

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MEDIATEK INC.
Petitioner,

v.

MOSAID TECHNOLOGIES, INC.,
Patent Owner

IPR2024-00721
Patent 9,350,349

**PETITIONER'S REQUEST FOR REHEARING FOLLOWING
INSTITUTION DECISION PURSUANT TO 37 C.F.R. § 42.71(d)**

TABLE OF CONTENTS

I. INTRODUCTION 1

II. LEGAL STANDARDS 1

III. ARGUMENT.....2

 A. The Board Overlooked or Misapprehended the Sleep Transistors Disclosed
 by Mizuno 2

 B. The Board Overlooked or Misapprehended the Obviousness of Multiple
 Sleep Transistors 5

IV. CONCLUSION 8

I. INTRODUCTION

Petitioner respectfully requests rehearing pursuant to 37 C.F.R. § 42.71(d) for claims 1-4 and 6-16 of U.S. Patent No. 9,350,349 (the “’349 Patent”). In its Decision on Institution (“DI” or “Decision”), the Board:

1. Overlooked or misapprehended the disclosure of plural sleep transistors by Mizuno, resulting in rejection of Petitioner’s evidence demonstrating that Mizuno’s teachings rendered obvious claim 1’s sleep transistors; and

2. Misapprehended the knowledge a POSITA would have had with regard to prior art sleep transistors and gave insufficient weight to Dr. Min’s testimony.

Respectfully, unsupported factual findings in the Decision and clear legal errors require rehearing. Upon rehearing, the Board should institute trial.

II. LEGAL STANDARDS

This Request is authorized under 37 C.F.R. § 42.71(d). It has been filed within 30 days of the October 3, 2024 entry of a decision not to institute a trial. Under 37 C.F.R. § 42.71(d), 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(c) provides that a panel will review the decision for an abuse of discretion. An abuse of discretion exists when the Board (1) overlooks relevant disclosures in a prior art reference, (*see Merial Ltd. v. Virbac*, IPR2014-01279, Paper 18 at 7 (Apr.

15, 2015)), or (2) misapplies the law, (*see PNY Techs., Inc. v. Phison Electronics Corp.*, IPR2013-00472, Paper 16 at 3 (April 23, 2014)).

III. ARGUMENT

A. The Board Overlooked or Misapprehended the Sleep Transistors Disclosed by Mizuno

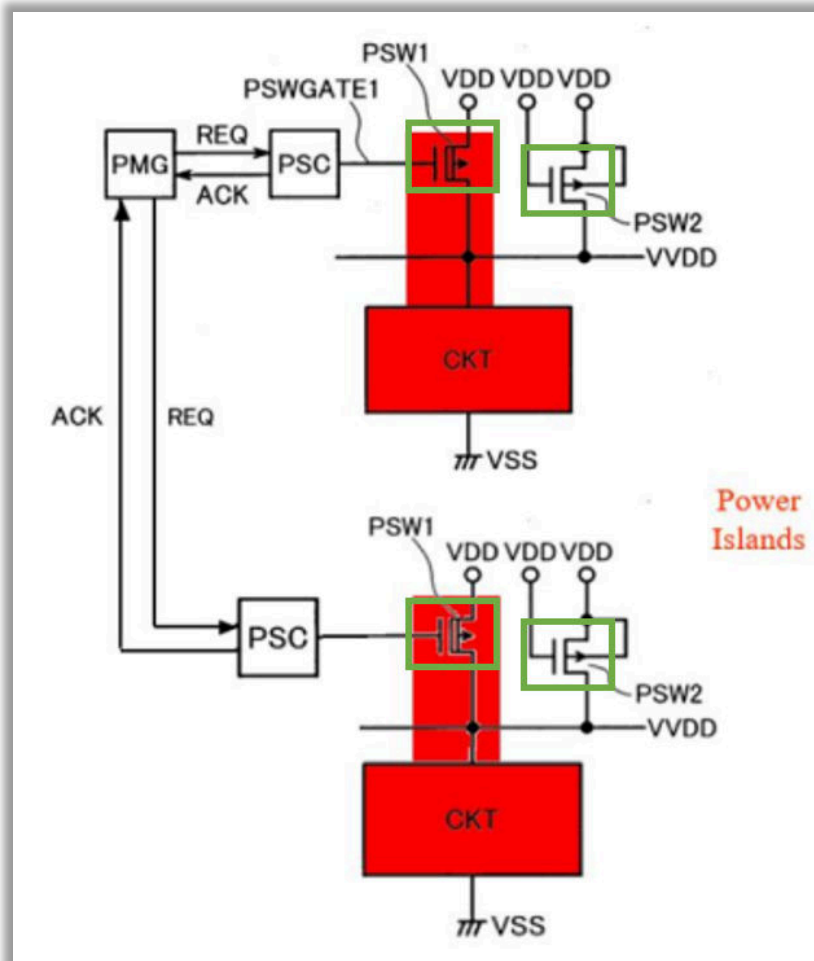
The Board, when analyzing Mizuno, concluded that “[p]etitioner’s contentions and mappings, which identify as a power island circuit CKT coupled to a single transistor PSW1, fails to demonstrate how Mizuno teaches or suggests the power islands limitation, which expressly requires each power island to have multiple sleep transistors.” D.I. at 17 (internal quotations omitted). But the Board ignored Petitioner’s assertions regarding, and Mizuno’s disclosure of, sleep transistor PSW2.

