	40	5.1	89	2.3	24.2
P2-8 lead sorbent free	40	3.4	89	52.8	208.4
P2-6 lead sorbent free	40	2.3	89	87.1	223.1
Cylindrical Block:					
Block 1	40	17.0	151	9.2	357.7
Block 2	40	9.9	151	14.6	308.2
Mixed Media:					
Brita Granular	40	5.5	128	42.2	386.7
German Maxtra	40	4.9	145	43.8	402.3
Pur 2 stage w/timer	40	16.0	141	30.2	911.4
Pur 2 stage w/timer	40	10.4	141	36.6	706.8
Pur 2 stage w/timer	40	11.0	141	38.6	785.9

'141 patent, Table 5. That is, the PT3-6 embodiment would fail the "validated by NSF/ANSI 53 (2007) standard" construction inserted into the definition of "lifetime" by the *Markman* Order, but the scope of the claim must be broad enough to encompass that disclosed embodiment. *See*

SynQor, 709 F.3d at 1378-79. Thus, Brita's only evidence of the described methodology for determining "lifetime," the NSF/ANSI 53 (2007) protocol, does not adequately define the scope of the limitation. Accordingly, the Commission finds that the ALJ's reliance on the 2007 version of the NSF/ANSI 53 protocol is insufficient to delineate the metes and bounds of the claim.

Third, Brita's argument that the NSF/ANSI 53 protocol referenced in the specification overcomes indefiniteness is contrary to black letter law because the specification recites no specific version of NSF/ANSI 53 protocol and that protocol is subject to change. While Brita presented only the 2007 version of the NSF/ANSI 53 protocol to support its construction, the '141 patent incorporates by reference the NSF/ANSI 53 protocol as a whole and does not incorporate a specific version. '141 patent at 26:22-29 ("FRAP performance testing may be conducted according to the NSF/ANSI 53 protocol . . . which is herein incorporated by reference."); ID at 15. Thus, even if the 2007 version of the protocol is not relevant, one could argue that the NSF/ANSI 53 protocol in general is clear enough to give meaning to the claim. The problem, however, is that since the protocol changes over time, the scope of the claimed "lifetime" will vary based upon the version of the NSF/ANSI 53 protocol that one relies upon. No other version of the NSF/ANSI 53 protocol has been introduced into the record by Brita to show a consistent methodology for determining "lifetime." Yet, under Federal Circuit law, the scope of a claim cannot evolve over time. *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1385 (Fed. Cir. 2014) ("We have long recognized that, although the understanding of a claim term can evolve over time, the literal scope of a patent claim cannot have different meanings at different times."); *see* "ANSI: NSF/ANSI 53-2021, Past Revisions of NSF 53," *available at* https://blog.ansi.org/nsf-ansi-53-2021-drinking-water-units-health-effect/#gref (last visited July 19, 2023)). This potential variation in methodology underscores why generally relying upon the

NSF/ANSI 53 protocol to determine lifetime is problematic. The specification broadly defines lifetime, consistent with the explicit claim language, in a manner that would encompass other undisclosed protocols or even unsupported assertions made by a manufacturer or seller. '141 patent at 26:6-8.

Moreover, record evidence shows that the filter usage lifetime could also depend on what contaminant is being filtered or the quality of the source water. *See* RXM-0019 [Knipmeyer Rough] at 150-151, 261-265 (acknowledging that lifetime of the filter can change based on the contaminant being filtered). Indeed, the lifetime of the filter could be claimed based on other impurities being filtered such as, a certain number of gallons for arsenic, a certain number of gallons for chromium, a certain number of gallons for lead, etc. *See* RX-0020 (Harrison Decl.) at ¶ 42-44. The evidence further shows that manufacturers often use a single lifetime claim that is not related to the amount of lead that the filter can reduce but rather related to the "lowest common denominator" contaminant that a filter is effective in reducing. *Id.* at ¶ 44. That is, if a filter is certified for lead at 60 gallons but chlorine at 40 gallons, the reported lifetime is often just "40 gallons," which fails to indicate the lead reductive qualities of the filter as required by the claim. The '141 patent provides no guidance for one skilled in the art on how to measure the "Lifetime" limitation.

Brita further argues that "[s]ince consumers rely on lifetime numbers to determine the value proposition of a given water filter it is logical that the asserted lifetime of filters must be tested and validated so that they are not deceptive or misleading." Brita Sub. at 7. Although this attorney argument may ring true, it is unsupported by record evidence and has no bearing on how the inventors described and claimed their invention in the intrinsic evidence of the patent.

In sum, Brita's arguments and evidence fail to cabin the lifetime "claimed by a manufacturer or seller" in a manner that can be understood by a skilled artisan with reasonable certainty by reason of the pure subjectivity by which a manufacturer or seller can claim a filter usage lifetime. The "L-filter usage lifetime claimed by a manufacturer or seller" could cover lifetimes that are claimed on packaging and in advertising and those that are claimed in other undisclosed places. The term could also cover claimed lifetimes that are calculated and substantiated using testing as well as those that are claimed with no apparent objective basis. It could include lifetimes that are verified using the 2007 version of the NSF/ANSI 53 protocol or a different version of that standard or using another protocol altogether. Lifetimes claimed by manufacturers and sellers could be untethered to any fact-based measure. Additionally, it could encompass different lifetimes claimed by different manufacturers or sellers of the same product and can be based on various contaminants not just lead. This undefined and variable scope does not inform persons skilled in the art about the scope of the invention with any certainty. Nor can the claims be saved by any of the intrinsic or extrinsic evidence on the record as discussed above. Thus, the evidence shows that an ordinarily skilled artisan at the time of the invention could not have ascertained the scope of the limitation "filter usage lifetime claimed by a manufacturer or seller of the filter" with reasonable certainty. Accordingly, the Commission finds that the claims 1, 2-6 and 23 of the '141 patent are invalid for indefiniteness.

C. Written Description

The Commission determined to review the ID's findings on written description. 88 Fed. Reg. 42951 (July 5, 2023). On review, the Commission has determined to reverse the ID's findings. Independent of the Commission's determination that the asserted claims are invalid as indefinite based on the inability to ascertain with reasonable certainty the lifetime limitation, the

Commission finds that claims 1, 2-6 and 23 of the '141 patent are invalid for lack of written description as to any filter media other than carbon block filters that are within the scope of the asserted claims and, as discussed below, for lack of enablement of the asserted claims relating to non-carbon block filters.

1. Legal Standard

The written description requirement of 35 U.S.C. § 112 states that:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

35 U.S.C. § 112 (Pre-AIA). A patent disclosure satisfies the written description requirement when it "reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013, 1016 (Fed. Cir. 2022) (quoting *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (citations omitted)). The written description analysis "requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art" and "[b]ased on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed." *Ariad*, 598 F.3d at 1351. As explained in *Ariad*, the analysis varies depending on context:

> [T]he level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology. For generic claims, we have set forth a number of factors for evaluating the adequacy of the disclosure, including "the existing knowledge in the particular field, the extent and content of the prior art, the maturity of the science of technology, [and] the predictability of the aspect at issue."

Id.

