

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

SCHOLLE CORPORATION,)	
)	
)	
Plaintiff,)	13 C 3976
v.)	
)	Judge Virginia M. Kendall
RAPAK LLC,)	
)	
)	
Defendant.)	

MEMORANDUM OPINION AND ORDER

Plaintiff Scholle Corporation moved for a preliminary injunction against Defendant Rapak LLC based on Rapak’s alleged infringement of U.S. Patent No. 8,448,799. The ’799 Patent discloses a self-sealing bag in box cap assembly. Scholle claims that its QuickSeal Sentry Lock fitment, which is a valve used to attach flexible bags such as those used in liquid fruit and dairy products to serve smoothie beverages in major restaurant chains, is an embodiment of the ’799 Patent. Although Scholle has been in the market for many years, Scholle touts its QuickSeal Sentry Lock as a relatively new innovation. Scholle obtained its patent on May 28, 2103, the day before this suit was filed. On January 9, 2014, this Court conducted a factual hearing to allow the parties to present evidence and arguments in support of their respective positions. For the reasons stated herein, this Court grants Scholle’s motion for preliminary injunction and enjoins Rapak from making, using, selling, or offering to sell in the United States the accused product, Rapak’s Smoothie Valve, or products that include Rapak’s Smoothie Valve as a component.

LEGAL STANDARD

Federal Rule of Civil Procedure 65 allows courts to issue preliminary injunctions to prevent harm to one or more parties before the parties have fully adjudicated their claims. A preliminary injunction is an extraordinary remedy that requires a clear showing that one is entitled to such a remedy. *LifeScan Scotland, Ltd. v. Shasta Technologies., LLC*, 734 F.3d 1361, 1366 (Fed. Cir. 2013). Because Scholle seeks to enjoin Rapak’s alleged patent infringement, Federal Circuit precedent controls. *Revision Military, Inc. v. Balboa Mfg. Co.*, 700 F.3d 524, 525 (Fed. Cir. 2012). “A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest.” *Id.* (quoting *Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 22 (2008)). In an action for patent infringement, a plaintiff cannot meet his burden where the accused infringer raises a substantial question as to infringement or invalidity. *LifeScan*, 734 F.3d at 1366.

A. Scholle is Likely to Succeed on the Merits

1. Claim Construction

“A correct claim construction is almost always a prerequisite for imposition of a preliminary injunction.” *Chamberlain Group, Inc. v. Lear Corp.*, 516 F.3d 1331, 1340 (Fed. Cir. 2008). At issue here is claim 1 of the ’799 Patent. The claim discloses a cap assembly. In its pleadings and at the preliminary injunction hearing, Rapak identified two terms in claim 1 of the ’799 Patent that it believes require construction. These terms are “top surface” and “releasably sandwich.” This Court construes those claims for purposes of the pending preliminary injunction motion. *See Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, 695 F.3d 1285, 1302 (Fed. Cir. 2012) (“the general rule is that tentative claim construction for preliminary injunction purposes does not remove the issue from later review after the facts are elaborated”).

The parties' dispute whether an inwardly sloping surface on the accused product is part of the "top surface" or the "inner surface" of the cap assembly. If the former, then Rapak argues that it does not infringe; if the latter, then Scholle argues that Rapak infringes. But "[c]laims are properly construed without the objective of capturing or excluding the accused device." *Vita-Mix Corp. v. BasicHolding, Inc.*, 581 F.3d 1317, 1324 (Fed. Cir. 2009). Therefore, this Court will not consider the accused product when construing the claim term.

Instead, this Court must focus primarily on the language of the claim. *Aria Diagnostics, Inc. v. Sequenom, Inc.*, 726 F.3d 1296, 1300 (Fed. Cir. 2013). Here, the claim identifies the "top surface" as part of the body of the cap assembly and generally defines where the "top surface" is in relation to other claim limitations; but it does not define or otherwise suggest what the "top surface" is. (Dkt. 20-2 at 5:13-6:8.)

