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**UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.**

In the Matter of

**CERTAIN SILICON-ON-INSULATOR
WAFERS**

Inv. No. 337-TA-1025

**ORDER NO. 13: INITIAL DETERMINATION FINDING COMPLAINANT SILICON
GENESIS CORPORATION HAS SATISFIED CONTINGENTLY
THE ECONOMIC PRONG OF THE DOMESTIC INDUSTRY
REQUIREMENT**

Administrative Law Judge MaryJoan McNamara

(February 8, 2017)

Appearances:

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SUMMARY FINDINGS

Pursuant to the Notice of Investigation, 81 Fed. Reg. 73,419 (Oct. 25, 2016), this is an Initial Determination (“ID”) as it pertains solely to the economic prong of the Complainant, Silicon Genesis Corporation’s Domestic Industry (“DI”) case.

It is held that Complainant, Silicon Genesis Corporation (“SiGen”), has established contingently a domestic industry in the United States through the activities of its licensee, SunEdison Semiconductor Limited (“SunEdison”), pursuant to 19 U.S.C. § 1337(a)(3). Specifically, this ID finds that Silicon Genesis Corporation contingently has satisfied 19 U.S.C. § 1337 (a)(3)(A), (a)(3)(B) and (a)(3)(C) through its licensee, SunEdison, SiGen has proven by a preponderance of evidence that it has made a significant domestic investment in plant and equipment, in capital and labor, and a substantial investment in research and development to produce certain silicon-on-insulator (“SOI”) products at issue in this Investigation. 19 U.S.C. § 1337 (a)(3).

This ID reserves for the remainder of this Investigation the issue whether SiGen, through SunEdison, has satisfied the technical prong of the domestic industry requirement by practicing at least one of claims 1, 3, 28 and 39 of U.S. Patent No. 6,458,672 (“the 672 patent”), and at least one of claims 1-3 and 5 of U.S. Patent No. 6,171,965 (“the ’965 patent”). Based upon the evidence presented during the evidentiary hearing on the domestic industry held on December 6 and 7, 2016, there appear to be disputes of fact that preclude a technical prong determination at this time.

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The following abbreviations are used in this Initial Determination:

| | |
|---------------|--|
| Compl. | Complainant's (Silicon Genesis Corporation) complaint |
| Answer | Respondent's (Soitec, S.A.) answer to complaint |
| Tr. | Evidentiary hearing transcript, December 6 and 7, 2016 |
| CX | Complainant's exhibit |
| CDX | Complainant's demonstrative exhibit |
| CPX | Complainant's physical exhibit |
| CPSt. | Complainant's pre-hearing statement |
| CPBr. | Complainant's pre-hearing brief |
| CBr. | Complainant's initial post-hearing brief |
| CRBr. | Complainant's post-hearing reply brief |
| JX | Joint exhibit |
| RX | Respondent's exhibit |
| RDX | Respondent's demonstrative exhibit |
| RPX | Respondent's physical exhibit |
| RPSt. | Respondent's pre-hearing statement |
| RPBr. | Respondent's pre-hearing brief |
| RBr. | Respondent's initial post-hearing brief |
| RRBr. | Respondent's reply post-hearing brief |
| SX | Staff's (Office of Unfair Import Investigations) exhibit |
| SPSt. | Staff's pre-hearing statement |
| SPBr. | Staff's pre-hearing brief |

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SBr. Staff's initial post-hearing brief

SRBr. Staff's post-hearing reply brief

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I. BACKGROUND

A. Institution.

By publication of a Notice of Investigation in the Federal Register on October 25, 2016, pursuant to subsection (b) of Section 337 of the Tariff Act of 1930, as amended, the Commission instituted Investigation No. 337-TA-1025 with respect to U.S. Patent No. 6,458,672 (“the ’672 patent”) and U.S. Patent No. 6,171,965 (“the ’965 patent”) (collectively, the “Asserted Patents”) to determine:

whether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain silicon-on-insulator wafers by reason of infringement of one or more of claims 1, 3, 28 and 39 of the ’692 patent and claims 1-3 and 5 of the ’965 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337[.]