The purpose of the "written description" requirement is to "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, the inventor was in possession of the invention." *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991). "The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed*." *Vas-Cath*, 935 F.2d at 1563-64 (emphasis in original). *Id.* "The essence of the written description requirement is that a patent applicant, as part of the bargain with the public, must describe his or her invention so that the public will know what it is and that he or she has truly made the claimed invention." *Nuvo Pharms. (Ireland) Designated Activity Co. v. Dr. Reddy's Lab'ys Inc.*, 923 F.3d 1368, 1376-77 (Fed. Cir. 2019). The Federal Circuit has explained that "[t]he written description requirement exists to ensure that inventors do not attempt to preempt the future before it has arrived." *Billups-Rothenberg, Inc. v. Associated Reg'l & Univ. Pathologists, Inc.*, 642 F.3d 1031, 1036 (Fed. Cir. 2011).

A patent is presumed to have adequate written description. *Novartis*, 38 F.4th at 1019. The presumption of validity must be overcome by clear and convincing evidence. *Ariad*, 598 F.3d at 1354-55. Compliance with the written description requirement is a question of fact. *Id*.

2. The ID

The ID noted Respondents' argument that the written description requirement is not met because the disclosure does not describe the full claim scope of filter media types that could fall within the broadly recited "filter media." ID at 173.[16] Specifically, Respondents argued that the '141 patent fails to show that the inventors had possession of filter species other than carbon

[16] The Commission takes no position on the ID's discussion and findings on Respondents' second argument, *i.e.*, whether there is adequate written description for the ranges of values of the FRAP factor and its variables recited in the asserted claims.

block filters. *Id.* The ID noted Brita's counter argument that there is adequate disclosure in the specification and originally filed claims to support the asserted claims. *Id.*

The ID agreed with Brita, stating that "Respondents lacked credible support for any dispute that explicit disclosures of the claims, or the invention claimed does not exist." *Id.* at 174-75. The ID further found that the "findings of fact stem from Brita's more accurate and complete explanations of the explicit, detailed factual explanation for the written description of the invention that is reflected in the specification, and on the more thorough and credible explanations and opinions that Brita's expert, Dr. Benny Freeman offered during the Hearing." *Id.* at 175-77. In contrast, the ID concluded with respect to Respondents' expert that "Dr. Hatch's initial 'opinion' was both legally and factually erroneous" and "was not credible." *Id.* at 182-84.

Respondents argued to the ALJ that "the '141 patent does not show that the inventors had possession of a filter species other than the carbon block filters" and that "the '141 patent is directed to a genus of at least eight distinct types of filter media, but the specification only possessed a limited number of carbon block water filters." *Id.* at 187. In response, the ID pointed to Brita's argument "that the specification discloses numerous filters, accompanied by examples of flow rate, volume, lifetime, effluent lead concentration, and FRAP factors that embody the claimed invention." *Id.* at 188. The ID noted that, "[a]s explained in *Ariad*, one way to define species falling within a genus is by name" and that "[h]ere, the specification of the '141 patent identifies by name the species such as mixed media, carbon blocks, nonwovens, hollow fibers, membranes, nonwovens, depth media, nanoparticles and nanofibers, and ligands, in at least two (2) locations: at column 25, lines 9-12, and column 26, lines 30-37. (JX-0022 at 25:9-12, 26:30-37)." *Id.* at 189. The ID concluded that "a skilled artisan would be able to 'visualize

or recognize' the members of the genus because the specification clearly identifies the species." *Id.*

Regarding Respondents' argument that "the only working examples in the '141 patent (see Tables 1 and 5 of the '141 patent) are for carbon block filters," the ID stated that "[i]n rebuttal Brita argued correctly legally that the written description requirement does not require working examples of each species." *Id.* at 190 (citing *Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1365 (Fed. Cir. 2003)). The ID reasoned that "[i]n *Cordis*, a description of a preferred embodiment of certain types of openings was sufficient written description of broadly claimed openings" and that "the holding in *Cordis* supports a factual finding that while the '141 patent describes a preferred embodiment of carbon block, the other broadly claimed filters, identified below and in the '141 patent, have adequate written description in the specification." *Id.* at 190-91 (citing *Cordis*, 339 F.3d at 1364-65; JX-0022 at 11:35-41 (describing carbon block water filters), Table 5 (working examples of carbon block filters)).

The ID noted that "Brita argued that carbon block filters are not different in form and function than other filter media types because they function in the same manner across filter media types" and that "the field had been so well-studied by the time of invention that a skilled artisan would understand that filtration concepts were applicable across filter formats and applications." *Id.* at 196 (citing Tr. (Freeman) at 1513:16-1514:9; Tr. (Knipmeyer) at 174:4-13, 175:8-24 (describing similarities in chemical filtration and mechanical filtration for mixed media and carbon block filter media, wherein they both have "chemical filtration where they can absorb ion exchange and mechanical filtration or physical filtration. Really the difference is in the size of the particle that is used. So granular media tends to be larger sizes. Carbon block tends to be smaller sized particles"); CX-0143C.0072 (listing testing results mixed media filters with over

10 ppm effluent lead concentration - the "current" Brita legacy, Maxtra and PUR filters); Tr. (Knipmeyer) at 168:5-171:22 (explaining testing results shown on CX-0143C.0072)). According to the ID, one of the inventors, "Dr. Knipmeyer explained that the activated carbon may have different sizes in different filter media of carbon block compared to mixed media, but the filter media both perform chemical and mechanical filtration" and that "Dr. Freeman testified that the 'activated carbon and lead scavengers don't know or care what filter format they're in" but "perform their function independent of how they're organized and what their geometry is." *Id.* at 197 (citing Tr. (Freeman) at 1513:24-1514:2, 1518:3-8).

The ID concluded that "the weight of the evidence supports a finding of fact that the existing knowledge in the field at the time of the invention that became the '141 patent fails to support Respondents' argument that the various filter types are 'entirely' different in form and function." *Id.*

3. Analysis

The Commission finds that the ID erred in concluding that the asserted claims are not invalid for lack of written description. The '141 patent broadly claims any and all filtration media types with activated carbon and a lead scavenger that meet the functional FRAP factor limitation. *See, e.g.*, '141 patent claim 1, Resp. Pet. at 6. For instance, independent claim 1 recites: A gravity-fed water filter, comprising: "a filter media including at least activated carbon and a lead scavenger, wherein the filter achieves a Filter Rate and Performance (FRAP) factor of about 350 or less" according to a specific formula. While the claim is broadly directed to a filter that has activated carbon and a lead scavenger, it covers any type of filter media that incorporates those two things. The patent identifies several filter media types that could be used with activated carbon and a lead scavenger, including mixed media, carbon blocks, nonwovens, hollow fibers, membranes, depth media, nanoparticles and nanofibers, and ligands. '141 patent

at 25:9-12, 26:30-37. Yet, the patent discloses only a single filtration media species—carbon block—that achieved the claimed FRAP factor of less than 350, specifically disclosing "a gravity-fed carbon block water filter." '141 patent Abs., 1:15-18, 5:24-33, 6:11-23, 7:45-9:26; Tr. (Freeman) at 1569:5-1571:12; Tr. (Hatch) at 1428:2-1430:21. Indeed, in the "field of the invention" section, the patent states that "[t]he present invention relates to gravity flow filtration systems, and more particularly, this invention relates to carbon block and granular filters having rapid flow rates and excellent filtration performance." '141 patent 1:15-18. For the other types of filter media, the patent provides no guidance or information about how or why these other types of media achieve the requisite FRAP. '141 patent, 26:63-67; Tr. (Freeman) at 1569:5-1571:12; Tr. (Hatch) at 1428:2-1430:21. The breadth of the claim contrasted with the lack of disclosure tends to indicate that the inventors were not, in fact, in possession of the invention relating to the other types of filter media, besides carbon block, as of the filing date.

