UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

)	
KEURIG, INC.,)	
)	
Plaintiff,)	
)	Civil Action No
v.)	11-11941-FDS
)	
JBR, INC. d/b/a ROGERS FAMILY)	
COMPANY,)	
)	
Defendant.)	
)	

MEMORANDUM AND ORDER ON CLAIM CONSTRUCTION

SAYLOR, J.

This is a patent dispute involving inventions that allow a consumer to brew a single cup of coffee.¹ Plaintiff Keurig, Inc., manufactures brewers and individual cartridges containing ground coffee. Keurig seeks a judgment that cartridges manufactured and sold by defendant JBR, Inc., infringe upon its patents. JBR has asserted, among other things, non-infringement and invalidity of Keurig's patents.

The parties' allegations hinge in part on the construction of the claims in Keurig's U.S. Patent No. 7,165,488 (the "'488 patent") and U.S. Patent No. 7,347,138 (the "'138 patent").² The Court conducted a *Markman* hearing on the construction of the relevant claims on January 29, 2013.

¹ The cartridges for the brewer at issue can also be used for tea, hot chocolate, or other hot beverages. For the sake of simplicity, the Court will generally use the term "coffee."

² A third patent held by Keurig also provides the basis for this suit, U.S. Patent No. D502, 362 (the "362 patent"). However, that patent is a design patent and therefore contains no claim terms for the Court to construe.

Keurig and JBR dispute eight terms: (1) "cartridge" and "beverage cartridge" (the parties agree that the two terms should have the same meaning); (2) "piercing;" (3) "inclined position;" (4) "vertical position;" (5) "open position;" (6) "closed position;" (7) "resilient element;" and (8) "handle."

I. Background

Keurig filed the application that ultimately produced the '488 patent on December 12, 2003. The '488 patent was issued on January 23, 2007. Keurig filed the application for the '138 patent on August 24, 2004. The '138 patent was issued on March 25, 2008.

The '488 and '138 patents are directed to an apparatus and method for brewing a single cup of coffee using a removable "beverage cartridge." The specific claims of the '488 patent at issue in this suit are independent claim 22 and dependent claim 29. The claims of the '138 patent at issue are independent claim 1 and dependent claim 18.

Claims 22 and 29 of the '488 patent collectively read as follows:

- 22. A method for forming a beverage, comprising: providing a beverage forming device having a housing with a receptacle accessible to a user, the receptacle having an opening to receive a beverage cartridge, and the receptacle opening having a center axis extending from a center of the opening; moving the receptacle from a vertical position, in which the center axis extends vertically and intersects a lid in a closed position, to a forwardly inclined position in which the opening of the receptacle to receive a cartridge faces away from the lid, and the center axis does not intersect the lid in an open position; moving the lid to the open position; providing a beverage cartridge in the receptacle while the receptacle is in the forwardly inclined position; moving the receptacle to the vertical position; to moving the lid to the closed position in which the lid cooperates with the receptacle to at least partially enclose the beverage cartridge; and providing a liquid into the beverage cartridge to produce a beverage.
- 29. The method of claim 22, further comprising piercing the beverage cartridge with an inlet probe when the lid is moved to the closed position.

Claims 1 and 18 of the '138 patent collectively read:

- 1. An apparatus for forming a beverage, comprising: a housing adapted to support components of a beverage forming device; a receptacle movable relative to the housing between a vertical position and an inclined position in which the receptacle is accessible to insert or remove a beverage cartridge; a lid that covers at least part of the receptacle when the receptacle is in the vertical position; a handle that is movable between open and closed positions to cause the receptacle to move between the vertical and inclined positions; and at least one resilient element arranged to resiliently hold the handle in the closed position, wherein the at least one resilient element remains deflected when the handle is in the closed position.
- 18. The apparatus of claim 1, further comprising a beverage cartridge that includes a beverage medium and a filter element.

Keurig manufactures and licenses commercially available brewers and beverage cartridges (branded as "K-Cups") that allow users to accomplish the methods described in these claims. JBR manufactures beverage cartridges (branded as "OneCups") that can be used with Keurig brewers to brew a single cup of coffee. At the heart of the dispute concerning the construction of the claim terms is the issue of whether those claims cover the method of using a JBR cartridge in conjunction with a Keurig brewer to brew a cup of coffee.