81 Fed. Reg. 73419 (Oct. 25, 2016).

The Notice of Institution (“NOI”) directed the Administrative Law Judge (“ALJ”) to determine, within one-hundred (100) days of institution, whether Complainant Silicon Genesis Corporation has standing to assert each of the asserted patents in this Investigation. Specifically, the Commission wrote:

Notwithstanding any Commission Rules that would otherwise apply, the presiding Administrative Law Judge shall hold an early evidentiary hearing, find facts, and issue an early decision, as to whether the complainant has standing to assert each of the asserted patents. Any such decision shall be in the form of an initial determination (ID). Petitions for review of such an ID shall be due five calendar days after service of the ID; any replies shall be due three business days after service of a petition. The ID will become the Commission’s final determination 30 days after the date of service of the ID unless the Commission determines to review the ID. Any such review will be conducted in accordance with Commission Rules 210.43, 210.44, and 210.45, 19 C.F.R. §§ 210.43, 210.44, and 210.45. The Commission expects the issuance of an early ID relating to the economic prong of the domestic industry requirement within 100 days of institution, except that the presiding ALJ may grant a limited extension of the ID for good cause shown. The issuance of an early ID finding complainant[] do[es] not satisfy the economic prong of the domestic industry requirement shall stay the

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investigation unless the Commission orders otherwise; any other decision shall not stay the investigation or delay the issuance of a final ID covering the other issues of the investigation[.]

Id.

The Notice of Investigation names Silicon Genesis Corporation as complainant and Soitec, S.A. as respondent. *Id.* at 73420. The Commission Investigative Staff of the Office of Unfair Import Investigations (“Staff”) is also a party to this Investigation. *Id.* On October 19, 2016, Chief Administrative Law Judge Bullock assigned this Investigation to me. (Doc. ID No. 593069 (Oct. 19, 2016).).

B. The Parties.

1. Silicon Genesis Corporation

Silicon Genesis Corporation (“SiGen” or “Complainant”) is a corporation organized under the laws of California, with its principal place of business in Santa Clara, California. According to its Complaint, SiGen was founded in 1997 and developed a “core set of leading-edge processes for SOI wafer fabrication using innovations such as room temperature cleaving.” (Compl. at ¶ 6 (citing Declaration of Theodore Fong² ¶ 4 (Ex. A. to Compl.), Doc. ID No. 582202 (May 26, 2016).). In other words, SiGen developed and demonstrated processes for silicon-on-insulator (“SOI”) wafer fabrication for use in semiconductors. (*Id.* at ¶ 2.). According to SiGen’s description, after it introduced its technology, SiGen became an “intellectual property licensor and equipment provider for its engineered substrate solutions, including propriety bonded layer transfer technology.” (*Id.* at ¶ 7.). On February 17, 2015, SiGen filed for bankruptcy protection pursuant to Chapter 11 of the United States Bankruptcy

² When he testified on December 6, 2016, Mr. Theodore Fong was President and Chief Executive Officer of SiliconGenesis. (Tr. (Fong) at 185:23-24.).

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Code, but continued to operate its core businesses, including the exploitation of the patents asserted in this Investigation. (*Id.* at ¶ 9.). On December 2, 2015, SiGen’s Chapter 11 case was dismissed. (*Id.* at ¶ 10.). SiGen is relying solely upon the domestic investments of its licensee, SunEdison Semiconductor, Ltd. (“SunEdison”) in order to establish its domestic industry in this litigation.

2. Respondent Soitec, S.A.

Soitec, S.A. (“Soitec” or “Respondent”) is a Société Anonyme, organized under the laws of France, with its principal place of business located at Par Technologique des Fontaines, 38190 Bernin, France. (Answer at ¶ 11; *see also* RPBr. at 1 (Doc. ID No. 595901 (Nov. 25, 2016))). Soitec manufactures SOI wafers outside the United States and imports and sells SOI wafers to customers both within and outside the United States. (Answer at ¶ 3.). Soitec says that it has been manufacturing SOI wafers for commercial applications and the global semiconductor industry since at least 1993. (RPBr. at 1.).

II. JURISDICTION AND IMPORTATION

To have the authority to decide a case, a court or agency must have both subject matter jurisdiction and jurisdiction over either the parties or the property involved. *See Certain Steel Rod Treating Apparatus and Components Thereof*, Inv. No. 337-TA-97, Commission Memorandum Opinion, 215 U.S.P.Q. 229, 231 (U.S.I.T.C. 1981). For the reasons discussed below, the Commission has jurisdiction over this Investigation.

