

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NVIDIA CORP.,
Petitioner,

v.

SAMSUNG ELECTRONICS CO., LTD.,
Patent Owner.

Case IPR2015-01315
Patent 6,819,602 B2

Before JAMESON LEE, PATRICK R. SCANLON, and JUSTIN BUSCH,
Administrative Patent Judges.

SCANLON, *Administrative Patent Judge.*

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Petitioner, NVIDIA Corp., filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 1, 3, and 26–29 of U.S. Patent No. 6,819,602 B2 (Ex. 1001, “the ’602 patent”) pursuant to 35 U.S.C. §§ 311–319. Patent Owner, Samsung Electronics Co., Ltd., filed a Preliminary Response (Paper 6, “Prelim. Resp.”).

In a conference call with the parties, the panel authorized Petitioner to submit a five-page, non-argumentative claim chart showing how the claims of a reference patent asserted by Petitioner are supported by a provisional application. Paper 9, 3. The panel also authorized Patent Owner to file a five-page response to Petitioner’s claim chart. *Id.* at 4. Petitioner filed a claim chart. Paper 8. Paper 8 included two pages of text in addition to the five-page claim chart. Because these two additional pages are not in compliance with our Order (*see* Paper 9), we have considered the claim chart only and none of the arguments presented in the additional two pages. Patent Owner subsequently filed a response to Petitioner’s claim chart. Paper 10.

We have jurisdiction under 35 U.S.C. § 314, which provides that *inter partes* review may not be instituted unless “the information presented in the petition . . . and any [preliminary] response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a).

Upon consideration of the arguments and evidence presented by Petitioner and Patent Owner, we are not persuaded that Petitioner has demonstrated, under 35 U.S.C. § 314(a), a reasonable likelihood that it would prevail in showing the unpatentability of any of claims 1, 3, and 26–

29 of the '602 patent. Accordingly, we do not institute an *inter partes* review of any claim.

II. BACKGROUND

A. Related Matters

The parties identify the district court proceeding *Samsung Electronics Co. v. NVIDIA Corp.*, Case No. 3:14-cv-00757-REP (E.D. Va.) as a related matter. Pet. 2; Paper 5, 2.

B. The Prior Art

Petitioner relies on the following prior art:

1. U.S. Patent No. 7,032,092 B2, issued Apr. 18, 2006 (“Lai”) (Ex. 1003); and
2. U.S. Patent No. 6,522,599 B2, issued Feb. 18, 2003 (“Ooishi”) (Ex. 1005).

C. The Asserted Grounds

Petitioner challenges claims 1, 3, and 26–29 of the '602 patent on the following grounds:

Reference(s)	Basis	Claims Challenged
Lai	§ 102(e)	1 and 3
Lai and Ooishi	§ 103	26–29

III. ANALYSIS

A. Claim Construction

In an *inter partes* review, the Board interprets claims using the “broadest reasonable construction in light of the specification of the patent in which [they] appear[.]” 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1277–79 (Fed. Cir. 2015). Under the broadest

reasonable interpretation standard, claim terms are given their ordinary and customary meaning in view of the specification, as would be understood by one of ordinary skill in the art at the time of the invention. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–17 (Fed. Cir. 2005) (en banc)).

We construe only those claim terms in controversy, and we do so only to the extent necessary to resolve the controversy. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). On the present record, no claim term requires an express construction.

B. Determination of whether Lai Qualifies as Prior Art

The ’602 patent issued from U.S. Patent Application No. 10/278,071, which claims the benefit of U.S. Provisional Application No. 60/379,665, filed on May 10, 2002. Ex. 1001, [21], [60], 1:7–10. Petitioner acknowledges that the ’602 patent claims the benefit of the May 10, 2002 provisional filing date without contesting the propriety of the claim. Pet. 3, 18; *see also* Prelim. Resp. 4 n.1 (asserting claims 1, 3, and 26–29 should be presumed to have an effective filing date of May 10, 2002 because Petitioner accepts that date). Based on the current record, we agree that, for purposes of this Decision, the effective filing date of the ’602 patent should be taken to be May 10, 2002.

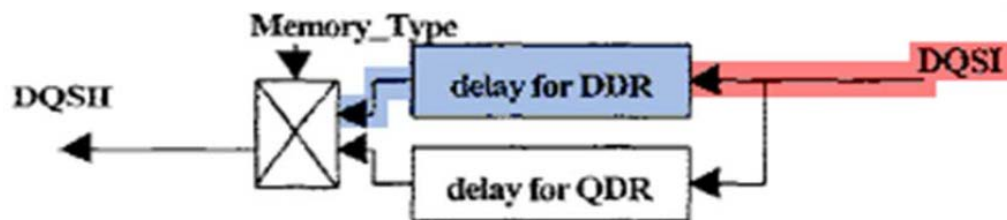
Lai issued from U.S. Patent Application No. 10/236,794, which was filed on September 6, 2002 and claims the benefit of U.S. Provisional Application No. 60/328,284, filed on October 9, 2001 (Ex. 1004, “the Lai Provisional”). Ex. 1003, [21], [22], [60], 1:8–12. Because Lai’s filing date postdates the effective filing date of the ’602 patent, Lai must be entitled to the benefit of the Lai Provisional filing date to qualify as prior art under 35 U.S.C. § 102(e). Lai is entitled to the benefit of the Lai Provisional filing date if the disclosure of the Lai Provisional supports the claimed subject matter of Lai in accordance with 35 U.S.C. § 112, ¶ 1.¹ See *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1381 (Fed. Cir. 2015) (“A reference patent is only entitled to claim the benefit of the filing date of its provisional application if the disclosure of the provisional application provides support for the claims in the reference patent in compliance with § 112, ¶ 1.”).

