

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RED HAT, INC., DELL INC., DELL TECHNOLOGIES INC.,
EMC CORPORATION, HEWLETT PACKARD ENTERPRISES CO.,
HITACHI VANTARA CORPORATION,
and SUPER MICRO COMPUTER, INC.,
Petitioner,

v.

ELECTRONICS & TELECOMMUNICATIONS RESEARCH
INSTITUTE,
Patent Owner.

Case IPR2019-00465
Patent 6,718,436 B2

Before JAMESON LEE, KIMBERLY McGRAW,
and NATHAN A. ENGELS, *Administrative Patent Judges*.

LEE, *Administrative Patent Judge*.

DECISION
Denying Request for Rehearing
37 C.F.R. § 42.71(d)

I. INTRODUCTION

In a decision rendered on June 13, 2019, we denied institution of trial with respect to claims 1–14 of U.S. Patent No. 6,718,436 B2 (“the ’436 patent”) on all grounds of unpatentability asserted in the Petition. Paper 15 (“Decision”). On July 15, 2019, Petitioner filed a Request for Rehearing. Paper 16 (“Request”).

On rehearing, the burden of showing a decision on whether to institute trial should be modified lies with the party challenging the decision. 37 C.F.R. § 42.71(d). “When rehearing a decision on petition, a panel will review the decision for an abuse of discretion.” 37 C.F.R. § 42.71(c). “The request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.” 37 C.F.R. § 42.71(d).

In the Decision, we stated that “it is necessary to resolve whether the various tables recited in claims 1, 8, and 11, that are within the metadata and stored within the disk partitions forming the logical volume, must have a tabular format or structure in the disk partitions, or need only be presented on a display as tables for viewing.” Decision 13–14. We determined that the tables “must have or embody a tabular data structure within the disk partitions,” and that “[t]he requirement would not be met by presenting metadata on a display in table form.” *Id.* at 16. In the Request, Petitioner asserts that our reading of the claims “is inconsistent with the plain meaning of the claim language, which recites first ‘generating the metadata[’] (including the claimed tables) and then second the ‘storing of metadata.’” Request 2.

For reasons discussed below, Petitioner has not shown that we misapprehended or overlooked any argument or evidence or that we abused our discretion in denying institution of review. The Request is *denied*.

II. DISCUSSION

At issue is the claim language that recites the storing of metadata including tables. Step “b)” of claims 1 and 11 reads as follows: “b) generating the metadata including information of the logical volume and the disk partitions forming the logical volume and *storing the metadata to the disk partitions forming the logical volume.*” Ex. 1001, 12:22–25, 14:32–35 (emphasis added). Claim 8 essentially recites the same. *See id.* at 13:36–39. Each of claims 1, 8, and 11 further recites: “wherein the metadata includes a disk partition table . . . ; a logical volume table . . . ; an extent allocation table . . . ; and a mapping table” *Id.* at 12:35–47, 13:49–61, 14:46–67. The antecedent basis for “the metadata” is that metadata which has been generated *and* stored in the disk partitions forming the logical volume.

As we explained in the Decision, for petitions filed on or after November 13, 2018, a claim shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b) (2018). Petitioner filed its Petition on December 19, 2018. Paper 6. Thus, we apply the claim construction standard as set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

1. Disclaimer and Disavowal

The thrust of Petitioner's arguments is that the various reasons in the Decision, supporting the conclusion that the recited tables must have or embody a tabular structure within the disk partitions, are erroneous because they do not identify anything in the Specification sufficiently clear to constitute a disclaimer or disavowal on the part of the patent applicant. Request 4, 6–9. Petitioner cites authority to the effect that a disclaimer or disavowal of claim scope must be clear. *Id.*

Petitioner's disclaimer/disavowal argument, however, is misplaced because the Decision does not apply the principle of disclaimer or disavowal to arrive at any conclusion or determination. We reached the conclusion in the Decision on claim construction without finding that the patent applicant disclaimed or disavowed certain claim scope. Rather, we simply construed the claim language in light of the Specification of the '436 patent. Consequently, we need not show "clear" disavowal as Petitioner appears to contend. *See, e.g., id.* at 3–4 (stating specification disclaimer can only be found where it is "clear and unequivocal"), 7 (stating objects of the invention can only result in a disclaimer of claim scope where they demonstrate a "clear intent to disavow"), 8–9 (stating preferred embodiments do not limit claim scope unless they evidence unmistakable intent to disclaim). Further, under 37 C.F.R. § 42.104(b)(3), the Petition must set forth how a claim is to be construed. That, however, the Petition did not do with regard to language requiring storing metadata including the tables in disk partitions. We could not have misapprehended or overlooked something the Petitioner never presented or explained.

For reasons discussed below, we are not persuaded by Petitioner that our construction is incorrect.