A. Subject Matter Jurisdiction

Section 337 declares to be unlawful “[t]he importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of articles” that infringe a valid and enforceable United States patent if an industry

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relating to the articles protected by the patent exists or is in the process of being established in the United States. *See* 19 U.S.C. §§ 1337(a)(1)(B)(i) and (a)(2). Pursuant to Section 337, the Commission investigates alleged violations of the Section and hears and decides actions involving those alleged violations.

With respect to the asserted patents, Soitec does not contest that the Commission has subject matter jurisdiction over Soitec and the subject matter of this Investigation. Soitec acknowledges that it sells for importation, imports, or sells after importation into the United States, articles that are accused in this Investigation.

In a November 16, 2016 letter to the Commission, Soitec acknowledged that it imports SOI wafers into the United States under the Harmonized Tariff Schedule, HTSUS 3818.00. (Doc. ID No. 595038 (Nov. 14, 2016));³ Nov. 14, 2016 Letter at 1; *see also* Answer ¶ 32.). In the Nov. 14, 2016 Letter, Soitec provided a table that reflects the quantities and values of accused SOI wafers it has imported into or sold in the United States from 2011 through August 31, 2016. (*Id.*). The value that Soitec has placed on its sales in total for those years is some [] dollars. (*Id.*). Moreover, Soitec estimates that the U.S. market represents [] of Soitec's worldwide unit sales for SOI wafers. (*Id.* at 2.). *See Certain Elec. Devices with Image Processing Sys., Components Thereof, and Associated Software*, Inv. No. 337-TA-724, Comm'n Op. at 9-10 (U.S.I.T.C., Dec. 21, 2011⁴).

³ November 14, 2016 Letter from Jonathan Engler, Esq. to the Honorable Lisa Barton, Confidential Exhibit A to Respondent Soitec S.A's Response to the Complaint of Complainant Silicon Genesis Corporation under section 337 of the Tariff Act of 1930 as Amended, and the Notice of Investigation Issued by the United States Trade Commission ("Nov. 14, 2016 Letter").

⁴ Date of public opinion.

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B. Personal Jurisdiction

Soitec responded to the Complaint and Notice of Investigation and has fully participated in the Investigation by, among other things, participating in discovery, participating in the early evidentiary hearing regarding the economic prong of the domestic industry requirement, and filing Pre-Hearing and Post-Hearing Briefs. Soitec has not contested jurisdiction. (See Answer (Doc. ID No. 595036 (Nov. 14, 2016))). Accordingly, Soitec has submitted to the personal jurisdiction of the Commission and that the Commission has *in rem* jurisdiction over Soitec and the Accused Products. *Certain Cloisonné Jewelry*, Inv. No. 337-TA-195, Initial Determination at 40-43 (U.S.I.T.C., Mar. 1985) (unreviewed).

C. In Rem Jurisdiction and Importation

The Commission has *in rem* jurisdiction over infringing articles that are imported into the United States, sold for importation, or sold within the United States after importation by the owner, importer, or consignee. 19 C.F.R. § 1337(a)(1)(B). A complainant need only establish the importation of a single accused product to satisfy the importation requirement of Section 337. See, e.g., *Certain Trolley Wheel Assemblies*, Inv. No. 337-TA-161, Comm'n Op. at 7-8, USITC Pub. No. 1605 (Nov. 1984) (finding the importation requirement met by the importation of a single product); *Certain Absorbent Garments*, Inv. No. 337-TA-508, Order No. 16, 2004 WL 2251882, at *2 (U.S.I.T.C. Aug. 20, 2004). As is reflected in its Nov. 14, 2016 Letter, Soitec has acknowledged importing or selling accused products in the United States. (Nov. 14, 2016 Letter at 2.).

III. THE ASSERTED PATENTS

A. U.S. Patent No. 6,458,672 (“the ’672 patent”): Technology Overview

Both patents at issue generally relate to processes used to manufacture SOI wafers for

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semiconductors for use in electronic devices. (Compl. ¶ 13.). The '672 patent is entitled "Controlled Cleavage Process and Resulting Device Using Beta Annealing," issued on October 1, 2002. (JX-0002.). The '672 patent generally describes methods for forming films of material from substrates. (*See* RPBr. at 3.). The specification describes that thin films can be produced from substrates by implanting the substrate with particles, and then applying energy to the substrate. (*Id.*). That is a "cleaving" process that SiGen asserts is the process that SunEdison's Perfect SOI wafer product uses and that practices claim 1 of the '672 patent. (Compl. ¶ 26.).