Brita concedes that "[t]here is no dispute that the inventors' reductions to practice were all carbon block filters." Brita Rep. at 15. Brita, however, argues that "the law has never required an actual reduction to practice to demonstrate possession, much less an actual reduction to practice *of all embodiments of the claims*." *Id.* (citing *Ariad,* 598 F.3d at 1352) (emphasis by Brita). The ID too pointed to Brita's argument "that the specification discloses numerous filters, accompanied by examples of flow rate, volume, lifetime, effluent lead concentration, and FRAP factors that embody the claimed invention" and that "[a]s explained in *Ariad*, one way to define species falling within a genus is by name." *Id.* at 188. The ID stated that "[h]ere, the specification of the '141 patent identifies by name the species such as mixed media, carbon blocks, nonwovens, hollow fibers, membranes, nonwovens, depth media, nanoparticles and nanofibers, and ligands, in at least two (2) locations: at column 25, lines 9-12, and column 26,

lines 30-37 (JX-0022 at 25:9-12, 26:30-37)." *Id.* at 189. The ID concluded that "a skilled artisan would be able to 'visualize or recognize' the members of the genus because the specification clearly identifies the species." *Id.*

The Commission finds that there is clear and convincing evidence that the written description requirement is not met. The specification discloses that "[t]he formulation of gravity fed carbon blocks disclosed are unique in there [sic] ability to meet the required FRAP factor" and only provides examples of "gravity flow carbon blocks that have a FRAP factor of less than 350." '141 patent, 26:63-67. By their own admission in the patent, the inventors were only in possession of a filter that uses carbon blocks, not other types of filter media.

Similarly, the patent disclosure does not describe how any other types of filter media (other than carbon blocks) can achieve the claimed FRAP factor and specifically states that no other filter media types that were tested or known to exist in the market could achieve the claimed FRAP factor:

> Several gravity fed carbon blocks and mixed media filters have been tested for flow rate and lead reduction capability against the defined lead challenge water. Filters tested include several formulations of carbon blocks along with commercially available mixed media filters produced by BRITA® and PUR®. Based on the results from testing, the FRAP factors were calculated for each filter and reported below. ***No mixed media filters tested met the claimed FRAP factor range due to their inability to remove particulate lead.*** The formulations of gravity fed carbon blocks disclosed are unique in [their] ability to meet the required FRAP factor. The "Examples" below include many examples of gravity flow carbon blocks that have a FRAP factor of less than 350. ***It is not believed that any currently-marketed gravity-flow filters have a FRAP factor of less than 350.***

'141 patent at 26:55–27:2, Table 5 (emphasis added). Based upon this disclosure, one of ordinary skill at the time of the invention would not have understood that the inventors were in possession of other types of media filters (other than carbon block filters) that achieve a FRAP factor below 350.

Brita and the ID appear to suggest that the claims' recitation of "activated carbon" and a "lead scavenger" sufficiently provides commonality among all filter media types and that "activated carbon and lead scavengers don't know or care what filter format they're in" and will "perform [predictably] their function independent of how they're organized and what their geometry is." Resp. Sub. at 15-16 (citing Tr. (Freeman) at 1513:24–1514:2); ID at 175-79. While activated carbon and lead scavengers may perform as predicted when applied to water to remove lead and other impurities from it, that is not the point. The point is the ability to filter water with activated carbon, a lead scavenger, and a filter media that together achieve the specific FRAP factor disclosed and claimed in the patent. Yet, the specification does not describe how that combination can be used to achieve the required FRAP factor with a filter media other than carbon block so as to support the conclusion that the inventors were in possession of such invention using filter media other than carbon block. And, as Respondents note, "[n]othing suggests that the mere inclusion of activated carbon and a lead scavenger will, on its own, sufficiently reduce lead to levels such that the filter will necessarily achieve FRAP below 350." Resp. Sub. at 16.[17] Put differently, nothing in the patent disclosure would lead one of ordinary skill in the art to understand how the claimed FRAP could be achieved with filter media other than carbon blocks based solely on the predictability of activated carbon and lead scavengers as Brita and the ID appear to suggest.

Indeed, the clear and convincing evidence, including the patent disclosure itself and the inventors' testimonies, is to the contrary. As Respondents correctly point out, the patent "disclosure focuses the inventors' purported advancement to carbon block specific filters that

[17] As discussed below with regard to enablement (specifically *Wands* Factor 7), the evidence of record shows that the art is unpredictable with regard to achieving a FRAP factor below 350. *See, infra,* at 56.

have the performance capability to meet the functional FRAP limitation." Resp. Pet. at 8 (citing '141 patent Abs., 1:15-18, 5:24-33, 6:11-23, 7:45-9:26); Tr. (Freeman) at 1569:5-1571:12; Tr. (Hatch) at 1428:2-1430:21). The testimony of the inventors confirms that the invention disclosed in the specification is limited to carbon block filters. Specifically, the inventors themselves testified that they did not actually invent any non-carbon block filters that would meet the FRAP factor limitation. Resp. Pet. at 17-18 (citing Tr. (Knipmeyer) at 202:9-17 (invention utilized only carbon block); 203:5-9 (did not invent membrane filter); 203:10-14 (did not invent nonwoven filter); 203:15-19 (did not invent depth media filters); 203:20-24 (did not invent nanoparticle filter); 203:25-204:2 (did not invent nanofiber filter); 204:3-8 (did not invent granular media filter); 204:9-12 (did not invent or disclose granular activated carbon with ion exchange resin meeting FRAP limitation); RX-2607C Brita (Knipmeyer) 64:6-10 ("Q And – and as part of inventing this patented technology, did you invent any activated carbon and ion exchange resin filter that would have met this FRAP limitation? A Not at that time, no."); RX-2607C Brita (Knipmeyer) Dep. at 52:7-15 ("Q. What – what's the delta? What's the magic formula? . . . A. -- we changed technology from a granular media to a carbon block. Q. Did the current granular media solutions at the time, were they able to solve this problem? A. Not that I'm aware of.); RX-2607C at 327:15-328:6; RX-2601C (Reid) Dep. at 42:4-10; RX-2602C Omnipure (Saaski) Dep. at 114:17-116:2; RX-2602C Omnipure (Saaski) Dep. at 115:9-116:2.

Against this undisputed evidence, the Commission disagrees that "a skilled artisan would be able to 'visualize or recognize' the members of the genus because the specification clearly identifies the species." *See* ID at 189. As the Federal Circuit has explained, "[t]he written description requirement exists to ensure that inventors do not attempt to preempt the future before it has arrived." *Billups-Rothenberg*, 642 F.3d at 1036. We agree with Respondents that

"the disclosure of the '141 patent is not commensurate with this immensely broad scope" and that "[i]n concluding that the '141 patent properly demonstrates possession to the entire scope of Brita's claimed genus 'invention,' the ID permits Brita's claims to 'overreach the scope of the inventor's contribution to the field of art as described in the patent specification,' and undermine 'the *quid pro quo* of the patent grant.'" Resp. Pet. at 8 (citing *Ariad*, 598 F.3d at 1354-55).