2. Plain Meaning of the Claim Language

Petitioner argues that the claim construction requiring the claimed tables to be stored in tabular structure is inconsistent with the plain meaning of the claim language, and that “[a]ll that the plain language of the claims of the ’436 patent requires is that the mapping table (and the various other claimed tables) be generated, then later ‘included’ when the metadata is stored to the disk.” Request 2. In that regard, Petitioner additionally asserts that “[i]t is beyond dispute that, in the prior art, the claimed tables were included in the metadata, which was later stored.” *Id.*

We disagree. The argument and assertion are not supported by the record. Indeed, the argument itself is internally inconsistent, in suggesting that a table need not be stored when storing a table. In our view, a plain reading of the claim language requires metadata, including the tables, be stored in disk partitions and that the tables are stored in disk partitions as tables, i.e., having or embodying a tabular data structure as we determined. *See* Decision 16. Significantly, Petitioner conflates a table with raw data that are contained in the table. The two are not the same. Storing data that are extracted from or taken from a table plainly is not the same as storing the table. We are unpersuaded by Petitioner that the Decision’s reading of the claims is inconsistent with the plain language of the claims.

3. Consistency with the Specification

In arriving at our conclusion that the claims require that the tables are stored in disk partitions as tables, i.e., having or embodying a tabular data structure, we discussed the Specification of the ’436 patent, including the

discussion of prior art, the stated objectives, its summary, and its disclosed embodiments. Decision 14–16. Petitioner does not dispute that the disclosed embodiments show tabular data structures within the disk partitions. Request 4 n.1. Petitioner argues, instead, that the law disfavors limiting the claims to a preferred embodiment even if the patent describes only a single embodiment, citing *JVW Enters. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005). *Id.* at 9. Petitioner’s argument is misplaced, because our reading of the claims is based on the plain language of the claims, as discussed above, and consistent with the disclosed embodiments and other statements in the Specification. It is not a matter of importing a limitation into the claims from the Specification, where the claims require no such limitation. Rather, the limitation is required by the claims.

We noted in the Decision that, with respect to the prior art, the ’436 patent explains prior art systems have problems because the metadata was stored in “huge storage structures.” Decision 14. Petitioner argues that this description merely indicates a problem with the amount of the data being stored rather than what structures are used to store the data. Request 6. The argument is unpersuasive. First, the term “huge data structures” refers more to data structure than just data. Second, even if the language is ambiguous as to whether it refers to data structure or just data, there is insufficient clarity to support Petitioner’s inconsistency argument. Thus, the description that there is a problem in the prior art with the size of data structures is not inconsistent with our reading the claims as requiring the storage of tables as tables, i.e., in tabular structures. Instead, the description is consistent with

using tabular storage structures as a part of the solution to the pre-existing problem.

The Decision further discussed stated objectives in the Specification of the '436 patent as follows:

The specification further identifies an object of the invention as “to provide a logical volume manager for managing a logical volume *using a mapping table storing a relation* between a physical address and a logical address, *using a minimum space for metadata* and supporting online dynamic resizing.” *Id.* at 3:66 to 4:3 (emphasis added). Another stated object is “to provide a computer-readable *recording medium storing* a program or *data structure* for embodying the method.” *Id.* at 4:4–6 (emphasis added).

Decision 15. Petitioner argues that none of the cited objectives of the invention “can meet the threshold of [a] clear intent to disavow.” Request 7. As noted above, however, we did not apply the principle of either disclaimer or disavowal. Rather, we cited these objectives to show consistency with and support for how we have construed the claims. These objectives indicate a focus of the invention on storage data structures.

Likewise, the Decision cited to the Summary of the Invention section of the '436 patent not to support a determination of disclaimer or disavowal, but to show that the focus of the invention is on data storage in the disk partitions and not on how the metadata is displayed. Decision 15. Although the cited text does refer to minimizing the necessary metadata to be stored, that is not inconsistent with our reading of the claim language as discussed above.

III. CONCLUSION

When rehearing a decision on petition, a panel will review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c). Petitioner

correctly points out (Request 3) the following: “An abuse of discretion is found if the decision: (1) is clearly unreasonable, arbitrary, or fanciful; (2) is based on an erroneous conclusion of law; (3) rests on clearly erroneous fact finding; or (4) involves a record that contains no evidence on which the Board could rationally base its decision.” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367 (Fed. Cir. 2016).

For reasons discussed above, Petitioner has not shown any abuse of discretion in the Decision.

Petitioner’s Request for Rehearing is *denied*.

Summary Table of Decision on Rehearing Request:

Claims	35 U.S.C §	Basis	Denied	Granted
1, 2, 8	103(a)	HP-UX Handbook and Peloquin	1, 2, 8	
4–6, 9–13	103(a)	HP-UX Handbook, Peloquin, and Murray	4–6, 9–13	
3, 7, 14	103(a)	HP-UX Handbook, Peloquin, Murray, and Kodama	3, 7, 14	
1, 2, 4, 5, 6, 8–13	103(a)	HP-UX Handbook and HP-UX Manual	1, 2, 4, 5, 6, 8–13	
3, 7, 14	103(a)	HP-UX Handbook, HP-UX Manual, and Kodama	3, 7, 14	
Overall Outcome			1–14	

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