Petitioner explicitly asserted that “Mizuno’s power switch PSW1 and current source PSW2 are sleep transistors that reduce leakage in the integrated circuit during standby”:

In standby, the leakage current through “power switch PSW1” is substantially less than that through “current source PSW2” (i.e., “ $I_{off}(PSW1) \ll I_{off}(PSW2)$ ”) such that the “current source PSW2 functions as a leak current limiter circuit for circuit block CKT.” MTK-1005, [0055]-[0057], [0085], [0093], [0122]; MTK-1003, ¶285. Thus, a POSITA would have understood and found obvious that Mizuno’s “power switch PSW1” and “current

source PSW2” are sleep transistors that reduce leakage in the integrated circuit during standby. MTK-1003, ¶¶284-85, 298-302; MTK-1001, Abstract, 2:19-30, 2:55-60, 4:32-5:19, 7:24-29.

Pet. at 62-63. Indeed, the Institution Decision cites Petitioner’s modified version of Figure 22, commenting that “Petitioner identifies upper transistor PSW1 and circuit CKT as a ‘power island.’” D.I. at 17. However, the figure clearly shows both PSW1 and PSW2 coupled to the respective circuit CKT, as required by the claims.



D.I. at 17 (citing Pet. at 63) (annotated). While Petitioner did not originally annotate PSW2 in the figure in red, Petitioner explained both in the overview of Mizuno and in the individual limitations that current source (“sleep transistor”) PSW2 is both coupled to the power island and facilitates the reduction of power consumed by providing the standby current. *See* Pet. at 57 (“current[] supplied to the circuit block during standby operation is mainly supplied to the current source PSW2”), 62-63 (“current source PSW2 functions as a leak current limiter circuit for circuit block CKT”), 68, 74. The Board’s sole focus on and discussion of PSW1 overlooked that

the Petition also relied on PSW2, which Mizuno expressly teaches and illustrates is a transistor. MTK-1005 at [0057], Figs. 1, 22.

Had the Board properly considered the Petition's assertions regarding the power island circuit CKT coupled to multiple transistors, PSW1 and PSW2, which the Petition asserts, as discussed above, the Board would have properly concluded that Petitioner's contentions and mappings demonstrate that Mizuno teaches the power islands limitation of the claims, which as the Board noted in the Decision requires the power island to have multiple sleep transistors. *See* D.I. at 17. Having overlooked Mizuno's teachings and the Petition's discussion and assertions of the multiple sleep transistors, PSW1 and PSW2 (which were supported by expert opinion, *see e.g.*, MTK-1003 at ¶ 285), the Board committed clear error in overlooking or misapprehending how the Petition used Mizuno's teachings to demonstrate the "sleep transistors," which are part of the claimed power islands limitation. For at least this reason, the Board should reconsider its Decision and institute trial against the challenged claims.