Nor is it sufficient to simply recite in the specification the names of filter types to satisfy the written description requirement as the ID did here. ID at 189. The patent states that "[t]he nature of the filter meeting the following performance criteria is independent of the exact embodiment of the filter and thus applicable to mixed-media, carbon blocks, non wovens, hollow fibers and other filtration formats." It also states that "[t]he FRAP factor criteria set forth herein is applicable to all embodiments of pour through filters including but not limited to mixed media (carbon and ion exchange resin), carbon blocks with any type and size of carbon and binder material with and without lead sorbent" and that "[o]ther embodiments of the present invention include alternate filtration techniques such as membranes, nonwovens, depth media, nanoparticles and nanofibers, ligands, etc." '141 patent at 25:9-12, 26:30-37. These two statements enumerating other filter types, however, provide no guidance on how to achieve the claimed FRAP using filter media other than carbon blocks. *See Idenix Pharms. LLC v. Gilead Scis. Inc.*, 941 F.3d 1149, 1164 (Fed. Cir. 2019) (holding that the mere listing or examples of supposedly effective species fails to satisfy written description where the specification does "not explain what makes them effective, or why" and "depriv[ing] [an ordinarily skilled artisan] of any meaningful guidance into what compounds beyond the examples and formulas, if any, would provide the same result"). Further, use of the term "etc.," '141 patent at 26:37, indicates a genus broader than that which is specifically enumerated.

The ID's findings are based in part on its credibility determinations. However, the findings relied upon by the ID in this investigation, including Complainants' expert testimony, cannot overcome the express disclosures in the patent and the undisputed record evidence that clearly and convincingly show that the invention provides adequate written description support only for what the inventors actually invented: carbon block filters that meet the FRAP factor limitation, and not for the full breadth of the claims that, as written, cover any filter media that can achieve the FRAP factor limitation. *Nuvo Pharms. (Ireland) Designated Activity Co. v. Dr. Reddy's Lab'ys Inc.*, 923 F.3d 1368, 1381 (Fed. Cir. 2019) (finding claim indefinite where specification "does not demonstrate that the inventor possessed more than a mere wish or hope that uncoated PPI would work, and thus it does not demonstrate that he actually invented what he claimed: an amount of uncoated PPI that is effective to raise the gastric pH to at least 3.5"); *see also id.* ("Although inventor testimony cannot establish written description support where none exists in the four corners of the specification, it illuminates the absence of critical description in this case.").

In sum, the ID's finding that the patent disclosure provides adequate written support for non-carbon block filter media is not supported by the undisputed record evidence. Thus, the Commission has determined to reverse the ID on that issue and find the asserted claims invalid for lack of written description under 35 U.S.C § 112.

D. Enablement

The Commission determined to review the ID's findings on enablement. 88 Fed. Reg. 42951-52 (July 5, 2023). On review, the Commission has determined to reverse the ID's findings. The Commission finds that Respondents have established by clear and convincing

evidence that the full scope and types of filter media of claims 1, 2-6 and 23 of the '141 patent are not enabled.

1. Legal Standard

The enablement requirement of 35 U.S.C. § 112 states that:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains . . . to make and use the same.

35 U.S.C. § 112 (Pre-AIA). The Supreme Court has explained that "[i]f a patent claims an entire class of processes, machines, manufactures, or compositions of matter, the patent's specification must enable a person skilled in the art to make and use the entire class" and that "the specification must enable the full scope of the invention as defined by its claims." *Amgen Inc. v. Sanofi*, 143 S. Ct. 1243, 1254 (2023). The standard for enablement is whether a person skilled in the art can "make and use" the invention "without undue experimentation." *In re Wands*, 858 F.2d 731, 736-37 (Fed. Cir. 1988) (finding enablement where the disclosure provided considerable direction and guidance, working examples, in combination with a high level of skill and that methods to practice the invention were well-known). "The 'undue experimentation' proscription is, in effect, a gloss on the statute which has arisen from decisional law which requires that sufficient information be given in the application so that one of ordinary skill in the art can practice it without the necessity for undue experimentation." *Fields v. Conover*, 443 F.2d 1386 (CCPA 1971). "Sufficiently routine" experimentation that would be reasonable for a skilled artisan to carry out does not preclude a finding of enablement. *Amgen Inc. v. Sanofi, Aventisub LLC*, 987 F.3d 1080, 1085 (Fed. Cir. 2021). However, a finding of "undue" experimentation to make and use the invention leads to lack of enablement. *Id.* Factual considerations, now known as the *Wands* factors, guide the inquiry as to whether a person skilled

in the art would require "undue" experimentation to make and use the invention. *Id.* at 1084. "Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations." *Wands*, 858 F.2d at 737. The *Wands f*actors are:

> (1) the quantity of experimentation necessary,
> (2) the amount of direction or guidance presented,
> (3) the presence or absence of working examples,
> (4) the nature of the invention,
> (5) the state of the prior art,
> (6) the relative skill of those in the art,
> (7) the predictability or unpredictability of the art, and
> (8) the breadth of the claims.

Id.

The *Wands* factors "are illustrative, not mandatory," and there is no requirement to consider all of the factors. *McRO, Inc. v. Bandai* Namco *Games Am. Inc.*, 959 F.3d 1091, 1100 (Fed. Cir. 2020) ("*McRO II*"). A *Wands* analysis considers "how much experimentation a skilled artisan would have to undertake to make and use those products or processes." *Id.* A lack of enablement requires "identif[ying] specifics that are or may be within the claim but are not enabled." *Id*. at 1104. Under Federal Circuit precedent, the specification need not "describe how to make and use every possible variant of the claimed invention." *Amgen*, 987 F.3d at 1084-85 (quoting *McRO II*, 959 F.3d at 1100). However, as the Supreme Court explained, "in allowing that much tolerance, courts cannot detract from the basic statutory requirement that a patent's specification describe the invention 'in such full, clear, concise, and exact terms as to enable any person skilled in the art' to 'make and use' the invention. *Amgen*, 143 S. Ct. at 1255. As the Court put it, "[t]he more one claims, the more one must enable." *Id.*

"Enablement is determined from the viewpoint of persons of skill in the field of the invention at the time the patent application was filed." *Ajinomoto Co., Inc. v. Archer-Daniels-*

Midland Co., 228 F.3d 1338, 1345 (Fed. Cir. 2000). Enablement, unlike written description, is a question of law. *Ariad*, 595 F.3d at 1351.

2. The ID

The ID found that "an analysis of the relevant *Wands* factors and the evidence the Parties offered fails to support a finding of fact or law that undue experimentation is required to reach the full scope of the FRAP factor, its variables, and filter media types in the asserted claims." ID at 209. Thus, the ID concluded that "Respondents have failed to prove by clear and convincing evidence that the claims, including the full scope of the FRAP factors and types of filter media, are not enabled."[18] *Id.*

Wands Factor 1 – Quantity of Experimentation

The ID found that "Respondents broadly addressed *Wands* factors 1 and 8, but ultimately the opinion of their expert, Dr. Hatch, on *Wands* factor 1 was conclusory." *Id.* (citing Tr. (Hatch) at 1432:13-1435:5 (FRAP factor values); 1438:14-1439:13 (filter media embodiments)). The ID stated that "[e]xperimentation may be 'considerable,' yet not rise to experimentation consistent with non-enablement, so long as it is 'merely routine' or the specification 'provides a reasonable amount of guidance.'" ID at 209-210 (citing *Wyeth & Cordis Corp. v. Abbott Labs.*, 720 F.3d 1380, 1386 (Fed. Cir. 2013); *Cephalon, Inc. v. Watson Pharms., Inc.*, 707 F.3d 1330, 1338 (Fed. Cir. 2013) ("Extensive experimentation does not necessarily render the experiments unduly extensive where the experiments involve repetition of known or commonly used techniques.")). Regarding the "broad functional ranges of the asserted claims," the ID noted that "Respondents did not directly brief the quantity of experimentation that a person of skill might

[18] The Commission takes no position on the ID's discussion and findings regarding Respondents' argument that the "broad functional ranges of the asserted claims are not enabled," *id.* at 208.