Whether using a Keurig or JBR cartridge, a user operates a Keurig brewer in substantially the same manner. Once the machine has been turned on and filled with water, the user places a coffee cup in position under the brewing chamber where the coffee will be dispensed. The user then moves a "handle" to put the machine in an "open position"; this causes a receptacle in the brewing chamber to move into an "inclined position." The user then inserts a cartridge filled with coffee grounds (either Keurig or JBR) into that receptacle. The user then lowers the handle, which puts the machine in the "closed position" (and causes the receptacle to move back to the "vertical position"). The moving of the handle into the "closed position"

causes the machine to "pierce" the cartridge, permitting hot water to pass into the cartridge. The user presses the brewing button. In a few moments the hot coffee is dispensed into the awaiting cup.

The parties contest the interpretation of eight separate terms used to describe the methods in the claims recited above. The terms in dispute are: (1) "inclined position;" (2) "vertical position;" (3) "open position;" (4) "closed position;" (5) "handle;" (6) "resilient element;" (7) "cartridge" and "beverage cartridge" (the parties agree that the two terms should have the same meaning); and (8) "piercing."

On November 2, 2011, Keurig filed suit under 35 U.S.C. §100 *et seq.* against JBR for infringement of the '488, '138, and '362 patents. Specifically, Keurig contends that JBR has infringed on claims 22 and 29 of the '488 patent, claims 1 and 18 of the '138 patent, and the entirety of the '382 patent.

II. Legal Framework

The construction of claim terms is a question of law. *Markman v. Westview Instruments*, 517 U.S. 370, 372 (1996) ("[T]he construction of a patent, including terms of art within its claim, is exclusively within the province of the court.").

In *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*), the Federal Circuit clarified the proper approach to claim construction and set forth principles for determining the hierarchy and weight of the definitional sources that give the patent its meaning. The guiding principle of construction is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of . . . the effective filing date of the patent application." *Id.* at 1313. Courts thus seek clarification of meaning in "the words of the claims themselves, the

remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.* at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)).

A. The Words of the Claims Themselves

The claim construction analysis normally begins with the claims themselves.³ The claims of a patent "define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (citing *Innova*, 381 F.3d at 1115).

As a preliminary matter, it is well-established that a court may construe a claim term to have its plain meaning when such a construction resolves a dispute between the parties. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) ("A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute. . . when the "ordinary" meaning of a term does not resolve the parties' dispute . . . claim construction requires the court to determine what claim scope is appropriate in the context of the patents-in-suit."); *Finjan Inc. v.*

³ In *Phillips*, the Federal Circuit discredited the practice of starting the claim construction analysis with broad definitions found in dictionaries and other extrinsic sources:

[[]I]f the district court starts with the broad dictionary definition . . . and fails to fully appreciate how the specification implicitly limits that definition, the error will systematically cause the construction of the claim to be unduly expansive. The risk of systematic overbreadth is greatly reduced if the court instead focuses at the outset on how the patentee used the claim term in the claims, specification, and prosecution history, rather than starting with a broad definition and whittling it down.

Id. at 1321. Of course, if no special meaning is apparent after reviewing the intrinsic evidence, claim construction might then "involve[] little more than the application of the widely accepted meaning of commonly understood words." *Id.* at 1314.

Secure Computing Corp., 626 F.3d 1197, 1206-07 (Fed. Cir. 2010); see also U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, . . . [but] is not an obligatory exercise in redundancy.").

In some instances, it is the arrangement of the disputed term in the claims that is dispositive. "This court's cases provide numerous . . . examples in which the use of a term within the claim provides a firm basis for construing the term." *Phillips*, 415 F.3d at 1314. For example, because claim terms are normally used consistently throughout the patent, the meaning of a term in one claim is likely the meaning of that same term in another. *Id.* In addition, "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1315.

B. <u>The Specification</u>

"The claims, of course, do not stand alone." *Id.* at 1315. Rather, "they are part of a fully integrated written instrument, consisting principally of a specification that concludes with the claims." *Id.* (internal citations and quotations omitted). For that reason, the specification must always be consulted to determine a claim's intended meaning. "[T]he 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." *Id.* (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

"In general, the scope and outer boundary of claims is set by the patentee's description of his invention." *On Demand Mach. Corp. v. Ingram Indus.*, 442 F.3d 1331, 1338 (Fed. Cir. 2006); *see also Phillips*, 415 F.3d at 1315-1317 ("[T]he interpretation to be given a term can

only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim"). "[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." *Phillips*, 415 F.3d at 1316. It may also reveal "an intentional disclaimer, or disavowal, of claim scope by the inventor." *Id.* Therefore, the claims are to be construed in a way that makes them consistent with, and no broader than, the invention disclosed in the specification. *On Demand*, 442 F.3d at 1340 ("[C]laims cannot be of broader scope than the invention that is set forth in the specification."); *Phillips*, 415 F.3d at 1316 ("[C]laims must be construed so as to be consistent with the specification, of which they are a part.").