Accordingly, this Court turns to the specification, which is often fundamental to claim construction. *Trading Techs. Int'l, Inc. v. Open E Cry, LLC*, 728 F.3d 1309, 1319 (Fed. Cir. 2013) ("The specification is fundamental to claim construction, as 'it is the single best guide to the meaning of a disputed term.' ") (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc)). Here, the specification distinguishes the "top surface" from the other parts of the body of the cap assembly: the "bottom surface" and the "opening." (Dkt. No. 20-2 at 3:8-10.) As used in the '799 Patent, each of these terms take their plain and ordinary meaning as understood by a person of ordinary skill in the art.

In their pleadings and at the hearing, neither party attempted to define a person of ordinary skill. The only reference this Court found regarding the level of skill in the art was in Rapak's invalidity contentions. (Dkt. No. 37-30 at 6, n.1.) This Court accepts Rapak's definition for purposes of this motion. Rapak believes, at least for now, that a person of ordinary skill in the

art would have a degree in mechanical engineering with two to three years of experience in valve design and materials or a person having equivalent work experience in the field. This person, as would most others reading the '799 Patent, would understand “top surface” to mean the upper side of the assembly, “bottom surface” to mean the underside of the cap assembly, and “opening” to mean the aperture in the center of the cap assembly.

Contrary to Scholle’s suggestion, the “top surface” does not have to exist on a single plane. The specification indicates that the “top surface” may include a circumferential cap sealing flange:

The top surface includes circumferential cap sealing flange 56. The circumferential cap sealing flange 56 is typically employed when cap 46 is utilized. The cap 46 includes a similar sealing flange 56 which together with the cap sealing flange 56 provides a hermetic seal when engaged. In embodiments wherein a membrane seal is utilized, the sealing flange can be omitted, and the membrane seal can be sealed against the circumferential sealing surface 57 which is outboard of the location of the cap sealing flange.

(Dkt. No. 20-2 at 3:19-27.) As used in the '799 Patent, a flange is a rim or a lip that projects from a surface. (*See id.* at 3:19-23 and 3:47-50.) Because the top surface can include a circumferential cap sealing flange that projects from the surface, it can have multiple levels. The inclusion of a spout engagement channel, which has multiple levels, as part of the “bottom surface” supports this conclusion.

That does not address the real issue, which is where does the “top surface” end and the “opening” begin? The specification defines the “opening” as “comprising inner surface 64 and membrane engaging flange 66 positioned at the lower end thereof.” (*Id.* at 3:42-44.) The “inner surface” has several components, to include a recessed circumferential channel, a base channel, and a membrane engaging surface that is at the lower end of the opening. (*Id.* at 3:44-50.) The specification, to include Figures 3 and 4, indicate that the transition point between the “top

surface” and the “opening” is where the horizontal plane of the “top surface” descends toward the “bottom surface.” When there is a circumferential cap sealing flange, that descent begins at the inner edge (closest to the center of the opening) of it. The specification does not indicate whether this descent is a vertical one; therefore, the descent may slope as well. Because the invention must accommodate a retaining ring and a sealing membrane in the opening, the part of the body of the cap assembly that receives the retaining ring and sealing membrane is part of the opening. Therefore, the top surface ends and the opening begins where the innermost horizontal plane of the top surface begins its descent toward the bottom of the cap assembly.

Rapak also takes issue with the claim term “releasably sandwich.” But Rapak does not propose a construction for the term. Instead, Rapak argues that the inventors added the term to the specification during prosecution to avoid prior art and that the term cannot apply to Rapak’s product because removing its retaining ring would cause the product to leak. Scholle argues for the plain and ordinary meaning of the term, and cites the dictionary as an example of the meaning of the word sandwich. This Court agrees with Scholle that the claim term “releasably sandwich” takes its plain and ordinary meaning.

2. Infringement

Scholle has established that it is likely to succeed on the merits of its claim for patent infringement and Rapak has not raised a substantial question as to infringement. To determine whether an accused product infringes a patent claim, one must first construe the patent claim and then compare the properly construed claim to the accused product. *Meyer Intellectual Properties, Ltd. v. Bodum, Inc.*, 690 F.3d 1354, 1366 (Fed. Cir. 2012). “Literal infringement requires that each and every limitation set forth in a claim appear in an accused product.” *V-Formation, Inc. v. Benetton Group SpA*, 401 F.3d 1354, 1366 (Fed. Cir. 2012).