require, *Wands* factor 1, in its Pre-Hearing Brief or Post-Hearing briefing" but rather "argued that there was undue experimentation based on *Wands* factors 2-6 and 8." *Id.* at 210 (citing (Tr. (Hatch) at 1432:13-1435:5 (FRAP factor values), 1438:14-1439:13 (filter media embodiments)). The ID stated that "[b]ecause there is no substantiation for Dr. Hatch's testimony and Respondents' argument, Respondents have abandoned, withdrawn and/or waived any argument on this issue under Ground Rules 7.2 and 10.1." *Id.* at 211. The ID added that "[a]t best, Dr. Hatch's testimony was conclusory; it was given little weight or credibility." *Id.*

As to whether "there would be undue experimentation to make and use filters other than carbon block," the ID found that Respondents' expert, "Dr. Hatch did not provide explicitly supported evidence with his opinion on either the quantity of experimentation necessary to have arrived at carbon block filters or any of the filter media that the '141 patent discloses" and failed to "explain what undue experimentation is." *Id.* at 213 (citing Tr. (Hatch) at 1439:9-1440:21). The ID found that "[i]n contrast, Dr. Freeman provided testimony about the level of experimentation needed to translate the teachings of a carbon block filter to, for example, a nonwoven filter" and testified that "a person of skill would know: (a) the filter volume; (b) lead scavenger component; (c) activated carbon component; (d) 'how closely compressed the activated carbon and lead scavenger had been with their -- with the binder,' and together those 'would give an idea of the pore size that was available for filtration.'" *Id.* at 213 (citing (Tr. (Freeman) at 1521:8-12-1522:1) (pointing to Dr. Freeman's testimony that "because the components and raw materials that go into the filter are going to ***perform their function in any filter media*** that they're put into" that "***after some experimentation***, but not undue experimentation," comparable performance would be achieved") (emphasis in ID).

The ID found that "Respondents had the burden of proof to show that the quantity of experimentation favors a finding of undue experimentation" but that "Brita had the better supported argument, and credible opinion, through Dr. Freeman's testimony." *Id.* at 216.

Wands Factor 2 – The Amount of Direction or Guidance Presented

The ID noted Respondents' argument that "the '141 patent discloses only one type of working example, carbon block filters" and that "Respondents indirectly suggested that the working examples of carbon block in the '141 patent are not a source of guidance for the remaining filter blocks or full range of FRAP factor values." *Id.* at 216-17. The ID found that "Dr. Freeman testified that there is guidance or direction in the '141 patent to make filter media other than carbon media." *Id.* at 223-24. The ID stated that "Dr. Freeman testified that 'additional guidance throughout the specification [that] provides information to a person of skill in the art about how to -- how to extend and expand on the working examples ***to other media*** and to other examples with different characteristics and different materials.'" *Id.* (citing Tr. (Freeman) at 1520:22-1521:4 (emphasis by ID); JX-0022 at 13:30-34 (describing carbon block and granular filters), 26:30-37 (describing filter media embodiments of mixed media, carbon block, membranes, nonwovens, depth media, nanoparticles and nanofibers, ligands)).

According to the ID, "Dr. Freeman explained that the working examples provide guidance, based on a skilled artisan's understanding of pore size and components of the filter, to make and use filters with other filter media." *Id.* (citing Tr. (Freeman) at 1521:13-18, 1522:21-24). The ID found that "Dr. Freeman provided some reasoning, that the working examples of carbon block are guidance to make and use filters comprising other filter media." *Id.* at 224. The ID stated that "[g]iven that the testimonies are conflicting, and given that Respondents had

the burden of proof, when Dr. Freeman's explicit reference to and discussion of Figures 21-23 is examined, Brita and its expert have the better supported argument." *Id.*

Wands Factor 3 – Working Examples

The ID noted Respondents' argument "that there were no working examples of 'granular carbon filters, pleated paper filters or alternate filtration techniques such as membranes, nonwovens, depth media, nanoparticles and nanofibers, ligands, etc.' to achieve the claimed FRAP factors in the '141 patent." *Id.* at 225. The ID noted Brita's argument that "a skilled artisan could take the carbon block working examples, in light of knowledge in a well-known field, to construct and configure filters with alternative filter media" and that "Dr. Hatch did not disagree that these filters, filter media or configurations to obtain certain desired benefits are well-known." *Id.* (citing Tr. (Hatch) 1461:16-23 (admitting gravity-fed filters are well-known), 1465:7-1466:12) (describing well-known gravity-fed water filters of nonwovens, depth media, nanofibers, ligands, zeolites), 1466:13-17, 1467:6-9 (configuring different filter media by a skilled artisan)). The ID found that "Dr. Freeman admitted that there are no working examples of filter media other than carbon block" but that "Dr. Freeman testified that a 'routine' effort would extend the teaching of the '141 patent to other filter media types." *Id.* at 227 (citing (Tr. (Freeman) at 1561:16-19 ("My opinion is that the '141 patent disclosed carbon blocks in the working -- in the working examples, and then in the specification it also discloses other filter media"); Tr. (Freeman) at 1562:4-17).

The ID found that "Brita was unable to rebut that the '141 patent has no working examples for filter media other than carbon block" but that "this is not a case where the specification provides no enabling disclosure." *Id.* at 228 (citing *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1366 (Fed. Cir. 1997)). The ID stated that "[t]he evidence shows

that there is a presence of working examples for carbon block and granular carbon in the '141 patent, but [an] absence of working examples for filter media other than carbon block" and that "Respondents had the better supported argument." *Id.* at 228-229. The ID stated that "*Wands* factor 3 favors a finding of fact and law that there would be undue experimentation to make the claimed invention." *Id.* at 229.

Wands Factor 4 – The Nature of the Invention

The ID found that "Dr. Hatch testified that carbon block filters were 'the only nature of the invention that's shown' in the '141 patent" and that "Dr. Freeman testified that 'the nature of the invention is gravity-fed water filters, and we've heard several times today that this is a well-known field and has been known for many decades if not longer.'" *Id.* at 229 (citing Tr. (Hatch) 1438:20-23; Tr. (Freeman) at 1519:21-24). The ID stated that "[i]t is a factual finding that the nature of the invention is gravity-fed water filters including, according to one embodiment, carbon block filter media" and that "[t]he evidence does not clearly show that the nature of the invention either supports or does not support a finding of undue experimentation." *Id.* According to the ID, "[g]iven that Respondents had the burden of proof, *Wands* factor 4 does not support a finding of undue experimentation." *Id.*

Wands Factor 5 – The State of the Prior Art

The ID observed that "Respondents argued *Wands* factors 5 and 6 together," contending that "the state of the prior art and relative skill of those in the art supports undue experimentation to reach the full scope of the claimed invention." *Id.* at 230. The ID found that "the evidence supports a finding that the state of the art was advanced, which does not favor a finding under *Wands* factor 5 that there would be undue experimentation to make the claimed invention." *Id.*

at 235 (citing Tr. (Freeman) at 1586:13-1589:10; Tr. (Hatch) at 1461:14-1462:21, 1464:20-1465:5, 1465:18-1468:15).

Wands Factor 6 – The Relative Skill of Those in the Art

The ID found that "Respondents failed to provide substantiated arguments about the skill of those in the art" and that "Dr. Hatch did not offer an opinion on this individual *Wands* factor." *Id.* at 236. The ID, however, found that Dr. Hatch "acknowledged that a person of skill in the art would know how to calculate the FRAP factor variables of volume **V**, average filtration unit time **f**, effluent lead concentration $\mathbf{c}_e$, and lifetime **L** if properly defined." *Id.* (citing Tr. (Hatch) at 1434:18-1435:20).

