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27 AAVID THERMALLOY LLC and
28 BOYD CORPORATION

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

AAVID THERMALLOY LLC,

Plaintiff,

v.

COOLER MASTER CO., LTD. and
CMI USA, INC.,

Defendants.

Case No. 4:17-cv-05363-JSW

**JOINT CLAIM CONSTRUCTION AND
PREHEARING STATEMENT PURSUANT
TO PATENT L.R. 4-3**

COOLER MASTER CO., LTD.,
Counter-Claim Plaintiff,
v.
AAVID THERMALLOY LLC and
BOYD CORPORATION,
Counter-Claim Defendants.

Pursuant to Patent L.R. 4-3, Plaintiff Aavid Thermalloy LLC (“Aavid”) and Defendants Cooler Master Co., Ltd. and CMI USA, Inc. (“Defendants”) hereby jointly provide this Joint Claim Construction and Prehearing Statement regarding U.S. Patent No. 7,066,240 (“’240 patent”), U.S. Patent No. 7,100,679 (“’679 patent”), and U.S. Patent No. 7,100,680 (“’680 patent”) (collectively, “patents-in-suit”).

I. Stipulated Claim Constructions Pursuant to Patent L.R. 4-3(a)

Aavid and Defendants have met and conferred in an effort to identify proposed constructions that can be agreed upon and have narrowed their disputes to four claim terms. At this time, however, no stipulated constructions have been identified as necessary.

II. Disputed Terms, Proposed Constructions, and Supporting Evidence Pursuant to Patent L.R. 4-3(b)

The disputed terms and Aavid’s and Defendants’ respective proposed constructions are set forth in the chart below, along with an identification of the intrinsic and extrinsic evidence on which they intend to rely.¹

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¹ Unless otherwise noted, all intrinsic record citations are provided with reference to the ’240 patent; the corresponding portions of the ’679 patent and the ’680 patent are incorporated by reference.

Claim Terms	Aavid's Proposed Constructions & Support	Defendants' Proposed Constructions & Support
<p>"vapor chamber"</p> <p>'240 patent: claims 9-13</p> <p>'679 patent: claims 1, 2</p> <p>'680 patent: claims 1-3, 5</p>	<p>A vacuum sealed chamber, wherein a heat transfer fluid is evaporated and condensed and capillary forces are utilized to spread heat</p> <p><i>See</i> preamble; title of invention; 1:41-44, 57-58, 61, 67; 2:2, 4-5, 11-40; 3:30-35, 48-67; 4:1-5, 19-20, 41-48, 61-67; 5:1-15; and Figs. 1-3.</p> <p>U.S. Pat. No. 6,437,983 at 1:32-44.</p>	<p>Enclosed and sealed void or cavity in which a suitable quantity of liquid is present to be evaporated (or vaporized) and condensed to transport or spread heat</p> <p><i>See</i> reference 14, abstract, 1:50-2:53, 3:6-17, 3:21-5:8, Figs. 1-3; claims 1, 9-14; '240 patent: claims 3, 4, 8; '679 patent: claims 1-3, 6; '680 patent: claims 1, 2, 4.</p> <p>http://www.dictionary.com/browse/chamber</p> <p>https://dictionary.cambridge.org/us/dictionary/english/chamber</p> <p>https://www.merriam-webster.com/dictionary/chamber</p> <p>https://en.oxforddictionaries.com/definition/chamber</p> <p>https://www.collinsdictionary.com/us/dictionary/english/chamber</p> <p>https://www.macmillandictionary.com/us/dictionary/american/chamber</p> <p>https://www.thefreedictionary.com/chamber</p> <p>https://www.ldoceonline.com/dictionary/chamber</p> <p>https://www.merriam-webster.com/dictionary/vacuum</p> <p>https://dictionary.cambridge.org/us/dictionary/english/vacuum</p> <p>http://www.dictionary.com/browse/vacuum</p> <p>Japanese Examined Utility Model Application Publication; Title: Heat Pipe; Dates of Publication: July 9, 1991 and March 27, 1996; Inventors:</p>