B. The Board Overlooked or Misapprehended the Obviousness of Multiple Sleep Transistors

Alternatively, or in addition to Section III.A, the Board misapprehended the knowledge or skill of a person of ordinary of skill in the art ("POSITA") with regards to sleep transistors. The Board adopted Petitioner's definition of a POSITA as a

person with at least a bachelor of science degree in electrical engineering, computer engineering, computer science, or a related field, and at least two years of experience in the research, design, development, or testing of electronic circuits or components, or software for controlling electronic circuits or components, or the equivalent, with additional education substituting for experience and vice versa. D.I. at 6 (citing Pet. at 5). Dr. Min meets this definition, yet the Board did not credit Dr. Min or the '349 Patent's express acknowledgement that methods of reducing leakage current were well-known in the prior art. *See* MTK-1001, 1:58-2:30; MTK-1003, ¶¶ 76-77. Dr. Min explained that Figure 1 of the '349 Patent showed that multiple sleep transistors were "prior art." MTK-1003, ¶¶ 61-62 (citing MTK-1001, Fig. 1).

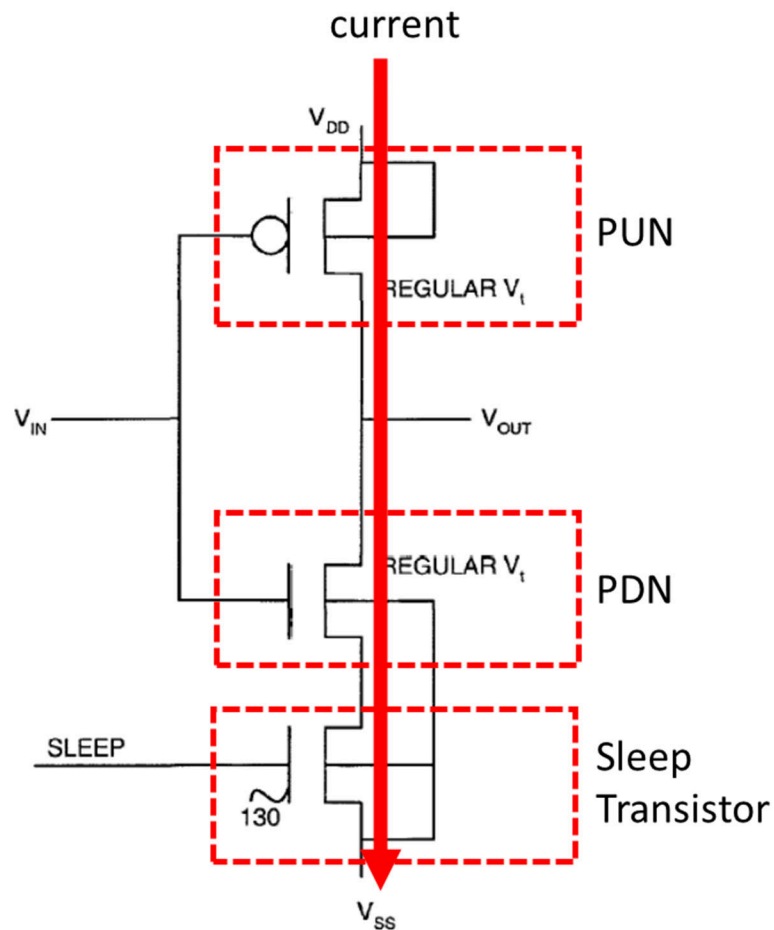


FIG. 1
PRIOR ART

MTK-1003, ¶ 61.

Indeed, for both Takahashi and Mizuno, the Board did not credit a POSITA with the requisite level of skill to implement multiple sleep transistors. D.I. at 11, 17-18. For example, Dr. Min explained that “a POSITA would have understood and found obvious that Takahashi’s ‘control circuit 70’ (i.e., a circuitry) included in ‘device 200’ of Figures 11-17 for ‘Wake up logic,’ would be coupled with a sleep transistor (e.g., a switching circuit) and thus comprise another exemplary power

island because power consumption is controlled within the block 70.” MTK-1003, ¶ 105. But, as Dr. Min explained, a POSITA would have understood wake up logic, as admitted in the ’349 Patent itself, to include embodiments with multiple sleep transistors. *Id.* at ¶ 58-62; MTK-1001, 1:65-2:30.

Thus, for this additional reason, the Board misapprehended a POSITA’s level of skill in implementing wake up logic using “sleep transistors” and should reconsider its Decision.

IV. CONCLUSION

For the foregoing reasons, and those discussed in the Petition, Petitioner respectfully requests the Board reconsider its Decision and institute *inter partes* review of the challenged claims of the ’349 Patent.

Respectfully submitted,

Date: November 4, 2024

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on November 4, 2024, a complete and entire copy of this Petitioner's Request for Rehearing was provided by email to Patent Owner by serving the email correspondence addresses of record as follows:

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