

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Inergy Technology, Inc.,

Petitioner

v.

Force Mos Technology Co., Ltd.,

Patent Owner

Patent No. 7,812,409 B2

Issue Date: October 12, 2010

Title: TRENCH MOSFET WITH CELL LAYOUT, RUGGEDNESS,  
TRUNCATED CORNERS

*Inter Partes* Review No. IPR2024-00094

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**PETITIONER'S MOTION TO SUBMIT SUPPLEMENTAL  
INFORMATION**

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## **PROPOSED NEW EXHIBITS**

| EXHIBIT NUMBER | DESCRIPTION                                                                                                                                                                                                                                                                                 |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1020           | Supplemental Declaration of Sylvia Hall-Ellis, Ph.D.                                                                                                                                                                                                                                        |
| 1021           | Attachment 1 to Exhibit 1020, IEEE <i>Xplore</i> result for Kim, Sang-Gi et al., “Trench Corner Rounding Technology Using Hydrogen Annealing for Highly Reliable Trench DMOSFETS,” International Symposium on Power Semiconductor Devices and ICs (ISPSD), May 22-25, 2000, Toulouse France |
| 1022           | Attachment 2 to Exhibit 1020, Conference Schedule and Table of Contents for the International Symposium on Power Semiconductor Devices and ICs (ISPSD), May 22-25, 2000, Toulouse France                                                                                                    |
| 1023           | Supplemental Declaration of David Kuan-Yu Liu, Ph.D.                                                                                                                                                                                                                                        |

## **I. INTRODUCTION**

Pursuant to 37 C.F.R. § 42.123(a), and under the authorization granted by the Board on June 25, 2024, Petitioner, Inergy Technology, Inc., hereby timely moves to submit Exhibits 1020-1023 (a supplemental declaration of Dr. Hall-Ellis regarding the public availability and accessibility of Kikkawa (Exhibit 1007) and Kim (Exhibit 1012) with two supporting exhibits and a supplemental declaration of Dr. Liu regarding the public availability and accessibility of Kikkawa (Exhibit 1007) and Kim (Exhibit 1012) as supplemental information. Exhibits 1020 and 1023 are supplemental expert declarations providing testimony supporting the public availability and accessibility of Kim (filed with the Petition (Paper 1) as Exhibit 1012) and Kikkawa (filed with the Petition as Exhibit 1007), and Exhibits 1021-1022 are attachments to Exhibit 1020 with information supporting the testimony of Exhibit 1020 regarding the public availability and accessibility of Kim. Kikkawa is a primary reference submitted by Petitioner with respect to Grounds 2 and 5 and claims 2, 5, and 6 for which trial has been instituted. Kim is referenced in the Declaration of Dr. Liu (Exhibit 1003) to support that the '409 Patent, Kobayashi, and Hsieh are all directed to solutions to similar problems with semiconductor devices with respect to Ground 4 and claims 1 and 3-5. For at least these reasons, Exhibits 1020-1023 are relevant to a claim for which trial has been instituted. Petitioner respectfully requests that it be permitted to

supplement the information in the record with Exhibits 1020-1023 at least because: (1) Exhibits 1020-1023 constitute supplemental information; (2) both requirements of § 42.123(a) have been met; (3) Exhibits 1020-1023 do not change the grounds of unpatentability or evidence initially presented in the Petition; (4) Exhibits 1020-1023 do not limit the Board’s ability to satisfy its mandate for the just, speedy, and inexpensive resolution of this proceeding; and (5) there is little to no prejudice to Patent Owner that would arise from Petitioner’s submission of Exhibits 1020-1023 well-before Patent Owner’s Response is due (August 12, 2024).

## **II. BACKGROUND**

Petitioner challenged the claims of U.S. Patent No. 7,812,409 (the “’409 Patent”) on six grounds, one of which included challenging claims 2 and 6 as obvious over Kobayashi in view of Kikkawa, another of which included challenging claim 5 as obvious over Kobayashi in view of Hsieh and the knowledge of a POSITA, and a third of which included challenging claims 1 and 3-5 as obvious over Kobayashi in view of Hshieh. (Paper 1 at 36-48 and 51-66.) Petitioner submitted the Declaration of Dr. Liu (*see* Exhibit 1003) in support of these grounds and the Declaration of Dr. Hall Ellis (*see* Exhibit 1008) in support of the public availability of certain prior art references, including Kikkawa.

On May 21, 2024, the Board instituted trial on “all challenged claims of the ’409 patent . . . on all grounds of unpatentability set forth in the Petition” upon determining that “there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the petition.” (Paper 9 at 39-40.)

