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United States District Court
Northern District of California

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

ASETEK DANMARK A/S,

Plaintiff,

v.

COOLIT SYSTEMS INC, et al.,

Defendants.

Case No. [19-cv-00410-EMC](#)

ORDER GRANTING IN PART AND DENYING IN PART DEFENDANTS’ MOTION FOR SUMMARY JUDGMENT; AND GRANTING IN PART AND DENYING IN PART PLAINTIFF’S MOTION FOR PARTIAL SUMMARY JUDGMENT

Docket Nos. 387, 394

I. INTRODUCTION

Plaintiff Asetek Danmark AS (“Asetek”) filed suit against CoolIT Systems, Inc. and its subsidiaries, and Corsair Gaming, Inc. and its U.S. subsidiaries (collectively “CoolIT”), asserting that CoolIT infringed and continues to infringe five of its patents — *i.e.*, the ‘601, ‘196, ‘362, ‘354 and ‘355 patents (collectively “CoolIT Patents”). CoolIT counterclaimed, alleging that Asetek infringed four of CoolIT’s patents — *i.e.*, the ‘330, ‘284, ‘266, and ‘567 patents. All of the allegedly infringed patents relate to liquid cooling systems and methods for cooling heat-generating electronic components. Both parties move for summary judgment. For the reasons stated below, the Court **GRANTS IN PART** Asetek’s Motion for summary judgment for validity of the ‘362 Patent and **DENIES IN PART** the Motion for noninfringement of the CoolIT Patents. The Court **DENIES IN PART** CoolIT’s Motion for summary judgment for validity of the CoolIT Patents and **GRANTS IN PART** the Motion for noninfringement of the ‘362 Patent.

b. The “Single Receptacle” Requirement

The parties dispute whether (1) the first structure defining the upper (pump) chamber is a second receptacle, and (2) the upper and lower chambers of the Tamriel are “separable.” If the first structure (upper chamber) constitutes a receptacle by itself, or the upper and lower chambers are separable as separate receptacles rather than constituting a single unitary unit, the device will not satisfy the stipulated “single receptacle” reservoir construction.

According to Asetek’s expert Dr. Tuckerman, the first structure of Tamriel (*i.e.*, the top chamber) is a “subcomponent . . . designed to fit within the reservoir housing via mating and interconnecting features” to form a “single receptacle.” 11/3/2021 Tuckerman Expert Infringement Rep. ¶¶ 147, 149-150. CoolIT, on the other hand, argues that both structures are each a receptacle separable by removing the screws – *i.e.*, “removably coupled” together. Ds’ Opp’n at 9-10. Hence, there is not a simple “receptacle.” CoolIT finds similarities to the Ryu reference in the CMI case. In *CMI*, CMI had argued that the heat exchanging interfaces in the accused products were screwed to the device and were not intended to be removed, and to do so would damage the products or otherwise render them nonfunctional; therefore, it did not infringe the ‘362 Patent requiring the heat exchanging interface to be “removably coupled” to the reservoir. *CMI USA Inc.*, 852 F.3d at 1359-60. However, the jury found that the device was “removably attached” or “removably coupled,” and the Federal Circuit affirmed, even though removal would cause coolant to leak. *Id.* The Federal Circuit reasoned that the patent did not require the functionality of each component upon detachment, and the device would function again if the components were reattached. *Id.* CoolIT argues that, like the Ryu reference, the two separable receptacles expose fluid to the outside of the closed-loop and require gasket-tubing to seal the connections. Ds’ MSJ at 22. Asetek disputes CoolIT’s comparison to Ryu.

The parties’ arguments about whether there are one or two receptacles focus mainly on mechanical separability – *i.e.*, through screws and a gasket. CoolIT argues the fact that the two chambers are thus attached and separate shows there are two receptacles. However, the Court does not find a mechanical distinction dispositive and instead looks to the function of the

1 (12/8/2021 Abraham Non-Infringement Rep.) ¶ 86 (“[A] receptacle . . . is simply ‘one that
2 receives and contains something’ like a container”) (quoting Merriam-Webster’s Collegiate
3 Dictionary)).