Nevertheless, courts must be careful to "us[e] the specification [only] to interpret the meaning of a claim" and not to "import[] limitations from the specification into the claim." *Phillips*, 415 F.3d at 1323; *see also Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1375 (Fed. Cir. 2005) (internal quotations omitted). A patent's "claims, not specification embodiments, define the scope of patent protection." *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009); *see also Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1381 (Fed. Cir. 2009) ("[E]mbodiments appearing in the written description will not be used to limit claim language that has broader effect."). "In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." *Phillips*, 415 F.3d at 1323. This is "because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments." *Id*.

Although this distinction "can be a difficult one to apply in practice[,] the line

between construing terms and importing limitations can be discerned with reasonable certainty and predictability if the court's focus remains on understanding how a person of ordinary skill in the art would understand the claim terms." *Id.* Ultimately, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* at 1316 (citing *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

C. The Prosecution History

After the specification and the claims themselves, the prosecution history is the next best indicator of term meaning. The prosecution history consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent. *Id.* at 1317. "Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Id.* "[T]he 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." *Id.* (citing *Vitronics*, 90 F.3d at 1582-83).

However, "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* As a result, courts generally require that "a patent applicant [] clearly and unambiguously express surrender of subject matter" to disavow claim scope during prosecution. *Voda v. Cordis Corp.*, 536 F.3d 1311, 1321 (Fed. Cir. 2008) (quoting *Sorensen v. Int'l Trade Comm'n*, 427 F.3d 1375, 1378 (Fed. Cir. 2005)).

D. <u>Extrinsic Sources</u>

Extrinsic evidence consists of "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317. It "can help educate the court regarding the field of the invention and can help the court determine what a person of ordinary skill in the art would understand claim terms to mean." *Id.* at 1319. However, extrinsic evidence suffers from a number of defects, including its independence from the patent, potential bias, and varying relevance. *Id.* at 1318-19. Such evidence is therefore "unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence," and courts may consider, or reject, such evidence at their discretion. *Id.* at 1319.

III. Analysis

The proposed constructions of the disputed terms in the '488 and '138 patents are as follows:

CLAIM TERM	KEURIG'S PROPOSED CONSTRUCTION	JBR'S PROPOSED CONSTRUCTION
"inclined position"	No construction necessary, or "the receptacle position wherein the center axis of the receptacle deviates from the vertical and horizontal"	"a receptacle position that allows for convenient insertion and removal of a beverage cartridge"
"vertical position"	No construction necessary, or "upright position, pointing directly overhead"	"a receptacle position in which the receptacle does not allow access for insertion or removal of a beverage cartridge"

"open position"	No construction necessary, or "the position that allows a beverage cartridge to be conveniently inserted into and removed from a receptacle"	"a position where a lid does not cooperate with a receptacle and thereby does not enclose a cartridge in the receptacle" (for the '488 patent)	
		"position a handle is in when a receptacle allows access for insertion and removal of a beverage cartridge" (for the '138 patent)	
"closed position"	No construction necessary, or "the position in which the lid and receptacle enclose the cartridge for use"	"position a handle is in when a receptacle does not allow access for insertion and removal of a beverage cartridge"	
"handle"	No construction necessary, or "hand-movable part"	"the part of the apparatus designed to be grasped by the hand"	
"resilient element"	No construction necessary, or "a deformable part that is capable of recovering its shape"	"an element that provides yieldable tactile resistance"	
"cartridge" and "beverage cartridge"	No construction necessary, or "a container that holds a beverage medium for use in a single-serve brewer"	"an impermeable piercable container internally subdivided by a filter element into two compartments, one of which contains a dry beverage medium"	
"piercing"	No construction necessary, or "making a hole in or through"	"passing through"	

(Joint Claim Const. St. at 2-5).