On June 4, 2024, Patent Owner filed Patent Owner’s Objections to Evidence Submitted Prior to Institution. (Paper 11.) With its objections, Patent Owner alleged that the Exhibit 1008 Declaration of Dr. Hall-Ellis is “not based on sufficient facts or data, not the product of reliable principals and methods, and not reflecting a reliable application of the principles and methods to the facts of the case,” and challenged the “purported date of publication of [Exhibits 1007 and 1012] and the alleged disclosures of each” including “how any journal purportedly containing Exhibit 1007 may have been filed or maintained at any library, or any of the library records relating to Exhibit 1007 or any such journal.” (*Id.* at 2-3.)

On June 18, 2024, Petitioner served Patent Owner with the supplemental declaration of Dr. Hall-Ellis (Exhibit 1020) regarding the public availability and accessibility of Kikkawa (Exhibit 1007) and Kim (Exhibit 1012), the attachments thereto (Exhibits 1021-1022), and the supplemental declaration of Dr. Liu (Exhibit 1023) regarding the public availability and accessibility of Kikkawa (Exhibit 1007) and Kim (Exhibit 1012). The same day, on June 18, 2024, counsel for Petitioner requested a meet and confer on Petitioner’s forthcoming request for authorization to

file a motion to submit Exhibits 1020-1023 as supplemental information. On June 20, 2024, counsel for Petitioner and Patent Owner met and conferred to determine whether Patent Owner would oppose Petitioner's request. On June 21, 2024, Patent Owner confirmed that it opposed Petitioner's request, and Petitioner requested authorization from the Board to file the motion to submit Exhibits 1020-1023 as supplemental information and included Patent Owner's statement of opposition in Petitioner's request to the Board. On June 25, 2024, the Board authorized Petitioner to file this motion to submit supplemental information by June 28, 2024, and provided that Patent Owner may file an opposition to the motion by July 8, 2024, and that no further briefing is authorized. Petitioner hereby moves the Board for authorization to file Exhibits 1020-1023. In accordance with the Board's direction that no further briefing is authorized, Petitioner has not presently filed Exhibits 1020-1023 herewith pending the Board's decision on Petitioner's motion.

### **III. LEGAL STANDARD**

Supplemental information includes information directed to the public accessibility of prior art references that serve as the basis for one or more grounds of unpatentability for which trial has been instituted. (*Palo Alto Network, Inc. v. Juniper Networks, Inc.* IPR2013-00369, Paper 37 at 2-3 (P.T.A.B. Feb. 5, 2014).) A party may move to submit supplemental information once trial has been instituted if: “(1) [a] request for the authorization to file a motion to submit supplemental

information is made within one month of the date the trial is instituted,” and “(2) [t]he supplemental information must be relevant to a claim for which the trial has been instituted.” (37 C.F.R. § 42.123(a).) The Board may find that a Petitioner has met its burden as movant and allow Petitioner to submit supplemental information when Petitioner demonstrates it has satisfied the requirements of 37 C.F.R. § 42.123(a). (*Palo Alto*, Paper 37 at 3-4.) The Board may also find that a Petitioner has met its burden when the supplemental information Petitioner seeks to submit does not “change the grounds of unpatentability authorized in th[e] proceeding” or “change the evidence initially presented in the Petition to support those grounds of unpatentability.” (*Id.*) Though “the Board must ensure ‘the just, speedy, and inexpensive resolution of every proceeding,’” the Board may find that a Petitioner has met its burden where Patent Owner is unable to present sufficient or credible reasons why Petitioner’s submission “would limit [the Board’s] ability to satisfy that mandate.” (*Id.* at 5 (citation omitted).) And the Board may find that a Petitioner has met its burden where “there is little, if any, prejudice to Patent Owner if the information is allowed into the record” because “Patent Owner already has possession of the supplemental information” and “Patent Owner will have sufficient time to address the supplemental information before filing its Patent Owner Response.” (*Id.* at 6.) Finally, there is no requirement at this stage that Petitioner be “required to provide” the supplemental information in the Petition or that it “could

have been presented” in the Petition because “whether ‘supplemental information reasonably could have been obtained earlier’ is a requirement under § 42.123(b) and (c)--not a requirement under § 42.123(a).” (*Id.* at 4.)

#### **IV. ARGUMENT**

Petitioner’s motion meets the requirements of 37 C.F.R. § 42.123(a), and Petitioner has met its burden as movant to submit Exhibits 1020-1023 as supplemental information for the reasons provided herein.