Wands Factor 7 – The Predictability of the Art

The ID stated that "Respondents failed to argue about predictability in their Pre-Hearing Brief" and has therefore "abandoned, waived or withdrawn any argument on this issue under Ground Rule 7.2." *Id.* at 236-37.

Wands Factor 8 – The Breadth of the Claims

The ID noted Respondents' argument that "the broad range of filter types is not enabled because the specification only discloses carbon block filters, disparages mixed media filters, would use trial and error, and requires gap-filling at the novel point of invention." *Id.* at 237. Respondents also argued that "the '141 patent claims functional ranges of FRAP factor values, volume and average filtration unit time values that are broad and unbound are not enabled." *Id.* The ID also noted Brita's response that "a specification need not explain every detail, and typically omits what is well-known." *Id.* The ID stated that "[u]nlike *Amgen* [987 F.3d 1080, 1085 (Fed. Cir. 2021)], the asserted claims do not claim a function but rather, claim a mathematical formula, inter-related variables, and provide a performance result of a particular

FRAP factor value" and that "[t]he FRAP factor itself embodies structure." *Id.* at 241. The ID surmised that thus "here, the bar for enablement is not as high as in *Amgen* because the FRAP factor is not pure functional claiming." *Id.* The ID noted that "Dr. Hatch opined that a person of ordinary skill in the art would not know how to achieve the very low end of FRAP values, *i.e.*, a FRAP factor below 6.7." *Id.* (citing Tr. (Hatch) at 1431:1-14). The ID noted that "Dr. Freeman disagreed and opined that a person of skill would know how activated carbon and lead scavenger influence the variables of the FRAP factor to meet the performance required in the asserted claims." *Id.* (citing Tr. (Freeman) at 1524:16-1525:1).

Respondents also argued that while there are numerous possible filter species and structure that could meet the structural limitations of the '141 patent, "the inventors had exactly one species of filter (carbon block), one size and kind of activated carbon, and two lead scavengers: a grand total of two working examples P-A and P-T." ID at 247 (citing JX-0022 at Tables 1, 5). The ID stated that "[i]t is not disputed that the '141 patent discloses various filter media embodiments, various activated carbon, and lead scavengers" and that "[t]hese are all in the prior art." *Id.* The ID pointed to Dr. Freeman's testimony that "while the activated carbon and lead scavenger may take different forms, they are all expected to behave in the same manner in the filter media." *Id.* The ID found that while "[t]he claims are broad in that the filter media is not limited to carbon block in the asserted claims," "it is not clear that this supports a finding of undue experimentation given the state of the art and the remaining *Wands* factors." *Id.* at 248.

The ID noted that "Respondents argued that Dr. Knipmeyer acknowledged that creating non-carbon block embodiments would involve creating new technology." *Id.* at 249 (citing RSBr. at 46 (citing (Tr. (Knipmeyer) at 327:15-328:6 ("I imagine that you could develop new technology that would -- that would meet that requirement" of the '141 patent.))). The ID

pointed to *Centrak*, and stated that there, "an inventor's admission of not having working examples of all embodiments was not fatal to meeting the written description requirement because the nature and context of the invention was also considered." *Id.* The ID found that "[h]ere, the remaining *Wands* factors, including that the state of the prior art recognizes that filter media other than carbon block were well-known, on balance, support enablement." *Id.*

3. Analysis

As with written description, the Commission finds that Respondents have shown by clear and convincing evidence that the asserted claims are invalid because they are not enabled. At the outset, we note that the Supreme Court's *Amgen* opinion neither affirmatively required nor disparaged a *Wands* analysis. In our view, a *Wands* analysis remains useful in determining whether a claimed invention meets the enablement requirement and we have considered each of the *Wands* factors.

Wands Factor 1 - Quantity of Experimentation

We disagree with the ID's findings as to *Wands* factor 1. Specifically, the Commission finds unpersuasive the ID's conclusion that there would not be undue experimentation to make and use filters other than carbon blocks. The ID largely relied on experts to find that the claims were enabled. ID at 213 (citing (Tr. (Freeman) at 1521:8-12-1522:1). However, there is no dispute that the patent disclosure itself provides no teaching on how any filter other than carbon blocks can achieve the required FRAP. Indeed, the patent specification states that the inventors tested "mixed media filters containing granular carbon [*i.e.*, activated carbon] and ion exchange resin [*i.e.*, a lead scavenger]" with other types of filter media, however, "[a]ll mixed media filters tested fail to adequately reduce total lead concentrations by 50% (75 liters) of filter life." '141 patent at 31:9–10; 31:54–55; '141 patent at 26:63-67; Tr. (Freeman) at 1569:5-1571:12; Tr. (Hatch) at 1428:2-1430:21. Despite these failures, the patent specification does not provide a

road map for how mixed media materials, or any type of filter other than carbon blocks, can achieve the required FRAP. Further to this point, as noted above, the inventors readily admit that they did not invent any filter with a material type other than carbon block in connection with the '141 patent. *See* Tr. (Knipmeyer) at 202:9-17 (invention utilized only carbon block); 203:5-9 (did not invent membrane filter); 203:10-14 (did not invent nonwoven filter); 203:15-19 (did not invent depth media filters); 203:20-24 (did not invent nanoparticle filter); 203:25-204:2 (did not invent nanofiber filter); 204:3-8 (did not invent granular media filter); 204:9-12 (did not invent or disclose granular activated carbon and ion exchange resin combination meeting FRAP limitation); 204:13-17 (no disclosure in the '141 patent of any filters other than carbon block).

As Respondents correctly observe, "[t]he only general quality common to every filter disclosed in the '141 Patent capable of achieving FRAP of less than 350 is carbon block, which is a completely different type of filter than any other type referenced in passing in the '141 Patent." Resp. Sub at 16. The patent specification discloses that carbon block filters are made from powdered activated carbon that must be bonded with a binder and then formed into "an integrated, porous, composite, carbon block." *Id.* (citing '141 patent at 13:22-24; 9:44-10:40 (disclosing types of binders that can be used)). The patent discloses other media filters that use granular activated carbon (*i.e.*, loose granules held in a compartment with no binder) with an ion exchange resin, but none of these were shown to meet the required FRAP. '141 patent at 3:25-4:24.

The ID suggested that figures 21-23 provide guidance on how to achieve the required FRAP without undue experimentation. ID at 224. Figures 21-23 are graphical representations of filter FRAP factors as a function of filtration unit time and Volume, lead reduction, and filter lifetime, respectively. JX-0022 at 26:38-40. The patent, after describing figures 21-23,

specifically states that "[s]everal gravity fed carbon blocks and mixed media filters have been tested for flow rate and lead reduction capability against the defined lead challenge water." *Id.* at 26:55-57. The patent specification then explains that the "[f]ilters tested include several formulations of carbon blocks along with commercially available mixed media filters produced by BRITA and PUR." *Id.* at 26:57-60. Based on the results from testing, "[n]o mixed media filters tested met the claimed FRAP factor range due to their inability to remove particulate lead." *Id.* at 26:61-63. Only the carbon block formulations met the claimed FRAP. The patent specification makes clear that "[t]he formulations of gravity fed *carbon blocks* disclosed are unique in [their] ability to meet the required FRAP factor." *Id.* at 26:63-65 (emphasis added). The patent then goes on to provide "many examples of gravity flow *carbon blocks* that have a FRAP factor of less than 350" and states that "it is not believed that any currently-marketed gravity-flow filters have a FRAP factor of less than 350." *Id.* at 26:67-27:2 (emphasis added). There is nothing in this disclosure that would guide a skilled artisan to develop a non-carbon block filter that achieves the required FRAP. Indeed, given the failed efforts of the inventors to create a non-carbon block filter as discussed above, this disclosure in the patent itself would discourage an ordinarily skilled artisan from pursuing the use of non-carbon block filters. The ID's finding is therefore contradicted by the patent disclosure itself.