A. "Inclined Position" and "Vertical Position"

Although the terms "inclined position" and "vertical position" appear in claims of both the '488 and '138 patents, their use in claim 1 of the '138 patent is typical:

[A] receptacle movable relative to the housing between a **vertical position** and an **inclined position** in which the receptacle is accessible to insert or remove a beverage cartridge . . . a handle that is movable between open and closed positions to cause the

receptacle to move between the **vertical and inclined positions**

U.S. Patent No. 7,347,138 at col. 4 ll. 15-18, 21-23 (filed Aug. 23, 2004) (emphasis added).

As mentioned above, the Court is not required to provide additional language construing a claim if its ordinary meaning can be readily understood by a layperson and adopting it would resolve the parties' dispute concerning interpretation. *See O2 Micro*, 521 F.3d at 1361; *see also CardioFocus, Inc. v. Cardiogenesis Corp.*, 827 F. Supp. 2d 36, 41 (D. Mass. 2011) (holding that when "claim terms do not implicate any special knowledge possessed by a person in the art and, thus, should be given their ordinary meanings," and the terms are not "ambiguous or uncommon," claim construction is not warranted); *Finjan*, 626 F.3d at 1206-07 (holding that the district court did not err by not explicitly construing the term "addressed to a client" and relying on its ordinary meaning); *Phillips*, 415 F.3d at 1314 ("In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.").

Here, adopting the ordinary meanings of the terms "inclined position" and "vertical position" would settle the interpretation dispute. The slightly more difficult issue is whether the jury's general understanding of the terms, without further interpretation by the Court, would comport with their use in the claims or differ from the meanings given to the terms by those skilled in the art. *Accord Phillips*, 415 F.3d at 1315-1317.

The terms "inclined position" and "vertical position" are not complicated. They are even more easily understood in the context of the patents at issue, because they concern a relatively simple apparatus, with few moving parts, that will likely be familiar to many of the jurors. The

terms are used in the claims to describe the orientation of the receptacle when it is open and a beverage cartridge is to be inserted, as opposed to when it is closed and the beverage is brewing. The ordinary meanings of the terms accurately describe the tilted (in other words, "inclined") position of the open receptacle versus the straight up-and-down (in other words, "vertical") position of the closed receptacle. Accordingly, the Court will not construe the terms "inclined position" and "vertical position" beyond attributing to them their ordinary meanings.

B. "Open Position" and "Closed Position"

The terms "open position" and "closed position" appear in claims of both the '488 and '138 patents. Their use in claim 22 of the '488 patent is as follows:

[M]oving the receptacle from a vertical position, in which the center axis extends vertically and intersects a lid in a **closed position**, to a forwardly inclined position in which the opening of the receptacle to receive a cartridge faces away from the lid, and the center axis does not intersect the lid in an **open position**; moving the lid to the **open position**; providing a beverage cartridge in the receptacle while the receptacle is in the forwardly inclined position; moving the receptacle to the vertical position; to moving the lid to the **closed position** in which the lid cooperates with the receptacle to at least partially enclose the beverage cartridge

U.S. Patent No. 7,165,488 at col. 5 ll. 1-13 (filed Dec. 12, 2003) (emphasis added). Their use in claim 1 of the '138 patent is as follows:

[A] handle that is movable between **open and closed positions** to cause the receptacle to move between the vertical and inclined positions; and at least one resilient element arranged to resiliently hold the handle in the **closed position**, wherein the at least one resilient element remains deflected when the handle is in the **closed position**. . . .

U.S. Patent No. 7,347,138 at col. 4 ll. 21-25 (filed Aug. 23, 2004) (emphasis added).

Again, the Court is not required to provide additional language construing a claim if its ordinary meaning can be readily understood by the jury and adopting it would resolve the parties' dispute concerning interpretation. *See O2 Micro*, 521 F.3d at 1361; *see also*

CardioFocus, 827 F. Supp. 2d at 41; Finjan, 626 F.3d at 1206-07; Phillips, 415 F.3d at 1314.

As with the terms "inclined position" and "vertical position," adopting the ordinary meanings of the terms "open position" and "closed position" would settle the interpretation dispute. Again, the question is whether the jury's general understanding of the terms, without further interpretation by the Court, would comport with their use in the claims or differ from the meanings given to the terms by those skilled in the art. *Accord Phillips*, 415 F.3d at 1315-1317.