B. U.S. Patent No. 6,171,965 ("the '965 patent"): Technology Overview

The '965 patent is entitled "Treatment Method of Cleaved Film for the Manufacture of Substrates." (JX-0001.). The '965 Patent issued on January 9, 2001, and generally describes methods for treating thin films of material. (RPBr. at 4.). The specification generally describes that this treatment is accomplished by a combination of heat treatment and the application of an etchant to reduce surface roughness. (*Id.*). The background statement to the '965 patent says that:

the present invention provides a technique for improving surface texture or the surface characteristics of a film of material, e.g. silicon, silicon germanium, or others. . . . But it will be recognized that the invention has a wider range of applicability; it can be applied to smoothing a film for other substrates such as multi-layered integrated circuit devices, three-dimensional packaging of integrated semiconductor devices, photonic devices, piezoelectronic devices, microelectromechanical systems ("MEMS") sensors, actuators, solar cells, flat panel displays (e.g., LCD, AMLCD), doping semiconductor devices, biological and biomedical devices and the like.

(JX-0001 at 1:9-20.).

SiGen asserts that SunEdison's Perfect SOI wafer is manufactured using a process that practices claim 1 of the '965 patent. (Compl. at ¶ 27.).

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C. Ownership of the Asserted Patents and Standing

The '965 patent was assigned to SiGen, and that assignment was recorded with the U.S. Patent and Trademark Office. (*See* Compl. at App. E.). SiGen did not provide a copy of a similar assignment to SunEdison of the '672 patent. However, the face of the '672 patent identifies SiGen as the assignee. (*Id.* at App. F (certified copy of the '672 patent); *see also* JX-0002.). Soitec has not directly challenged SiGen's ownership of the '672 patent or SiGen's ownership of the '965 patent and its standing to bring suit. However, as is discussed in Section IV.C below, while Soitec has challenged the current status of SunEdison as the licensee of the '672 and '965 patents,⁵ this decision finds that at least through the completion of the acquisition on or about December 2, 2016 of SunEdison by a Taiwanese company, GlobalWafers Co., Ltd. ("GlobalWafers"), SiGen had standing to bring suit against Soitec ("GlobalWafers acquisition.").

IV. SELECTIVE PROCEDURAL HISTORY

A. Certain Requested Amendments to the Procedural Schedule Were Denied

By Order No. 2 ("Scheduling Order"), the evidentiary hearing ("Hearing") on the economic prong of the domestic industry ("DI") requirement was scheduled for, and held on, December 6 and 7, 2016.⁶ (Order No. 2 (Oct. 26, 2016)).⁷

⁵ Soitec argues in its Pre-Hearing Brief that SiGen cannot prove that its assignment of the '672 and '965 passed to SunEdison Semiconductor Limited, SiGen's licensee. This can be construed as a standing argument. (*See* RPBr. at 21.). Soitec formally challenged SiGen's standing to bring suit in its Eighth Affirmative Defense. (Answer at ¶ 47.). This decision rejects Soitec's argument as unsupported for reasons explained in this decision.

⁶ Order No. 2 notes that "the economic domestic industry prong may involve proof that the patents/claims are practiced." (Order 2 at 1 n.1.). From an evidentiary standpoint, it might make little sense, depending upon circumstances, to divorce the technical prong, that is proof whether the patents are practiced, from the economic prong.

⁷ Setting Procedural Schedule with Ground Rules.

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While the Scheduling Order does not establish deadlines for fact and expert discovery, the parties submitted a joint motion, in which, *inter alia*, they requested amendments to the Scheduling Order that included a proposed inclusion of a deadline of November 18, 2016 for fact discovery, and a deadline of December 2, 2016 for expert discovery.⁸ (See Order No. 2 at 2 (Nov. 1, 2016); Joint Scheduling Mot at 1.). The Joint Scheduling Motion was adopted on November 2, 2016.⁹ (Order No. 4 at 1 (Nov. 2, 2016).).