Petitioner asserts that Lai qualifies as prior art under 35 U.S.C. § 102(e) because the Lai Provisional “pre-dates the ’602 patent.” Pet. 19. In support of this assertion, Petitioner argues that “[a] prior art disclosure found in an issued patent is considered disclosed as of the filing date of the provisional application so long as *the provisional application provides written description support for the claimed invention*,” and the Lai Provisional “provides written description support for *the claimed invention of Lai*.” *Id.* (citing Ex. 1007 ¶ 84) (emphases added).

¹ Section 4(c) of the Leahy-Smith America Invents Act (“AIA”) re-designated 35 U.S.C. § 112, ¶ 1, as 35 U.S.C. § 112(a). Pub. L. No. 112-29, 125 Stat. 284, 296 (2011). Because the ’602 patent has a filing date before September 16, 2012 (the effective date of § 4(c)), we will refer to the pre-AIA version of § 112.

The Petition, however, does not show how the disclosure in the Lai Provisional supports the claims of Lai. Instead, the Petition describes what the Lai Provisional discloses (*id.* at 19–21) and maps this disclosure to the challenged claims of the '602 patent (*id.* at 27–39, 42–60).

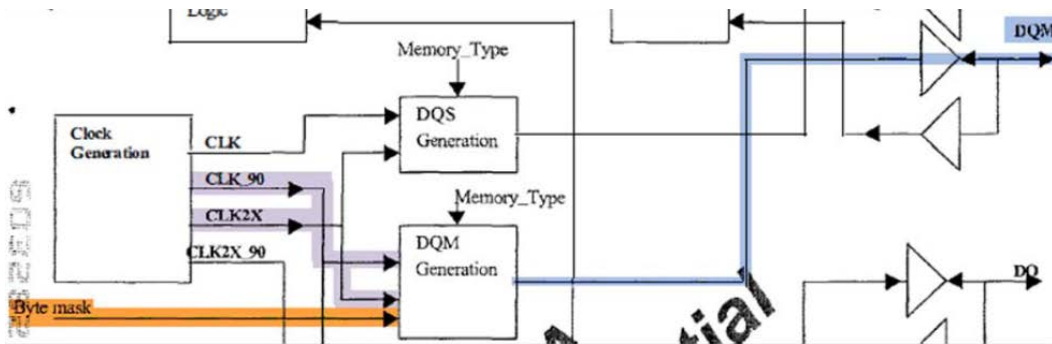
As mentioned above, Petitioner has presented a claim chart purporting to map the disclosure of the Lai Provisional to claims 12 and 14 of Lai. Paper 8. Petitioner contends that the claim 12 limitation “a first delay circuit for receiving a differential signal, and after delaying the differential signal for a first predetermined time period, the first delay circuit providing a first delay signal,” which it refers to as element 12[a], is disclosed in the Lai Provisional by the text “DQS Delay Circuit. The DQS has to be delayed to a point such that it can safely sample the input coming data. The delay amount will be different for DDR and QDR memory. It is selected based on Memory_Type information” and the drawing reproduced below (with Petitioner’s annotations):



Id. at 1–2 (citing Ex. 1004, 4, 6). The drawing depicts one possible implementation of the “DQS delay circuit” disclosed in the Lai Provisional. Ex. 1004, 6. According to Petitioner, the “delay for DDR” box (highlighted in blue) is the first delay circuit, the line (highlighted in blue) to the left of the box is the first delay signal, and the line (highlighted in red) to the right of the box is the differential signal. Paper 8, 2. Petitioner makes a similar argument in connection with the “second delay circuit” limitation of claim