Claim Terms	Aavid's Proposed Constructions & Support	Defendants' Proposed Constructions & Support
		<p>Tadahito Takahashi, Kaoru Hasegawa, Muneaki Sokawa (4:48-64)</p> <p>The American Heritage Dictionary 4th ed. at 308 (2000): Chamber: An enclosed space or compartment.</p> <p>The American Heritage Dictionary 4th ed. at 1897-98 (2000): Vacuum: 1a. Absence of matter. b. A space empty of matter. c. A space relatively empty of matter. d. A space in which the pressure is significantly lower than atmospheric pressure. 2. A state of emptiness; a void.</p> <p>The American Heritage Dictionary 4th ed. at 297 (2000): Cavity: 1. A hollow; a hole.</p> <p>U.S. Pat. No. 4,012,770 (13:53-63);</p> <p>U.S. Pat. No. 4,165,472 (1:55-60, 4:23-30, 6:60-7:7);</p> <p>U.S. Pat. No. 6,817,097 (3:1-9, 21-36, reference 113).</p> <p>Summary of expert testimony:</p> <p>Dr. Pokharna will opine how one of ordinary skill in the art would understand, at the time of the alleged invention for the patents-in-suit, the term "vapor chamber" in the context of the patent-in-suit, as well as any state-of-the-art or background information in connection with the patents-in-suit and the related field(s). He will explain why the term should be accordingly construed as "enclosed and sealed void or</p>

Claim Terms	Aavid's Proposed Constructions & Support	Defendants' Proposed Constructions & Support
		cavity in which a suitable quantity of liquid is present to be evaporated (or vaporized) and condensed to transport or spread heat."
<p>"lip"</p> <p>'240 patent: claims 11-13</p> <p>'679 patent: claim 5</p> <p>'680 patent: claims 1-3, 5</p>	<p>Portion of the plate defined by the bonded region of the plate's inner or interior surface</p> <p><i>See</i> references 22 and 24 in Figs. 1-3; 3:27-28, 36-37; 4:44-48.</p> <p>https://www.merriam-webster.com/dictionary/lip (last visited May 29, 2018): <u>lip</u>: the edge of a hollow vessel or cavity.</p> <p>Merriam Webster's Collegiate Dictionary 10th ed. at 679 (1995): <u>lip</u> (4a): the edge of a hollow vessel or cavity.</p>	<p>Portion of the plate comprising a region bonded to another plate</p> <p><i>See</i> references 22 and 24, 2:41-53, 3:25-47, 4:6-18, 4:37-5:9, Figs. 1-3.</p> <p>https://www.collinsdictionary.com/us/dictionary/english/lip_1</p> <p>https://www.merriam-webster.com/dictionary/lip</p> <p>http://www.dictionary.com/browse/lip</p> <p>https://en.oxforddictionaries.com/definition/lip</p> <p>Summary of expert testimony:</p> <p>Dr. Pokharna will opine that, at the time of the alleged invention for the patents-in-suit, the term "lip" lacked a plain and ordinary meaning to one of ordinary skill in the art. He will then opine how one of ordinary skill in the art would understand, at that time, the term "lip" in the context of the patent-in-suit, as well as any state-of-the-art or background information in connection with the patents-in-suit and the related field(s). He will explain why the term should be accordingly construed as "portion of the plate comprising a region bonded to another plate."</p>
"spacer"	A structure, apart from the separately claimed depression, that is configured	Plain and ordinary meaning.

Claim Terms	Aavid's Proposed Constructions & Support	Defendants' Proposed Constructions & Support
<p>'240 patent: claim 11</p> <p>'679 patent: claim 5</p> <p>'680 patent: claim 1</p>	<p>to maintain a space or clearance between the plates and provides support for a capillary wick</p> <p><i>See</i> 1:57-58; 2:7-11, 14-15, 18-28; 3:36-47; 4:2-5; Fig. 2.</p> <p>https://www.merriam-webster.com/dictionary/spacer (last visited May 29, 2018): <u>spacer</u>: a device or piece used to create or maintain a desired amount of space (as between two parts).</p> <p>Webster's Third New International Dictionary Unabridged at 2180 (2002): <u>spacer</u>: a device or piece for holding two members at a given distance from each other,</p>	<p>If a construction is necessary: Structure used to maintain a space or clearance between the plates</p> <p><i>See</i> references 26, 44, 2:3-53, 3:35-4:60, Figs. 1-2.</p> <p>https://www.collinsdictionary.com/us/dictionary/english/spacer</p> <p>https://www.merriam-webster.com/dictionary/spacer</p> <p>Summary of expert testimony: Dr. Pokharna will opine how one of ordinary skill in the art would understand, at the time of the alleged invention for the patents-in-suit, the term "spacer" in the context of the patent-in-suit, as well as any state-of-the-art or background information in connection with the patents-in-suit and the related field(s). He will explain why the term, at that time, had a plain and ordinary meaning, and if a construction is necessary, should be accordingly construed as "structure used to maintain a space or clearance between the plates."</p>
<p>"hollow column"</p> <p>'240 patent: claims 9, 10, 13</p> <p>'680 patent: claims 2, 5, 6, 8</p>	<p>Plain and ordinary meaning</p> <p>If a construction is necessary: a columnar structure defining an unfilled or empty space</p> <p><i>See</i> title of invention; reference 44 in Figs. 1-3; 1:60; 2:10; 2:30-31, 37-40; 3:2-3, 21-24; 4:21-25, 35-36, 52.</p> <p>The American Heritage Dictionary 4th ed. at 367 (2000): <u>column</u>: Something resembling an</p>	<p>Cylindrical structure surrounding a void or cavity</p> <p><i>See</i> abstract references 26, 44, 2:3-53, 3:2-24, 3:35-4:60, Figs. 1-3.</p> <p>https://www.collinsdictionary.com/us/dictionary/english/column</p> <p>https://www.thefreedictionary.com/column</p>