Wands Factor 2 – The Amount of Direction or Guidance Presented

Regarding *Wands* factor 2, the ID found that "Dr. Freeman testified that there is guidance or direction in the '141 patent to make filter media other than carbon media." ID at 223-24. The Commission disagrees. The only "guidance" provided in the patent is the unremarkable listing of the names of several types of non-carbon block filter media. '141 patent at 26:30-37 (listing filter media embodiments of mixed media, carbon block, membranes, nonwovens, depth media,

nanoparticles and nanofibers, ligands). There is, however, no dispute that the patent does not teach how any of these media can achieve the claimed FRAP factor. Tr. (Freeman) at 1569:5-1571:12; Tr. (Hatch) at 1428:2-1430:21.

Moreover, as Respondents assert, "[e]ven Dr. Knipmeyer [one of the inventors of the 141 patent] admits that creating non-carbon block embodiments would involve creating 'new technology, which speaks to the abject lack of enablement of the breadth of the claims." Resp. Rep. at 37 (citing RX-2607C Brita (Knipmeyer) Dep. at 327:15-328:6). Brita's response to this is that "Dr. Knipmeyer was simply explaining that she herself had not created the other filter types." Brita Rep. at 34 (citing ID at 249). But this proves the point that the patent does not provide guidance as to how other filter media can achieve the claimed FRAP; nor could it given the inventors indisputably had not attained any other filter material that achieved the claimed FRAP. Rather, all of their attempts were unsuccessful. In sum, we agree with Respondents that there is nothing in the '141 patent that would guide a person of ordinary skill in the art to make a non-carbon block filter capable of the FRAP performance capabilities of the claimed invention. *See* Resp. Rep. at 37.

Wands Factor 3 – Working Examples

Regarding *Wands* factor 3, because the '141 patent describes no working examples of the disclosed "granular carbon filters, pleated paper filters or alternate filtration techniques such as membranes, nonwovens, depth media, nanoparticles and nanofibers, ligands, etc." to achieve the claimed FRAP, the Commission agrees with the ID that "*Wands* factor 3 favors a finding of fact and law that there would be undue experimentation to make the claimed invention." ID at 229.

Wands Factor 4 – The Nature of the Invention

As to *Wands* factor 4, despite the invention being directed broadly to gravity-fed water filters that can achieve FRAP of less than 350, carbon block filters are the only filter media the patent explains can achieve the claimed FRAP. The ID stated that "[i]t is a factual finding that the nature of the invention is gravity-fed water filters including, according to one embodiment, carbon block filter media" and that "[t]he evidence does not clearly show that the nature of the invention either supports or does not support a finding of undue experimentation." ID at 229. The ID then concluded that "[g]iven that Respondents had the burden of proof, *Wands* factor 4 does not support a finding of undue experimentation." *Id.*

The Commission finds that the nature of the invention is not gravity-fed water filters generally, but gravity-fed water filters that achieve the claimed FRAP with any type of filter media, and given that the patent discloses only carbon blocks to have achieved this FRAP, *Wands* factor 4 supports a finding of non-enablement. *See In re Colianni*, 561 F.2d 220 (CCPA 1977) ("The application of 'sufficient' ultrasonic energy is essential to appellant's claimed method, yet his specification does not disclose what a 'sufficient' dosage of ultrasonic energy might be or how those skilled in the art might make the appropriate selection of frequency, intensity, and duration." *** "The degree of disclosure and the nature of the art in this case are generally parallel to those in *In re Gardner*, 427 F.2d 786 (CCPA 1970), in which we found the specification not to comply with 35 USC 112, first paragraph.")

Wands Factor 5 – The State of the Prior Art

As to *Wands* factor 5, the ID found that "the evidence supports a finding that the state of the art was advanced, which does not favor a finding under *Wands* factor 5 that there would be undue experimentation to make the claimed invention." ID at 235. However, as discussed

above, the Commission finds that there is no evidence that this alleged advanced state of the prior art shows that a skilled artisan could have used other filter media to achieve the claimed invention without undue experimentation, especially when the evidence shows that the inventors themselves did not, and could not have done so without creating new technology.

Wands Factor 6 – The Relative Skill of Those in the Art

Regarding *Wands* factor 6, the ID found that "Respondents failed to provide substantiated arguments about the skill of those in the art" and that "Dr. Hatch did not offer an opinion on this individual *Wands* factor." *Id.* at 236. The ID, however, found that Dr. Hatch "acknowledged that a person of skill in the art would know how to calculate the FRAP factor variables of volume **V**, average filtration unit time **f**, effluent lead concentration $\mathbf{c_e}$, and lifetime **L** if properly defined." *Id.* (citing Tr. (Hatch) at 1434:18-1435:20). The Commission finds that the record evidence, however, shows that while the individual variables, such as volume V, are well-known, the FRAP factor does not embody a well-known or predictable law of physics or natural correlation that could be applied by a person of ordinary skill in the art. In fact, the evidence shows that the variables are interrelated such that changing one variable will change other variables in a nonlinear and unpredictable manner. Tr. (Hatch) at 1437:12-18; ID at 263, n.88. The ID observed that "[f]or example, in practice, doubling one variable does not double the FRAP factor because other variables also change depending on the interrelationship of the water filter, activated carbon and lead scavenger." ID at 263, n.88 (citing Tr. (Knipmeyer) at 219:7-11). Indeed, Dr. Knipmeyer testified that an ordinarily skilled artisan could not change an

individual input to the FRAP equation and expect a corresponding FRAP factor change because all the inputs are interrelated:

> Q. Keeping all other variables in the FRAP equation other than flow rate, let's say equal, in order to go from a FRAP of 6 to 3, I would have to essentially double my flow rate; is that right?
> A. Yes, but you can't change an individual characteristic. They're all interrelated.
> Q. You have to create the filter and consider the performance holistically, correct?
> A. That is correct.
> Q. In other words, you can't just snap your fingers, change one variable, and know that you would achieve a FRAP half as much; is that right?
> A. That's correct, because they are not mathematical variables, they are characteristics of the filter.

Tr. (Knipmeyer) 218:20-219:311 (emphasis added). Yet, the patent fails to disclose a general feature or characteristic of the claimed "genus" of filters that would lead an ordinarily skilled artisan to achieve the required FRAP with media filters other than carbon blocks. *Amgen*, 143 S. Ct. at 1254 (stating that "it may suffice to give an example (or a few examples) ***if*** the specification also discloses 'some general quality. . . running through' the class that gives it 'a peculiar fitness for the particular purpose"). Thus, the Commission finds that this factor supports a finding of non-enablement.