JBR contends that claim construction is necessary because claim 22 of the '488 patent uses the terms to describe the position of the handle, while claim 1 of the '138 patent uses the terms to describe the position of the lid, which could confuse the jurors' understanding of the terms. JBR proposes separate definitions for the terms as they are used in the two patents. Such an argument runs counter to basic principles of claim differentiation. More importantly, defining the terms differently for the purposes of the two patents would unnecessarily add to the likelihood of juror confusion. The terms "open position" and "closed position" are not complicated and are used in substantially the same way in both patents, regardless of whether they are referring to the position of the handle or the lid—two pieces which are, not coincidentally, attached to one another. Any potential for confusion is remedied by the fact that the patents concern a relatively simple apparatus. The terms are used in the claims to describe when the apparatus is open (and a beverage cartridge is to be inserted) as opposed to when it is closed (and the beverage is brewing). The ordinary meanings of the terms accurately describe the open and closed conditions of the apparatus. Accordingly, the Court will not construe the terms "open position" and "closed position" beyond attributing to them their ordinary meanings.

C. "Handle"

Although the term "handle" appears in claims of both the '488 and '138 patents, its use in claim 1 of the '138 patent is typical:

[A] **handle** that is movable between open and closed positions to cause the receptacle to move between the vertical and inclined positions; and at least one resilient element arranged to resiliently hold the handle in the closed position, wherein the at least one resilient element remains deflected when the **handle** is in the closed position.

U.S. Patent No. 7,347,138 at col. 4 ll. 21-27 (filed Aug. 23, 2004) (emphasis added).

Again, the Court is not required to provide additional language construing a claim if its ordinary meaning can be readily understood by the jury and adopting it would resolve the parties' dispute concerning interpretation. *See O2 Micro*, 521 F.3d at 1361; *see also CardioFocus*, 827 F. Supp. 2d at 41; *Finjan*, 626 F.3d at 1206-07; *Phillips*, 415 F.3d at 1314.

Again, adopting the ordinary meaning of the term "handle" would settle the interpretation dispute. Here, this very common term is used to describe an apparatus that clearly has only one part that possibly could be interpreted as a handle. In such a situation, there is very little concern that the jury's general understanding of the term, without further interpretation by the Court, would not comport with its use in the claims or differ from the meaning given to it by those skilled in the art. *Accord Phillips*, 415 F.3d at 1315-1317. The ordinary meaning of the term will undoubtedly lead a reasonable juror to perceive the part described in the claim as the "handle." Accordingly, the Court will not construe the term "handle" beyond attributing to it its ordinary meaning.

D. "Resilient Element"

The term "resilient element" appears in claim 1 of the '138 patent and is used as follows:

[A]t least one **resilient element** arranged to **resiliently** hold the handle in the closed

position, wherein the at least one **resilient element** remains deflected when the handle is in the closed position.

U.S. Patent No. 7,347,138 at col. 4 ll. 25-27 (filed Aug. 23, 2004) (emphasis added).

The parties agree that the term describes the element "providing an 'over the center' yieldable tactile resistance" to indicate when the brewer is in the closed position. U.S. Patent No. 7,347,138 at col. 3 ll. 51-53 (filed Aug. 23, 2004). The disagreement concerns whether the resilient element by its nature provides such "yieldable tactile resistance" or whether the resilient element is merely one part of a system that provides "yieldable tactile resistance," and consequently has a separate independent definition.

JBR contends that a "resilient element" is by definition "an element that provides yieldable tactile resistance." As support for this position, JBR relies almost entirely on the short quotation from the specifications of the '138 patent, which the Court cited above. *See* U.S. Patent No. 7,347,138 at col. 3 ll. 51-53 (filed Aug. 23, 2004).

Keurig, on the other hand, contends that a "resilient element" alone does not by definition provide yieldable tactile resistance. Keurig contends that it is the interaction between the resilient element and the other parts that creates the resistance. As support for this position, it cites to the context surrounding the quote relied upon by JBR. The full paragraph from the specification of the '138 patent provides:

Frame 26 includes resilient elements 50 configured and arranged to coact with the crank arms 42 in providing an "over the center" yieldable tactile resistance to pivotal movement of the handle 40 between its open and closed positions. More particularly, and with reference to FIGS. 10a-10d, which coincide respectively with FIGS. 6-9, it will be seen that the crank arms 42 pivot together with handle 40 about axis Aa. At the position shown in FIGS. S and 10c, corners 42a of the crank arms contact and downwardly deflect resilient elements 50 through an initial distance d₁, thus providing tactile resistance to continued handle movement. When the lid is finally closed, and as shown in FIG. 10d, the flat bottoms 42b of the crank arms rest against the upper edges of the

resilient elements, the latter having sprung back slightly but remaining downwardly deflected by a reduced distance d₂. The handle 40 is thus resiliently held downwardly in its closed position, thus providing a positive indication of chamber closure.