At issue here is claim 1 of the '799 Patent. Scholle has presented evidence that the accused product embodies each claim limitation. Rapak admits that it meets all but the following limitations of claim 1:

a body having a top surface and a bottom surface, a spout engagement channel on the bottom surface thereof and an inner surface defining an opening extending therethrough (“the channel limitation”);

the opening including a recessed circumferential channel molded into the inner surface and spaced apart from the top surface and a membrane engaging flange positioned proximate the recessed circumferential channel, such that the recessed circumferential channel is positioned between the top surface and the membrane engaging flange (“the opening limitation”);

and a retaining ring positioned entirely within the confines of the inner surface and below the top surface of the body (“the confines limitation”); and

the retaining ring positioned with the sealing membrane engaging surface in the overlying engagement with the sealing membrane, with the body engaging tab extending into the recessed circumferential channel of the body to releasably sandwich, in sealed engagement, the body engagement flange of the sealing membrane between the sealing membrane engagement surface of the retaining ring, and the membrane engaging flange of the body (“the releasably sandwich limitation”).

(Dkt. No. 37-30 at 2-4.)

Rapak’s challenges to Scholle’s infringement contentions fail. Scholle marked an accused product as Exhibit P. An examination of Exhibit P refutes Rapak’s argument that it does not meet the channel limitation. There is a groove on the bottom surface of the accused product that likely satisfies the channel limitation. The same is true for the opening limitation, as Exhibit P includes a recessed channel in its opening that is offset by vertical surfaces on either side. These vertical surfaces distance the recessed channel from the top surface and membrane engaging flange.

Rapak argues that it does not meet the confines limitation because its retaining ring extends above the top surface of its product. The accused product does not have a circumferential cap sealing flange. Rather, a sloping surface denotes the transition from the top surface to the opening. That sloping surface is a downward slope that runs from the horizontal top surface to the mostly vertical inner surface. Based on this Court’s construction of the term “top surface,” the downward sloping surface is part of the opening and not the top surface. In short, the retaining ring and sealing membrane enter the body of the cap assembly at the point where downward sloping surface begins. Although Rapak’s retaining ring extends above the bottom edge of the sloping surface, it does not extend above the top edge, which is where the top surface is. Therefore, the accused product likely satisfies this limitation.

Finally, Rapak argues that the accused product does not meet the releasably sandwich limitation. Rapak argues that its retaining ring is mechanically bonded—not releasably sandwiched. But Scholle demonstrated that the sealing membrane of the accused product is between its retaining ring and the membrane engaging flange. At the hearing, Scholle established that one could remove the retaining ring by hand and then re-insert it. Rapak argues that the product may leak after one forcefully removes the retaining ring from the accused product, but the claim does not require a leak-free product. It requires a membrane sandwiched between two components, which the accused product has. Therefore, this Court finds that Scholle is likely to prevail on infringement.

3. Invalidity

Scholle has established that Rapak’s challenges to the validity of claim 1 of the ’799 Patent lack substantial merit. The Court begins this analysis with the understanding that the ’799 Patent enjoys a presumption of validity under 35 U.S.C. § 282. In its opposition to Scholle’s motion, Rapak challenges claim 1 on three grounds: (1) improper inventorship; (2) anticipation;

and (3) obviousness. Rapak primarily relies on four prior art references: 1) U.S. Patent No. 5,377,877 to Brown; 2) U.S. Patent No. 5,938,086 to Gross; 3) U.S. Patent No. 7,861,393 to Pugne; and 4) U.S. Patent Publication No. 2010/0193516 to LaBean. Based on the evidence presented, none of these challenges raises a substantial question of validity.