Wands Factor 7 – The Predictability of the Art

Regarding *Wands* factor 7, Brita argues that "[t]he art disclosed which components to use, how the components perform, and the modeling for the basic scientific theories underpinning filters' performance" and that "[t]he amount of information available made the field predictable." Brita Sub. at 22 (citing Tr. 1519:21-1520:12 (Freeman); Tr. 1461:14-1462:1 (Hatch)). Brita states that "the general theories regarding filtration mechanisms and separation were well known and documented across filter media types" and that "skilled artisans knew that fluids could be filtered via physical separation, such as when water passes through the filter's

pores." Brita Sub. at 22 (citing Tr. 1493:21–1494:10 (Freeman); Tr. 174:4-13, 175:8-24 (Knipmeyer)).

However, the Commission finds nothing in the patent that indicates how the characteristics of the materials interact to achieve the required FRAP, and the patent itself shows significant variability in the FRAP that is achieved with filters having the same starting materials. *See, e.g.*, '141 patent, Table 5 (showing the exact same "Pur 2 stage w/ timer" filter achieving three different FRAP results: 670.9, 748.4, and 851.6). Furthermore, it is remarkable that Dr. Knipmeyer testified that creating non-carbon block embodiments would involve creating "new technology." Tr. (Knipmeyer) at 327:15-328:6 ("I imagine that you could develop new technology that would -- that would meet that requirement" of the '141 patent.). Yet, how to develop that new technology remains unclear and unpredictable from this patent disclosure. For the reasons discussed above as well as with regard to the other *Wands* factors, the evidence of record shows that the art is unpredictable.

Wands Factor 8 – The Breadth of the Claims

The ID stated that "[i]t is not disputed that the '141 patent discloses various filter media embodiments, various activated carbon, and lead scavengers" and that "[t]hese are all in the prior art." *Id.* The ID pointed to Dr. Freeman's testimony that "while the activated carbon and lead scavenger may take different forms, they are all expected to behave in the same manner in the filter media." *Id.* The ID found that "[t]he claims are broad in that the filter media is not limited to carbon block in the asserted claims" but that "it is not clear that this supports a finding of undue experimentation given the state of the art and the remaining *Wands* factors." ID at 248. The ID concluded that "[h]ere, the remaining *Wands* factors, including that the state of the prior

art recognizes that filter media other than carbon block were well-known, on balance, support enablement."

The Commission disagrees. *Amgen* makes clear that the more a party claims, the more it must enable regardless of how sophisticated the purported invention maybe. *Amgen*, 143 S. Ct. at 1256 ("For if our cases teach anything, it is that the more a party claims, the broader the monopoly it demands, the more it must enable. That holds true whether the case involves telegraphs devised in the 19th century, glues invented in the 20th, or antibody treatments developed in the 21st."). And, here, the claims are broad and do not limit the type of filter media.

Conclusion for *Wands* Factors

Upon considering all of the *Wands* factors, the Commission finds that the broad claims asserted here are not enabled by the patent specification. While the patent specification discloses the names of various filter media embodiments, it indisputably fails to disclose how these filter media, other than carbon blocks, can achieve the claimed FRAP. Brita argues that "[t]he art disclosed which components to use, how the components perform, and the modeling for the basic scientific theories underpinning filters' performance" and that "the general theories regarding filtration mechanisms and separation were well known and documented across filter media types" and that "skilled artisans knew that fluids could be filtered via physical separation, such as when water passes through the filter's pores." Brita Sub. at 22. The Commission finds that the inventors, however, failed to "identify a quality common to every functional embodiment" that would allow an ordinarily skilled artisan to develop the new technology needed to achieve the required FRAP using a non-carbon block filter. *Amgen*, 143 S. Ct. at 1256. Indeed, the only functional embodiment disclosed is carbon blocks. Thus, developing non-carbon block filters to

achieve the claimed FRAP would require "painstaking," or at least undue, experimentation to uncover the new technology. *See id.* ("Whether methods like a 'roadmap' . . . might suffice to enable other claims in other patents—perhaps because, as this Court suggested in *Incandescent Lamp,* the inventor identifies a quality common to every functional embodiment, *supra,* at 1254-1255—they do not here. They leave a scientist about where Sawyer and Man left Edison: forced to engage in "painstaking experimentation" to see what works.).

The facts here are reminiscent of *Incandescent Lamp*, where the Court found such similar disclosure insufficient to satisfy the enablement requirement, as the *Amgen* Court explained:

> "Sawyer and Man supposed they had discovered in carbonized paper the best material for an incandescent conductor." *Id.,* at 472, 16 S.Ct. 75. But "[i]nstead of confining themselves to carbonized paper, as they might properly have done, and in fact did in their third claim, they made a broad claim for every fibrous and textile material." *Ibid.* Even that broad claim "might" have been permissible, the Court allowed, if Sawyer and Man had disclosed "a quality common" to fibrous and textile substances that made them "peculiarly" adapted to incandescent lighting. *Ibid.* Had they done so, others would have known how to select among such materials to make an operable lamp. But the record showed that most fibrous and textile materials failed to work. Only through "painstaking experimentation" did Edison discover that bamboo "answered the required purpose." *Id.,* at 475-476, 16 S.Ct. 75. The Court summed up things this way: "[T]he fact that paper happens to belong to the fibrous kingdom did not invest [Sawyer and Man] with sovereignty over this entire kingdom." *Id.,* at 476, 16 S.Ct. 75.

Amgen, 143 S. Ct. at 1256 (citing *The Incandescent Lamp Patent*, 159 U.S. 465 (1895)). Here too, having only invented carbon block filters to achieve the claimed FRAP, Brita attempts to claim sovereignty over the entire filter kingdom, and the evidence of record shows that it would take "painstaking," *i.e.*, undue, experimentation to find other types of filter materials that meet the claim requirements. The claims at issue here must therefore meet the same fate.

In sum, the ID's finding that an ordinarily skilled artisan can practice the claimed invention using non-carbon block filter media without undue experimentation is not supported by

the undisputed record evidence. Thus, the Commission has determined to reverse the ID on that issue and find the asserted claims invalid for lack of enablement under 35 U.S.C § 112.

E. The ID's Patent Eligibility Findings Under 35 U.S.C § 101

The Commission determined to review the final ID's invalidity findings, including patent eligibility under 35 U.S.C. § 101. 87 Fed. Reg. 42950-53 (July 5, 2023). On review, the Commission has determined to take no position on the issue. *See Beloit*, 742 F.2d at 1423.

F. The ID's Finding that the Cited Prior Art Do Not Anticipate the Asserted Claims Under 35 U.S.C § 102

The Commission determined to review the final ID's invalidity findings, including anticipation under 35 U.S.C. § 102. 87 Fed. Reg. 42950-53 (July 5, 2023). On review, the Commission has determined to take no position on the issue. *See Beloit*, 742 F.2d at 1423.

G. The ID's Finding's on the Economic Prong of the Domestic Industry Requirement

The Commission determined to review the final ID's findings on the economic prong of the domestic industry requirement. 87 Fed. Reg. 42950-53 (July 5, 2023). On review, the Commission has determined to take no position on the issue. *See Beloit*, 742 F.2d at 1423.

V. CONCLUSION

As discussed above, the Commission has determined to reverse the ID's finding of a violation of section 337. Regarding the issues under review, the Commission has determined to: (1) vacate the ID's construction of the claim term "filter usage lifetime claimed by a manufacturer or seller of the filter" and find the claim limitation indefinite; (2) reverse the ID's finding that the asserted claims are not invalid for lack of written description; (3) reverse the ID's findings that the asserted claims are enabled; (4) take no position on the ID's section 101 analysis and findings; (5) take no position on the ID's anticipation analysis and findings; and

(6) take no position on the ID's findings on the economic prong of the domestic industry requirement.

By order of the Commission.

Lisa R. Barton
Secretary to the Commission

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