Petitioner requested authorization to file this Motion on June 21, 2024, within one month of the May 21, 2024, institution date. Thus, Petitioner’s motion is timely under 37 C.F.R. § 42.123(a)(1). (*See also* Paper 10.)

Further, Exhibits 1020-1023 are supplemental information that is relevant to a claim at issue in the trial. Exhibit 1020 is a supplemental declaration by Dr. Hall-Ellis regarding the public availability and accessibility of Kikkawa and Kim. Exhibits 1021-1022 are information supporting Dr. Hall-Ellis’ testimony regarding the public availability and accessibility of Kikkawa and Kim. Exhibit 1023 is a supplemental declaration by Dr. Liu supporting the public availability and accessibility of Kikkawa and Kim. Exhibits 1020-1023 are therefore relevant to Patent Owner’s argument regarding the public availability and accessibility of Kikkawa and Kim. These references are used to support the grounds for unpatentability involving the Kikkawa reference as well as Ground 4 obviousness

over Kobayashi in view of Hshieh and thus are relevant to a claim for which the trial has been instituted under 37 C.F.R. § 42.123(a)(2). Thus, Exhibits 1020-1023 are not solely directed to evidence supporting admissibility but rather the public availability and accessibility of Kikkawa and Kim and the reliability of the testimony of Dr. Hall-Ellis. This is appropriate supplemental information. (*Palo Alto*, Paper 37 (granting Petitioner's motion to submit supplemental information supporting the public accessibility of references serving as the basis of and supporting the grounds of unpatentability submitted with the Petition).)

In addition, Petitioner's submission of Exhibits 1020-23 would not change the grounds of unpatentability authorized in this proceeding or any evidence initially presented in the Petition to support those grounds of unpatentability. (*Palo Alto*, Paper 37 at 3.) Rather, the information is relevant to the limited issues of the public availability and accessibility of the Kikkawa and Kim references (Exhibits 1007 and 1012) and the reliability of the testimony of Dr. Hall-Ellis, which are issues relevant to, but that do not change, the grounds and claims from the Petition involving or referencing Kikkawa and Kim and for which trial was instituted. Therefore, there is no risk that the submission of Exhibits 1020-23 would create new issues or otherwise be inconsistent with the evidence submitted with the Petition or the Petition itself.

Petitioner's submission of Exhibits 1020-1023 also would not interfere with the just, speedy, and inexpensive resolution of this proceeding. (*Id.* at 4.) In fact,

accepting the submission of Exhibits 1020-1023 now would permit early consideration (institution was only granted just over one month ago) and either obviate the need for, or allow more efficient, briefing on the issues of the public availability and accessibility of the Kikkawa and Kim references and the reliability of the testimony of Dr. Hall-Ellis in the parties' initial post-institution filings. Any briefing now has the additional benefit of avoiding briefing in piecemeal motion to exclude practice now or at a much later date in this proceeding. Further, Patent Owner's Response is due August 12, 2024, and Patent Owner has not taken any depositions. Therefore, allowing Exhibits 1020-1023 into the record would not interfere with the Board's resolution of this proceeding.

Lastly, the submission of Exhibits 1020-1023 would not prejudice Patent Owner. Patent Owner raised the issues of the public availability and accessibility of the Kikkawa and Kim references (Exhibits 1007 and 1012) and the reliability of the testimony of Dr. Hall-Ellis on June 4, 2024. Patent Owner was served with the supplemental information that is Exhibits 1020-1023 on June 18, 2024. Patent Owner's opposition to this motion, if any, is due July 8, 2024. But Patent Owner's Response is not due until August 12, 2024. As explained above, Patent Owner has not taken any depositions. Accordingly, Patent Owner has more than sufficient time to review and respond to the limited information provided in Exhibits 1020-1023 on the narrow issues of the public availability and accessibility of the Kikkawa and Kim

references (Exhibits 1007 and 1012) and the reliability of the testimony of Dr. Hall-Ellis in the current time period allotted for Patent Owner's Response. (*Id.* at 5.)

## **V. CONCLUSION**

For the foregoing reasons, Petitioner respectfully requests permission to submit Exhibits 1020-1023 as supplemental information.

Respectfully submitted,

Dated: June 28, 2024

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**CERTIFICATE OF SERVICE**

I hereby certify that on June 28, 2024, I caused a true and correct copy of  
Petitioner's Motion to Submit Supplemental Information to be served via email to:

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Batkinson@dickinson-wright.com

Dated: June 28, 2024

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