U.S. Patent No. 7,347,138 at col. 3 ll. 50-67 (filed Aug. 23, 2004) (emphasis added).

Keurig thus contends that no interpretation of the term beyond its plain meaning is necessary. In the alternative, it contends that the term should be interpreted as "a deformable part that is capable of recovering its shape." As support for this position, Keurig refers to the accepted definition of the term "resilience," both in common and trade usage, citing Webster's Dictionary and the Federal Circuit's description in *Transclean Corp. v. Bridgewood Servs., Inc.* 290 F.3d 1364, 1374–75 (Fed. Cir. 2002) ("Dictionaries, both general and technical, define the adjective 'resilient' or its noun form 'resilience' as encompassing that which returns to its original shape following a deformation in shape.").

Unlike the terms discussed above, this term is not as easily understandable and its meaning is not well-known. Thus, there is potential to confuse the jury if the term is not construed.

JBR's proposed definition is contrary to the language of the specification it relies on for support. Nonetheless, the Court must still determine whether Keurig's proposed definition comports with the claims and abides by the principles of claim construction.

According to those principles, the Court first looks to the ordinary meaning of the term and how it is used in the claims; if this provides a "firm basis for construing the term," then the inquiry is over. *Phillips*, 415 F.3d at 1313. Here, the language of the claims provides guidance as to what is meant by the term "resilient element." By the language of claim 1 of the '138 patent, the "resilient element" works to "hold the handle in the closed position" by "remaining

deflected when the handle is in the closed position." U.S. Patent No. 7,347,138 at col. 4 ll. 25-27 (filed Aug. 23, 2004). "Deflected" in this context clearly signifies a "deformation in shape" of the type referred to in Keurig's proposed definition. It is sufficiently clear from the claim terms that a "resilient element" is used to refer to "a deformable part that is capable of recovering its shape." Accordingly, the Court will adopt Keurig's proposed definition.

Furthermore, the specification also supports Keurig's proposed definition. The specification sets forth a series of figures—referred to in the above-quoted passage as "10a-10d"—that quite clearly show the resilient element becoming deformed by the crank arm movement and then subsequently recovering its shape. *See* U.S. Patent No. 7,347,138 at FIG. 10a-10d (filed Aug. 23, 2004). The Court therefore interprets the term "resilient element" to mean "a deformable part that is capable of recovering its shape."

E. "Cartridge" and "Beverage Cartridge"

Although the term "cartridge," or "beverage cartridge," appears in claims of both the '488 and '138 patents, its use in claim 22 of the '488 patent is typical:

[M]oving the receptacle from a vertical position, in which the center axis extends vertically and intersects a lid in a closed position, to a forwardly inclined position in which the opening of the receptacle to receive a **cartridge** faces away from the lid, and the center axis does not intersect the lid in an open position; moving the lid to the open position; providing a **beverage cartridge** in the receptacle while the receptacle is in the forwardly inclined position; moving the receptacle to the vertical position; to moving the lid to the closed position in which the lid cooperates with the receptacle to at least partially enclose the **beverage cartridge**...

U.S. Patent No. 7,165,488 at col. 5 ll. 1-13 (filed Dec. 12, 2003) (emphasis added).

The parties agree that the term describes a "container" that "holds," or "contains," a

⁴ As noted, the parties have agreed to that these terms should be construed to have the same meaning.

"beverage medium" and is used with a single-serve brewer. The disagreement concerns whether the term, as used in the claims, is further limited to a subset of containers that also have the attributes described in JBR's proposed definition, or encompasses all containers that hold a beverage medium for use in single-serving brewers.

JBR contends that the term "cartridge" has a specific meaning in the claims, such that the term refers to a container that (1) is pierceable, (2) is internally subdivided by a filter element, and (3) contains a beverage medium.⁵ JBR proposes to define the term as "an impermeable piercable container internally subdivided by a filter element into two compartments, one of which contains a dry beverage medium." As support for this position, JBR cites to language in claims 14, 16, 17, and 29 of the '488 patent and claims 15, 17, and 18 of the '138 patent. JBR also refers to U.S. Patent No. 5,840,189 (filed Aug. 20, 1997) (the "'189 patent"), which teaches a beverage cartridge and is incorporated by reference in the '488 and '138 patents.