On November 15, 2016, SiGen filed an emergency motion by which it sought a modification to the discovery and hearing schedules in order to facilitate its ability to obtain information from SunEdison.¹⁰ (Motion Docket No. 1025-002 (Nov. 15, 2016); SiGen Emergency Mot. at 1.). Although SiGen had served its licensee, SunEdison, with both deposition and document subpoenas on November 4, 2016, SunEdison's counsel informed SiGen that it would be unable to produce responsive documents until the week of November 21, 2016, or a knowledgeable witness to testify in a deposition until the week of November 28, 2016, that is after the close of discovery. (*Id.* at 2-3.).

Staff responded to the SiGen Emergency Motion with its own proposed changes to both the discovery and Hearing schedules that were later than the discovery cutoff and Hearing dates that SiGen proposed.¹¹ (Doc. ID No. 595447 (Nov. 21, 2016); Staff Emergency Resp. at 1-2.). Staff called SiGen's proposed amendments "unworkable." (*Id.* at 1.).

⁸ Joint Motion to Amend the Procedural Schedule to Include Additional Dates Related to the Domestic Industry Proceedings ("Joint Scheduling Mot.").

⁹ Granting Joint Motion to Amend the Procedural Schedule.

¹⁰ Emergency Motion by Complainant for Modification of the Procedural Schedule ("SiGen Emergency Mot.").

¹¹ Commission Investigative Staff's Response to the Complainant's Emergency Motion for Modification

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On November 21, 2016, Soitec opposed SiGen's Emergency Motion.¹² (Doc. ID No. 595455 (Nov. 21, 2016); Opp'n to Emergency Mot. at 1-3.). Among its other bases for opposing the SiGen Emergency Motion, Soitec observed that SiGen had more than five (5) months from the filing of its Complaint on or about May 26, 2016 to the institution of this Investigation on October 25, 2016 to file a subpoena requests and serve subpoenas on SunEdison. (*Id.* at 1, 3-5.). Soitec also noted the preceding history of the Investigation in Inv. No. 337-TA-966, which was terminated in May 2016 in part because SiGen had not adequately prepared its domestic industry case and then attempted to produce late filed contentions and late filed discovery that were stricken.¹³

On November 28, 2016, Order No. 8 issued that denied both SiGen's and Staff's motions to substantially modify the Procedural Schedule in this Investigation. (Order No. 8 (Nov. 28, 2016). Order No. 8 lays out in some detail the historical backdrop to this Investigation, which includes the early termination of a predecessor Investigation, Inv. No. 337-TA-966, in part because of SiGen's failure to support its domestic industry case with timely submitted evidence. (*See id.* at 4-8.). Order No. 8 provides a rationale and case precedent for denying SiGen's and Staff's requests for modification of the Procedural Schedule. (*Id.* at 8-12.). Since none of the parties agreed on any of the proposed scheduling changes, and since the changes Staff and SiGen

of Procedural Schedule and Motion for Leave to Supplement Said Emergency Motion ("Staff Emergency Resp.").

¹² Respondent Soitec, S.A.'s Opposition to Complainant Silicon Genesis Corp.'s Motion for Modification of Procedural Schedule ("Opp'n to Emergency Mot.").

¹³ Order No. 8 to this Investigation provides some of the history of Inv. No. 337-TA-966. (Order No. 8 at 6-7.). A more complete history of the backdrop to this Investigation and these parties is contained in Order Nos. 15 (Doc. ID No. 580832 (May 10, 2016) and 18 (Doc. ID No. 589946 (Sept. 6, 2016) in Inv. No. 337-TA-966, which are incorporated here by reference.

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requested to certain discovery dates would have necessitated that Soitec be given additional time for discovery as well, the cascade of proposed changes likely would have taken this Investigation well beyond the ordered 100 days. Instead, the result of Order No. 8 was adherence to the Procedural Schedule adopted on November 2, 2016 that included all parties' first requested scheduling changes or amendments.¹⁴ (See Doc. ID No. 602170 (Jan. 30, 2017); December 5, 2016 Telephone Conference Transcript ("Dec. 5, 2016 Tr."); *see also* Order No. 8 at 12.).