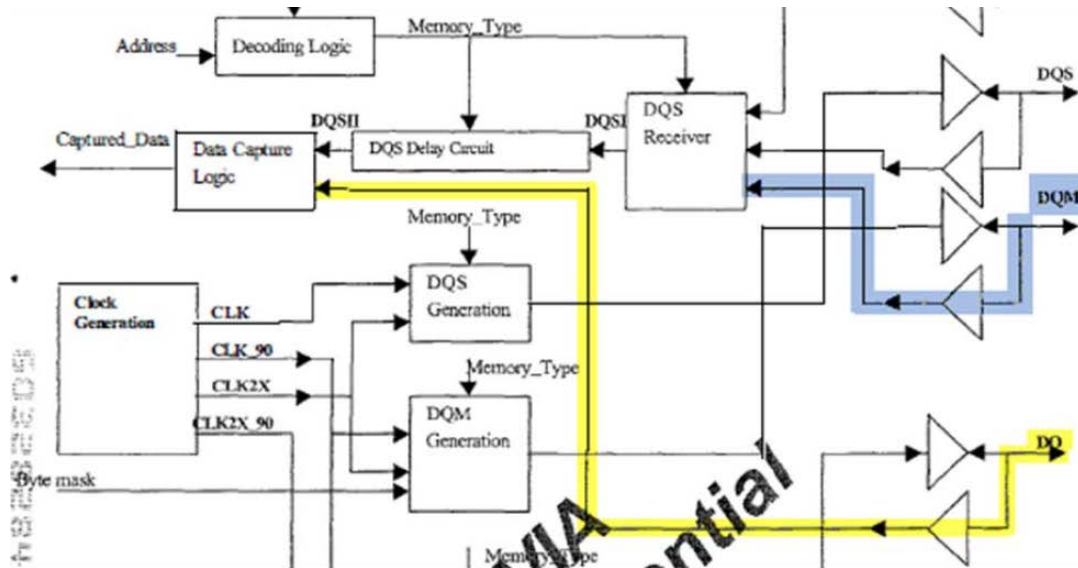
12, referred to as element 12[b], contending in this case that the “delay for QDR” box is the second delay circuit. *Id.*

In addition, Petitioner contends that the claim 14 limitation “providing a data mask signal chosen from a byte mask signal and a plurality of clock signals,” identified as element 14[c], is disclosed in the Lai Provisional by the drawing partially reproduced below (with Petitioner’s annotations):



Id. at 4 (citing Ex. 1004, 5). Petitioner asserts that the line labelled “DQM” (highlighted in blue) is the data mask signal. *Id.*

Petitioner further contends that the claim 14 limitation “receiving a memory data signal including the data mask signal,” identified as element 14[d], is disclosed in the Lai Provisional by the drawing partially reproduced below (with Petitioner’s annotations):



Id. at 5 (citing Ex. 1004, 5). Here, Petitioner asserts that the line labelled “DQM” (highlighted in blue) is the data mask signal and the line labelled “DO” (highlighted in yellow) is the memory data signal. *Id.*

Patent Owner argues that the claim chart “does not demonstrate that the Lai provisional provides written description support for the claims of the Lai patent.” Paper 10, 3. In particular, regarding elements 12[a] and 12[b], Patent Owner argues that the claim chart fails to show how the Lai Provisional supports the first and second time periods being “predetermined.” *Id.* at 4. Patent Owner also argues that the claim chart fails to show how element 14[d] is disclosed in the Lai Provisional because “Petitioner’s own annotated figure shows that the DO signal does not include the DQM signal.” *Id.*

We are not persuaded that the Lai Provisional adequately supports claim 12 or claim 14 of Lai in compliance with 35 U.S.C. § 112, ¶ 1. Claim 12 requires that the first and second delay circuits both receive a differential signal. Ex. 1003, 11:24, 11:28. The “delay for DDR” and “delay for QDR” boxes shown on page 6 of the Lai Provisional, which Petitioner asserts

correspond to the first and second delay circuits, respectively, receive only the signal labelled “DQSI.” Ex. 1004, 6. Petitioner, however, does not demonstrate adequately that this DQSI signal is a “differential signal.”

Furthermore, Petitioner’s assertion that the Lai Provisional discloses elements 14[c] and 14[d] relies on the line labelled “DQM” in the drawing on page 5 being the data mask signal, but Petitioner does not explain adequately how the Lai Provisional discloses that the DQM line is a data mask signal. The Lai Provisional does not appear to explicitly describe a data mask signal. We also agree with Patent Owner that Petitioner’s claim chart fails to show how element 14[d] is disclosed in the Lai Provisional because the drawing on page 5 does not show that the DO signal (alleged to be the memory data signal) includes the DQM signal (alleged to be the data mask signal). Ex. 1004, 5.

For the foregoing reasons, Petitioner has not shown adequately how the disclosure in the Lai Provisional supports claim 12, claim 14, or any other claim of Lai. Based on the record before us, Petitioner has not shown adequately that Lai qualifies as prior art with respect to claims 1, 3, and 26–29 of the ’602 patent.

C. Conclusion

Because both grounds of unpatentability asserted by Petitioner rely on Lai, we determine, in view of the above discussion, that Petitioner has not demonstrated a reasonable likelihood that it would prevail with respect to at least one of the claims challenged in the Petition. We do not institute an *inter partes* review of any claim of the ’602 patent.

IV. ORDER

In consideration of the foregoing, it is hereby:

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ORDERED that the Petition is *denied*, and that we do not institute an *inter partes* review of any claim of the '602 patent.

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