4 Here, the two structures are not only spatially separated by the tubing (*i.e.*, gasket)¹⁰, but
5 they are also functionally independent. CoolIT’s expert, Dr. Abraham, includes a demonstration
6 in his expert report that Tamriel’s two structures can function as two receptacles independently of
7 and away from each other, just like the prior art Ryu. 12/8/2021 Abraham Non-Infringement Rep.
8 ¶ 245 (“I have had a demo made to show that, when the two chambers of CoolIT’s new design is
9 separated and connected by a tube, the device functions just the same[.]”). CoolIT also points out
10 that both Ryu and Tamriel have a separation of the pump chamber that leads to a possible leakage,
11 which is prevented through gasket-tubing. 12/8/2021 Abraham Non-Infringement Rep. ¶ 259
12 (“[The gasket tubing connections] are the connections that Asetek has repeatedly touted that its
13 purported invention with a single-receptacle ‘reservoir’ would eliminate and would thus increase
14 reliability over prior art.”). The Court agrees with CoolIT that the two structures function
15 independently. Asetek’s contrary arguments are unconvincing:

16 First, Asetek points out that Tamriel’s top chamber subcomponent is permanently affixed
17 to the reservoir housing and is not separable without significant fluid loss; therefore, it is not a
18 functionally independent device like Ryu’s pump driver that is intended to be replaceable by a
19 user. Opp’n at 16. Asetek argues that the device was not intended to be taken apart, and doing so
20 would destroy the product because to take out the screws would require breaking the circuit board.
21 *Id.* However, Asetek’s argument fails because the issue here is not whether the device itself would
22 be destroyed if physically taken apart but whether the first and second structures can each function
23 as a receptacle, which Dr. Stein has shown through his simulation.¹¹

24
25 ¹⁰ CoolIT points out that both Ryu and Tamriel have a separation of the pump chamber that leads
26 to a possible leakage, which is prevented through gasket-tubing. 12/8/2021 Abraham Non-
27 Infringement Rep. ¶ 259 (“[The gasket tubing connections] are the connections that Asetek has
28 repeatedly touted that its purported invention with a single-receptacle ‘reservoir’ would eliminate
and would thus increase reliability over prior art.”).

¹¹ CoolIT also points out that this issue was unsuccessfully litigated by Asetek in *CMI*. Ds’ Reply

1 Next, Asetek points out that the top chamber subcomponent fulfills the same function as
 2 the impeller cover 46A in Asetek's preferred embodiment but is not described as a "receptacle" in
 3 the '196 patent. Ds' Opp'n at 17. However, it is the '362 Patent at issue in this case, not the '196
 4 patent. Furthermore, impeller cover 46A is only a preferred embodiment in the '196 patent and
 5 therefore not dispositive.

6 For the foregoing reasons, the Court finds that Tamriel's two structures function as two
 7 receptacles.¹²

8 c. Nesting Doll

9 Asetek also argues that, even if the top chamber subcomponent of the Tamriel is called a
 10 receptacle, it is still only a smaller receptacle contained within the larger receptacle that forms the
 11 reservoir housing, like the "nesting doll analogy." *Id.* at 18. Asetek points out that in *CMI*, CMI
 12 argued that the presence of a sub-chamber (which they argued was a receptacle) within the
 13 reservoir housing meant that the reservoir was not a single receptacle. *Id.* at 17-18. Judge Tigar
 14 noted:

15 it could be that even if the copper sub-chamber is a receptacle, that
 16 would not change the fact that the reservoir is a single receptacle
 17 divided into an upper chamber and lower chamber – the lower
 18 chamber would merely include or consist entirely of a smaller
 19 receptacle or sub-chamber. For example, nesting dolls contain many
 20 receptacles. But the smaller dolls – or receptacles – do not affect
 21 whether the biggest doll is a 'single receptacle'.

22 *Id.* at 18 (quoting the CMI case, Docket No. 426 at 6).

23 The Court finds the nesting doll analogy unconvincing under the facts of this case.

24 According to Dr. Abraham, the "encasement" or "outer wall" has no function and is merely
 25 cosmetic without touching liquid; the device will function the same even if it is removed.

26 12/8/2021 Abraham Non-Infringement Rep. ¶¶ 235-39. Asetek argues that the surrounding wall

27 _____
 28 constituted a receptacle, but whether the accused product met '362 Patent's requirement that the
 29 "heat-exchanging interface" must be "removably attached" or "removably coupled" to the
 30 "reservoir." '362 Patent, at 20:3–6; *CMI USA Inc.*, 852 F.3d at 1356.

12 Asetek also argues that CoolIT's own documents and pictures of Tamriel refer to the top
 chamber subcomponent as "chamber" and not a "receptacle." Ds' Opp'n at 14 (citing Ex. E).
 However, the relevant document does not specifically label the top chamber subcomponent as a