Keurig maintains that the term should simply be given its plain meaning, or at least not be further limited beyond the agreed-upon general description of a "container that holds a beverage medium for use in a single-serve brewer." Keurig contends that construing the term narrowly, as proposed by JBR, would be impermissibly limiting the term to one preferred embodiment from the patents' specifications. Furthermore, Keurig contends that JBR's proposed construction would render claim 30 of the '488 patent superfluous, and, therefore, runs contrary to the doctrine of claim differentiation.

As noted above, the Court must first look to the ordinary meaning of the term and how it is used in the claims; if this provides a "firm basis for construing the term," then the inquiry is

⁵ Because the parties agree as to the third element (containing a beverage medium), the Court will focus its discussion on the first two proposed elements.

over. *Phillips*, 415 F.3d at 1313. The term "beverage cartridge" does not have a well-defined ordinary meaning outside the scope of these patent claims. Here, the language of the claims also provides little guidance as to whether a "cartridge" is by definition limited to a container that is "pierceable" and "internally subdivided." Some of the dependent claims do indeed refer to a cartridge being "pierced," but others do not. For example, claim 15 of the '138 patent, which is dependent on claim 1, refers to "an inlet probe that is arranged to pierce a beverage cartridge."

U.S. Patent No. 7,347,138 at col. 5 ll. 1-5 (filed Aug. 23, 2004). However, claim 1 itself makes no reference to "piercing" a cartridge. *See id.* at col. 4 ll. 12-27. This suggests only that some "cartridges" are pierceable, but does not clearly indicate that "pierceability" is a definitional element. As to the "internal subdivision" by a "filter element," again the limiting characteristics appear only in dependent claims. *Compare id.* at col. 5 ll. 11-13 *with id.* at col. 4 ll. 12-27.

Furthermore, claim 30 of the '488 patent, which is dependent on claim 22, teaches "[t]he method of claim 22, wherein the beverage cartridge includes a beverage medium and a filter element." U.S. Patent No. 7,165,488 at col. 6 ll. 8-9 (filed Dec. 12, 2003). The doctrine of claim differentiation thus dictates that "internal subdivision" by a "filter element" cannot be a definitional characteristic of a "beverage cartridge." Under that doctrine, "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Phillips*, 415 F.3d at 1315. If the independent claim contained all of the same requirements as the dependent claim, it would be as narrow as the dependent claim and the separate dependent claim would serve no purpose. Here, claim 30 would be rendered superfluous if a "cartridge" by definition included a "filter element."

Accordingly, the Court finds that the term "cartridge" does not necessarily require an "internal"

subdivision" by a "filter element."

Having determined that the claim language does not provide a "firm basis" for completely defining the term, the Court looks next to the specifications. Indeed, the specifications do incorporate the '189 patent by reference. However, in doing so, the specifications are explicitly disclosing a preferred embodiment, not defining a claim term. See U.S. Patent No. 7,347,138 at col. 2 ll. 43-49 (filed Aug. 23, 2004) ("The cartridge 24 is preferably of the type disclosed, for example, in U. S. Pat. No. 5, 840, 189, the description of which is herein incorporated by reference.") (emphasis added). It is a fundamental principle of claim construction that courts do not "import[] limitations from the specification into the claim." Phillips, 415 F.3d at 1323; see also Gillette Co. v. Energizer Holdings, Inc., 405 F.3d 1367, 1375 (Fed. Cir. 2005) (internal quotations omitted). "In particular, [the Federal Circuit] ha[s] expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." Phillips, 415 F.3d at 1323. Accordingly, the Court will not adopt JBR's proposed definition on the basis of the above-cited language incorporating the '189 patent by reference.

The Court finds that Keurig's definition, which is limited to the agreed-upon basic elements of a "beverage cartridge," better comports the term's usage in the claims. Accordingly, the court will interpret the term "cartridge," or "beverage cartridge," to mean "a container that holds a beverage medium for use in a single-serve brewer."

F. "Piercing"

Although the term "piercing" appears in claims of both the '488 and '138 patents, its use

in claim 29 of the '488 patent is typical:

The method of claim 22, further comprising **piercing** the beverage cartridge with an inlet probe when the lid is moved to the closed position.

U.S. Patent No. 7,165,488 at col. 6 ll. 5-7 (filed Dec. 12, 2003) (emphasis added).