A patent must accurately list the correct inventors of the claimed invention. *Checkpoint Sys., Inc. v. All-Tag Sec. S.A.*, 412 F.3d 1331, 1337-38 (Fed. Cir. 2005). To render a patent invalid on this ground, one must show by clear and convincing evidence that the inventors named in a patent are incorrect. *Id.* According to Rapak, the '799 Patent should also include individuals who identified a problem with the named inventors' early design as inventors. But there is no evidence that those individuals significantly contributed to the conception and reduction to practice of the claimed invention. Instead, those individuals solely informed the inventors that inserting a probe into the cap assembly caused damage to a valve (Dkt. No. 63, Hr'g Tr. at 24:2-26:5) and suggested that the inventors modify the retaining ring to prevent that damage (*See* Dkt. No. 41-24 at SCHOLLE001819). They did not tell the inventors what modifications to make. An inventor must contribute to the conception and reduction to practice of the invention. *Nartron Corp. v. Schukra U.S.A. Inc.*, 558 F.3d 1352, 1356-57 (Fed. Cir. 2009). Because there is no evidence that anyone other than the inventors contributed to the design modification, Rapak has not raised a substantial question as to inventorship.

The design modification, however, precludes claim 1 of the '799 Patent from claiming priority to a provisional patent application filed in 2008. Although the provisional patent application disclosed a cap assembly, the retaining ring in that cap assembly was "substantially triangular in configuration." (Dkt. No. 46-10 at RAP000182.) Though not limited to this embodiment, the provisional application does not refer to a retaining ring having "an inwardly

sloping protective flange” as claimed in claim 1 of the ’799 Patent. (*Compare id.* with Dkt. No. 20-2 at 5:41-43.) Based on the evidence presented to this Court, the inventors added “an inwardly sloping protective flange” sometime after March 10, 2009, which is when a memorandum discussed the valve problem and a suggestion to fix it (Dkt. No. 41-24 at SCHOLLE001819), and March 19, 2009, which is the date of a memorandum that describes and depicts the modification made in response to the valve damage problem (Dkt. No. 41-25 at SCHOLLE000570).

Although the parties dispute whether all of the references identified by Rapak are prior art to claim 1 of the ’799 Patent, this Court will treat all four references as prior art for purposes of this motion. Rapak argues that two of those references, Pugne and LaBean, anticipate claim 1 of the ’799 Patent. To anticipate a claim, a single prior art reference must expressly or inherently disclose each and every element of the claim. *Whitserve, LLC v. Computer Packages, Inc.* 694, F.3d 10, 22 (Fed. Cir. 2012). As Scholle correctly notes, LaBean does not expressly or inherently disclose a spout engagement channel. The exterior surface in LaBean that Rapak argues meets this limitation does not have an outer flange as disclosed in the ’799 Patent. The same is true for Pugne. Therefore, Rapak has not raised a substantial question as to anticipation.

Nor has Rapak raised a substantial question as to whether the LaBean, Pugne, Gross, and Brown references, alone or in combination, render claim 1 of the ’799 Patent obvious. A patent claim is invalid as obvious “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” *Celsis In Vitro, Inc. v. CellzDirect, Inc.*, 664 F.3d 922, 928 (Fed. Cir. 2012) (quoting 35 U.S.C. § 103). To determine whether a patent claim is invalid as obvious, one must consider the following underlying factual

inquiries: “(1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.” *Celsis In Vitro*, 664 F.3d at 928.

The scope and content of the prior art presented by the parties include the LaBean, Pugne, Gross, and Brown references. According to Rapak, the level of ordinary skill in the art requires a degree in mechanical engineering with two to three years of experience in valve design and materials or a person having equivalent work experience in the field. The differences between the prior art and the claimed invention include not only LaBean and Pugne’s lack of spout engagement channels but also their lack of inwardly sloping protective flanges. Rapak points to what appears to be chamfers in the LaBean and Pugne references as inwardly sloping protective flanges. The Court disagrees with Rapak’s view. Though the chamfers may serve to guide a probe or to soften a hard edge, they do not appear to be “protective” in the sense used in the ’799 Patent.