Claim Terms	Aavid's Proposed Constructions & Support	Defendants' Proposed Constructions & Support
	<p>architectural pillar in form or function.</p> <p>The American Heritage Dictionary 4th ed. at 367 (2000): <u>columnar</u>: having the shape of a column.</p> <p>The American Heritage Dictionary 4th ed. at 838 (2000): <u>hollow</u>: <i>adj.</i> 1. having a cavity, gap, or space within. 2. deeply indented or concave; sunken.</p>	<p>https://en.oxforddictionaries.com/definition/column</p> <p>http://www.dictionary.com/browse/column?s=t</p> <p>Summary of expert testimony:</p> <p>Dr. Pokharna will opine that, at the time of the alleged invention for the patents-in-suit, the term “hollow column” lacked a plain and ordinary meaning to one of ordinary skill in the art. He will then opine how one of ordinary skill in the art would understand, at that time, the term “hollow column” in the context of the patent-in-suit, as well as any state-of-the-art or background information in connection with the patents-in-suit and the related field(s). He will explain why the term should be accordingly construed as “cylindrical structure surrounding a void or cavity.”</p>

III. Identification of Case-Dispositive Terms Pursuant to Patent L.R. 4-3(c)

Aavid and Defendants have consolidated their jointly proposed terms for construction to ten disputed terms. Aavid does not believe any of the disputed terms will be case dispositive. Defendants contend the terms “vapor chamber,” “hollow column,” and “depression” may be case-dispositive with respect to as least some of Aavid’s claims.

IV. Anticipated Length of Claim Construction Hearing Pursuant to Patent L.R. 4-3(d)

Aavid and Defendants believe two to two and a half (2 to 2.5) hours may be needed for the claim construction hearing, or as long as the length determined by the Court.

V. Proposed Claim Construction Witnesses Pursuant to Patent L.R. 4-3(e)

Aavid and Defendants dispute whether Defendants should be permitted to submit expert

1 testimony on claim construction, in light of Defendants' failure to designate testimony of an expert
2 witness in their Patent L.R. 4-2 disclosures, which were due no later than May 29, 2018. Patent
3 L.R. 4-2(e) requires that a party proposing to call one or more witnesses at a Claim Construction
4 Hearing to provide "the identity of each such witness, and for each witness, a summary of his or
5 her testimony including, for any expert, each opinion to be offered related to claim construction".
6 Indeed, "to be useful and fair to all parties, expert opinion must be timely under Patent Local Rules
7 4-2 and 4-4. These basic rules provide that expert *opinions* for claim construction must be disclosed
8 no more than twenty-one days after the exchange of proposed terms for construction." *Largan*
9 *Precision Co v. Genius Elec. Optical Co.*, No. 13-cv-02502-JD, 2014 U.S. Dist. LEXIS 169052, at
10 *5 (N.D. Cal. Dec. 5, 2014) (emphasis added). Defendants have failed to identify their proposed
11 expert's testimony or actual opinions, saying only that their proposed expert's testimony will cover
12 certain enumerated issues, without any substantive opinions as to those issues. Simply put,
13 Defendants merely mention general topics that presumably any expert could discuss without
14 providing "each opinion to be offered related to claim construction." Despite Defendants knowing
15 their proposed constructions and the specific opinions their expert has about those constructions,
16 they did not even disclose the general issues of the testimony until 1:30am CST on Friday, June 22,
17 2018 and for the first time disclosed some vague opinions at 11:53pm CST that same day. As a
18 result, during the claim construction discovery period that the Patent Local Rules permit,
19 Defendants have left Aavid little basis on which to depose Defendants' proposed expert, as Aavid
20 has only a vague idea what Defendants' proposed expert's testimony and actual opinions will be.

21 Aavid does not believe expert testimony on claim construction is necessary in this case.
22 However, to the extent Defendants are permitted to offer expert testimony on claim construction,
23 Aavid reserves its right to rely on declarations and/or testimony of Nelson Gernert as evidence of
24 how one having ordinary skill in the art would interpret the claim elements, to support each of
25 Aavid's proposed claim constructions. Mr. Gernert is the VP of Engineering and Technology at
26 Aavid Thermacore, Inc., which is a subsidiary of Aavid Thermalloy, LLC, and he has over thirty-
27 four (34) years of experience in the thermal management products industry, including substantial
28 involvement in the design, development, manufacturing, and sale of vapor chamber products. Mr.

