

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., HTC CORPORATION, HTC AMERICA, INC.,
SAMSUNG ELECTRONICS CO. LTD,
SAMSUNG ELECTRONICS AMERICA, INC., and AMAZON.COM, INC.,
Petitioner,

v.

MEMORY INTEGRITY, LLC,
Patent Owner.

Case IPR2015-00163
Patent 7,296,121 B2

Before JENNIFER S. BISK, NEIL T. POWELL, and
KERRY BEGLEY, *Administrative Patent Judges*.

BISK, *Administrative Patent Judge*.

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

INTRODUCTION

The parties named above¹ (“Petitioner”) request rehearing of the Board’s Decision on Institution (Paper 18, “Dec.”). Paper 20 (“Req. Reh’g”). Specifically, Petitioner seeks rehearing of our decision declining to institute an *inter partes* review of claim 12 of U.S. Patent No. 7,296,121 B2 (Ex. 1001, “the ’121 patent”).

“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 burden of showing a decision should be modified lies with the party challenging the decision[,]” who “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).

For the reasons that follow, Petitioner’s request for rehearing is *granted*.

DISCUSSION

The Petition asserts that claim 12 of the ’121 patent is anticipated by U.S. Patent No. 7,698,509 B1 (Ex. 1009, “Koster”). Pet. 3. Claims 11 and 12 of the ’121 patent recite:

11. The computer system of claim 1 wherein each of the processing nodes is programmed to complete a memory transaction after receiving a first number of responses to a first probe, the first number being fewer than the number of processing nodes.

¹ The Petition also lists Samsung Telecommunications America, LLC (“STA”) as a petitioner. Paper 1 (“Pet.”), 1. After the filing of the Petition, however, STA merged with and into Samsung Electronics America, Inc. Paper 12. Thus, STA no longer exists as a separate corporate entity. *Id.*

12. The computer system of claim 11 wherein the probe filtering unit has temporary storage associated therewith for holding read response data from one of the cache memories, and the first number is one.

Ex. 1001, 31:49–57.

In our Decision, we concluded that Petitioner had not shown sufficiently that Koster discloses “wherein each of the processing nodes is programmed to complete a memory transaction after receiving a first number of responses to a first probe” “and the first number is one,” as recited in claim 12. Dec. 22–24. We explained that we were “not persuaded that Petitioner has shown that Koster’s requesting microprocessor is ‘necessarily programmed to complete [its memory] transaction after receiving *one* response to the broadcast request for data.’” Dec. 23 (quoting Pet. 36–37).

Petitioner asserts that we misapprehended the Petition’s argument with respect to claim 12 by focusing on the fact that Koster’s system supports memory transactions that may involve multiple responses instead of looking solely at Koster’s example featuring exactly one response. Req. Reh’g 1–2. We agree with Petitioner that we misapprehended the significance of Petitioner’s argument with respect to claim 12. We read the argument set out in the Petition as asserting that because one example of Koster describes completing a memory transaction after receiving one response, Koster’s system *inherently* discloses completing a memory transaction after receiving one response in all situations, no matter the number of total responses. *See* Pet. 36–37 (“In other words, the requesting microprocessor is necessarily programmed to complete memory its [sic] transaction after receiving one response to the broadcast request for data (i.e., probe), as recited in claim 12.”).

The Request for Rehearing clarifies, however, that Petitioner’s argument is that the example describing exactly one response, *itself, explicitly* discloses completing a memory transaction after receiving one response. Req. Reh’g 5–6. Petitioner further explains that in order to be capable of performing this particular example, (1) Koster must necessarily be programmed to complete its memory transaction after receiving one response, and (2) Koster’s snoop filter necessarily stores, at least temporarily, a copy of that response. *Id.*; Pet. 36–37 (citing Ex. 1001, 6:67–7:14; Ex. 1014 ¶ D-18). Finally, Petitioner spells out that this logic does not change no matter how Koster behaves during other scenarios—scenarios involving more than one response—which are irrelevant to Petitioner’s argument. *Id.* at 6.

After considering Petitioner’s request, we agree that we misapprehended the argument in the Petition. Moreover, for purposes of this decision, we are persuaded that Petitioner has shown sufficiently that Koster discloses “wherein each of the processing nodes is programmed to complete a memory transaction after receiving a first number of responses to a first probe” “and the first number is one.”

Because we ended our analysis after discussing the limitation “and the first number is one” in the Decision to Institute, we did not address Patent Owner’s argument in its Preliminary Response (Paper 13, “Prelim. Resp.”) that Petitioner does not show sufficiently that Koster inherently discloses “temporary storage associated therewith for holding read response data from one of the cache memories,” as required by claim 12. Prelim. Resp. 37. Specifically, Patent Owner asserts that Koster does not disclose temporary storage for the response data associated with the probe filtering unit. *Id.* Instead, according to Patent Owner,

because Koster's shadow tag memory stores only tags, updates to this memory "merely require storing the memory address for the transaction rather than the response data itself." *Id.* at 37–38 (citing Ex. 1009, 6:15–17).

We are not persuaded, on the present record, that Koster's disclosure is as limited as Patent Owner asserts. To the contrary, at this stage of the proceeding, we are persuaded that Koster's statement "[b]y forwarding response B through the snoop filter 192, the snoop filter 192 is able to update its shadow tag memory 194" discloses that the contents of the response are sent to the snoop filter. Ex. 1009, 7:12–14. We also credit the testimony of Petitioner's declarant, Dr. Robert Horst, that "snoop filter 192 would only be capable of performing this update operation if it stored a copy of the response B, even if only for long enough to recognize that the response was being returned to the requesting microprocessor." Ex. 1014 ¶ D-19. On this record, we, therefore, agree with Petitioner that a person of ordinary skill in the art would understand that the snoop filter necessarily includes a temporary storage for holding response data. Pet. 37 (citing Ex. 1014 ¶ D-19).

Thus, for purposes of this decision, we are persuaded that Petitioner has shown sufficiently that Koster inherently discloses "wherein the probe filtering unit has temporary storage associated therewith for holding read response data from one of the cache memories, and the first number is one," as recited in claim 12.

CONCLUSION

In view of Petitioner's Request for Rehearing, we are persuaded that Petitioner has established a reasonable likelihood of prevailing in its challenge that claim 12 of the '121 patent is anticipated by Koster.

Any discussion of facts in this decision are made only for the purposes of institution and are not dispositive of any issue related to any ground on which we institute review. The Board has not made a final determination on the patentability of any challenged claims. The Board's final determination will be based on the record as fully developed during trial.

ORDER

Accordingly, it is:

ORDERED that Petitioner's Request for Rehearing is *granted*;

FURTHER ORDERED that the Order instituting trial (Paper 18) is modified so that trial is instituted on the following grounds:

1. claims 4–6, 11, and 12 as anticipated under 35 U.S.C. § 102 by Koster;
and
2. claims 19–24 as obvious under 35 U.S.C. § 103 over Koster and Smith;
and

FURTHER ORDERED that the trial schedule remains the same as set forth in the Scheduling Order (Paper 19) as modified by the Joint Stipulation Regarding Due Dates 2, 3, and 4, filed June 2, 2015 (Paper 21).

IPR2015-00163
Patent 7,296,121 B2

PETITIONER:

WALTER RENNER
axf@fr.com

ROBERTO DEVOTO
IPR39521-0007IP4@fr.com

PATENT OWNER:

JONATHAN BAKER
Jbaker@farneydaniels.com

BRYAN ATKINSON
MemoryIntegrityIPR@farneydaniels.com
batkinson@farneydaniels.com
fdlitsupport@farneydaniels.com