Even if the four references Rapak cites collectively disclosed all limitations of claim 1 of the ’799 Patent, Rapak did not offer any evidence as to why a person having ordinary skill in the art would have combined the references. One cannot show that a patent is obvious without evidence as to why a person having ordinary skill in the art would have combined the references to arrive at the claimed invention. *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1366-67. This reason can come from a number of sources to include the knowledge and skill of a person of ordinary skill in the art. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007) (“Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”) Rapak has not offered any

evidence as to what a person of ordinary skill in the art would have gleaned from the four references Rapak cites. Instead, Rapak relies exclusively on attorney argument. That is insufficient. *Contra ArcelorMittal France v. AK Steel Corp.*, 700 F.3d 1314, 1324 (Fed. Cir. 2012) (expert testimony that a person of ordinary skill in the art would have had the knowledge to combine prior art teachings provided evidence to support reason to combine). There is no evidence from which this Court can determine what a person having ordinary skill in the art would have known. Therefore, based on this preliminary record, Rapak has not raised a substantial question as to whether claim 1 of the '799 Patent is obvious.

B. Irreparable Injury

Scholle has shown that it will likely suffer irreparable injury absent an injunction. To establish irreparable harm in an action for patent infringement, a plaintiff must not only show that it will suffer irreparable harm but also establish a sufficiently strong causal nexus between the irreparable harm and the alleged infringement. *Apple Inc. v. Samsung Electronics Co., Ltd.*, 695 F.3d 1370, 1374 (Fed. Cir. 2012). “[T]he irreparable harm inquiry seeks to measure harms that no damages payment, however great, could address.” *Celsis in Vitro*, 664 F.3d at 930. “Price erosion, loss of goodwill, damage to reputation, and loss of business opportunities are all valid grounds for finding irreparable harm.” *Id.*

Here, Scholle has shown that competition with Rapak likely has led to a loss of market share and price erosion. Based on the evidence presented, there are two or three suppliers for cap assemblies in the market at issue. Thus, Scholle and Rapak are direct competitors. Since May 28, 2013, Scholle has lost sales to the accused product. (Dkt. No. 20-1 at 6.) And Rapak sells the accused product at a lower price than Scholle, which has exerted, and continues to exert, downward pressure on Scholle’s price. (*Id.* at 7.) Loss of market share and price erosion can constitute evidence of irreparable harm when determining whether a preliminary injunction

based on patent infringement should issue. *See Abbott Laboratories v. Sandoz, Inc.*, 544 F.3d 1341, 1361-62 (Fed. Cir. 2008); *Bio-Technology Gen. Corp. v. Genentech, Inc.*, 80 F.3d 1553, 1556 (Fed. Cir. 1996).

Further, Rapak is in no position to argue that the patented features do not drive sales of the cap assemblies at issue. The evidence presented shows that Scholle designed its cap assembly for use by a particular customer. According to Rapak, that customer not only insisted on one patented feature but also contributed to its invention. Given this design history, there is a strong causal nexus between the harm caused by Rapak's product, which incorporates that feature and is sold to that customer, and the alleged infringement. Therefore, Scholle has shown that Rapak's likely infringement will likely result in irreparable injury to Scholle.

C. Balance of Equities and Public Interest

This Court finds that the balance of equities tips slightly in Scholle's favor. Scholle is the patentee and has shown that it will likely prevail on the merits. Scholle argues that Rapak is a direct competitor that is using Scholle's patented technology to Scholle's detriment. Rather than identify any hardship it may suffer if an injunction issues, Rapak simply argues that Scholle will not prevail on the merits. Although Rapak does not argue it, it will likely lose sales if it can no longer sell the accused product. Even so, that does not outweigh Scholle's interest in enforcing its patent rights, which is in line with the public interest. Therefore, this Court finds that the balance of equities and the public interest favor Scholle, albeit slightly.

CONCLUSION

For the reasons stated herein, this Court grants Scholle's motion for a preliminary injunction. This Court directs the parties to submit a three-page position paper concerning the appropriate bond Scholle should post under Fed. R. Civ. P. 65(c). The parties may attach supporting documentation to their submission, as necessary.


Virginia M. Kendall
United States District Court Judge
Northern District of Illinois

Date: March 31, 2014