Unlike some of the terms discussed above, simply adopting the ordinary meaning of the term "piercing," without further explanation, would not necessarily settle the interpretation dispute. *See O2 Micro*, 521 F.3d at 1361; *Finjan*, 626 F.3d at 1206-07. Indeed, both parties purport to rely on the ordinary, dictionary definition of the word as the basis for their proposals. Standard dictionary definitions of the word "pierce" include at least two alternatives: (1) to make a hole in something (in other words, to puncture something) or (2) to pass through something (in other words, to penetrate something). JBR maintains that "piercing" means only "passing through" something and does not require puncturing; Keurig maintains that it means "making a hole in or through" and, therefore, puncturing is required. Nonetheless, the parties seem to agree that "[t]he purpose of piercing the beverage cartridge is to get the hot water into the beverage cartridge to make a beverage." (Markman Hrg. Tr. at 24:4-7). With that purpose in mind, the Court will look first to the claim terms, and then to the specifications, to determine how the term is used in the claims.

The words of the claims themselves provide little guidance as to whether "piercing" requires puncturing the cartridge, or includes both the alternatives of an initial puncture and a

⁶ To illustrate this distinction at oral argument the parties offered competing examples of "piercing" from everyday life. Counsel for Keurig suggested that a woman gets her ears "pierced" only one time and that "each morning when she puts on her earrings and passes the hoop through her ear, she's not piercing them all over again." (Markman Hrg. Tr. at 22:3-7). Counsel for JBR, on the other hand, suggested that when one pushes a straw through the top of a plastic cup that already has a hole in it, one is "piercing the lid as [one is] making the way through" and is "penetrating it" but not "puncturing it. . . not making a hole." (Markman Hrg. Tr. 24:24 - 25:4).

simple passing through an existing hole. The claims merely describe an inlet probe as the mechanism that accomplishes the "piercing." *See*, *e.g.*, U.S. Patent No. 7,165,488 at col. 6 ll. 5-7. An inlet probe could be capable of passing through something without puncturing it. Therefore, neither proposed definition of the term would render the claims nonsensical.

The figures in the specification, however, provide helpful guidance as to the term's meaning. Figure 6 of the '488 patent clearly depicts the inlet probe as a sharp, rather than blunt, instrument protruding out from the canister lid. It is hard to imagine another purpose for this instrument except that of puncturing the top of a beverage cartridge in order to make a hole in it. Indeed, if any kind of cartridge with a cover were to be placed in the machine, it would necessarily be punctured. Because the agreed purpose of this probe is to deposit hot water into the cartridge by "piercing" it—that is, puncturing it—the specification should be fairly read to indicate that "piercing" requires a puncture.⁷

The Court also notes that JBR appears to be attempting to expand the scope of the term in an attempt to bolster its patent-exhaustion and permissible-repair defenses. If the Court were to find that "piercing" includes passing through an existing hole, without puncturing, the reusable cartridges would all be rendered infringing uses, thereby eliminating one of Keurig's chief arguments that the patent is not exhausted due to the existence of "reasonable non-infringing uses." The Federal Circuit has cautioned against "speculative and convoluted reading of the claim language," particularly when it is suggested by counsel "retained to offer creative arguments in infringement litigation." *Dayco Prods. v. Total Containment, Inc.*, 258 F.3d 1317,

⁷ The '488 patent specification also cross-references various patents covering "known brew chambers for single serve beverage brewers" in which "disposable beverage filter cartridge[s] [are] pierced . . . to accommodate a through flow of metered hot water." '488 patent at 1:11–15. As Keurig notes, those patents describe puncturing of cartridges, not a mere passing through of an inlet probe.

1324 (Fed. Cir. 2001). Here, the term "piercing," as used in the patent, requires actually making

a hole in something (in other words, puncturing it), not simply passing through an existing hole.

Accordingly, the Court will interpret the term "piercing" to mean "making a whole in or

through."

IV. Conclusion

For the foregoing reasons, the disputed claim terms are construed as follows:

1. the terms "inclined position," "vertical position," "open position," "closed

position," and "handle" have their ordinary meaning and need not be given

special construction by the Court;

2. the term "resilient element" means "a deformable part that is capable of

recovering its shape";

3. the term "cartridge," or "beverage cartridge," means "a container that holds a

beverage medium for use in a single-serve brewer"; and

4. the term "piercing" means "making a hole in or through."

So Ordered.

/s/ F. Dennis Saylor

F. Dennis Saylor IV

United States District Judge

Dated: March 22, 2013

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