1 Gernert's testimony may address the enumerated issues that Defendants identify, including but not
 2 limited to the level of ordinary skill in the art of the patents-in-suit at the time of the invention, how
 3 one of ordinary skill in the art would understand the relevant terms in the context of the patent
 4 specification and claims, and background information regarding the claimed technology.

5 Defendants intend to rely on Dr. Himanshu Pokharna for his expert testimony to support
 6 each of Defendants' proposed claim constructions. Dr. Pokharna's qualifications have been
 7 disclosed in Dkt. No. 49 at 18 (Discovery Letter, Exhibit 7 at 1, ¶¶ 1-2). For each of the terms
 8 identified above in Section II under Patent L.R. 4-3(b), Dr. Pokharna's testimony will cover issues
 9 relating to (1) the state of the art, the level of ordinary skill in the art, and any other relevant
 10 background information in connection with the patents-in-suit and the related field(s) at the time of
 11 the alleged invention, (2) whether at that time, there existed, to one of ordinary skill in the art, any
 12 plain and ordinary meaning for the term (and why), and in either situation, (3) how one of ordinary
 13 skill in the art would understand, at that time, the relevant term in the context of the patent-in-suit,
 14 as well as any state-of-the-art or background information in connection with the patents-in-suit and
 15 the related field(s). There should be no dispute that Defendants are permitted to introduce Dr.
 16 Pokharna's testimony at this time because Patent L.R. 4-4 expressly authorizes discovery "with
 17 respect to claim construction of any witnesses, including experts, identified in the Preliminary
 18 Claim Construction statement (Patent L.R. 4-2) *or* Joint Claim Construction and Prehearing
 19 Statement (Patent L.R. 4-3)." Patent L.R. 4-4 (emphasis added). As explained to Aavid,
 20 Defendants' introduction of Dr. Pokharna's testimony during the very first meet-and-confer after
 21 the initial Patent L.R. 4-2 exchange was a response to Aavid's offering of "[p]lain and ordinary
 22 meaning" and/or possible expert testimony for certain terms during the initial Patent L.R. 4-2
 23 exchange and, moreover, is aimed at assisting this Court to reach the correct constructions. Aavid
 24 has also become fully aware of Defendants' intention to introduce Dr. Pokharna's testimony since
 25 as early as June 13, 2018, nine days before this instant filing under Patent L.R. 4-3. Thus, there
 26 should be no prejudice to Aavid, and Aavid has identified none. *DR Sys. v. Eastman Kodak Co.*,
 27 No. 08-CV-669-H (BLM), 2009 U.S. Dist. LEXIS 104080, at *39 (S.D. Cal. Nov. 9, 2009) (citing
 28 *Pfingston v. Ronan Eng'g Co.*, 284 F.3d 999, 1005 (9th Cir. 2002)) ("Exclusion of testimony for

1 failure to make required disclosure should only be imposed if the party seeking exclusion suffered
2 some prejudice.”) Further, Defendants have provided summaries for Dr. Pokharna’s testimony for
3 each of the disputed terms above in accordance with Patent L.R. 4-3. Furthermore, the parties had
4 agreed during an earlier meet-and-confer after the prior Patent L.R. 4-1 exchange that they could
5 modify their claim constructions and supporting evidence during the meet-and-confer process
6 between the Patent L.R. 4-2 exchange and the Patent L.R. 4-3 filing. Aavid now disputes it had so
7 agreed, but Defendants note that Aavid itself *added* additional supporting evidence for multiple
8 terms in the draft(s) for this Patent L.R. filing, while objecting to Defendants’ introduction of
9 additional evidence (including Dr. Pokharna’s testimony) nine days earlier. Aavid’s unnecessary
10 dispute over Defendants’ authorized introduction of expert testimony in this Patent L.R. 4-3 filing
11 is unreasonable, wastes party and judicial resources, and should be rejected by this Court..

12 In any event, the parties intend to further meet and confer in the coming week(s) to hopefully
13 resolve this dispute regarding expert testimony. The parties may also further meet and confer to
14 narrow their claim construction disputes and may accordingly file an amended Joint Claim
15 Construction and Prehearing Statement.

16 **VI. Requested Findings Pursuant to Patent L.R. 4-3(f)**

17 The Court has not requested any factual findings related to claim construction.

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Pursuant to Civil Local Rule 5-1(i)(3), by his signature below, counsel for Defendants attests under penalty of perjury that counsel for Aavid concurs in the filing of this document and consents to the affixing of his electronic signature on this document.

Dated: June 22, 2018

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