B. Motions *in Limine* Rulings Affected Evidence Submitted During Hearing

Critical to a procedural discussion and to the outcome of this decision are orders that issued with regard to certain *in limine* motions that the parties filed pre-hearing. Soitec filed four (4) motions *in limine* on November 30, 2016. Soitec's Motion *in Limine* No. 1 sought to preclude SiGen from offering testimony from *any* SunEdison witness during the Hearing.¹⁵ (Motion Docket No. 1025-004; MIL No. 1 at 1.). Both SiGen and Staff opposed Soitec's MIL No. 1.¹⁶ (Doc. ID No. 596435 (Dec. 1, 2016); SiGen Opp'n to Soitec MIL No. 1 at 1; Doc. ID No. 596615 (Dec. 2, 2016); Staff Resp. to Soitec MIL No. 1 at 1-2.).

During the December 5, 2016 pre-hearing telephone conference, I granted in part and denied in part Soitec's MIL No. 1 noting that I had signed SiGen's requested trial subpoena

¹⁴ Staff sought an amendment to the Procedural Schedule on November 8, 2016, as part of an oral motion made during telephone conference by which the date Staff's Pre-Hearing Brief would be due was changed to December 5, 2016. (See November 8, 2016 Telephone Conference Transcript ("Nov. 8, 2016 Tr.") at 21 (EDIS Doc. ID No. 596608 (Dec. 2, 2016)). Staff's oral motion was granted. (See Order No. 5 (Nov. 9, 2016)).

¹⁵ Respondent Soitec S.A.'s Motion *in Limine* (No. 1) to Preclude Complainant Silicon Genesis Corporation from Offering Testimony from a SunEdison Witness ("MIL No. 1").

¹⁶ Complainant's Opposition to Respondent's Motion *in Limine* No. 1 ("SiGen Opp'n to Soitec MIL No. 1"); Commission Investigative Staff's Response to Respondent Soitec S.A.'s Motion *in Limine* (No. 1) to Preclude Complainant Silicon Genesis Corporation from Offering Testimony from a SunEdison Witness ("Staff Resp. to Soitec MIL No. 1").

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addressed to SunEdison even after Order No. 8 issued, thereby signaling (as Staff correctly noted) that a SunEdison witness or witnesses would be allowed to testify during the Hearing. (Staff Resp. to Soitec MIL No. 1 at 2; Dec. 5, 2016 Tr. at 20-21.). Similarly, Staff provided a correct interpretation of Scheduling Order No. 2 (and implicitly of the Ground Rules) that purposely does not require that all Hearing witnesses must be deposed prior to offering testimony during a Hearing.¹⁷ (Staff Resp. to Soitec MIL No. 1 at 2; *see also* Dec. 5, 2016 Tr. at 20-21.).¹⁸ However, as part of the ruling on MIL No. 1, I granted that part of Soitec's motion in which it asked that any specific contentions that were not set forth by SiGen would not come into evidence and witnesses could not be questioned. (Dec. 5, 2016 Tr. at 22-23.).

Soitec's Motion-*in-Limine* No. 2 sought: (1) to preclude SiGen from relying upon late produced documents and evidence submitted by SunEdison after the close of fact discovery; (2) to strike the documents CX-0066C through CX-0076C that SunEdison produced after the fact discovery deadline; and (3) to strike certain portions of SiGen's Pre-Hearing Brief and sections of SiGen's expert report.¹⁹ (Motion Docket No. 1025-005 (Nov. 30, 2016);²⁰ Soitec's MIL No. 2.).

¹⁷ The Ground Rules for this and other investigations do not require witnesses to be deposed as a precondition to their appearing and providing testimony during an evidentiary hearing. Among other exigencies, witnesses may not be identified or available until the last possible moment (with this case being an example.). In this Investigation, SunEdison claimed that it was unable to comply timely with SiGen's deposition and document subpoenas because it lacked staff who were otherwise engaged with the SunEdison acquisition by GlobalWafers. (Doc. ID No. 595594 (Nov. 25, 2016.); Declaration of Robert M. Evans, Jr. ("Evans Decl.") at 1.).

¹⁸ The Staff Response to Soitec's MIL No. 1 notes that SunEdison was prepared to offer a witness for deposition on November 30, 2016 but Soitec chose not to accept that offer. That deposition would have occurred after discovery cut off. (*See* Staff Resp. to Soitec MIL No. 1 at 2.). The deposition did not occur. (*Id.*).

¹⁹ Drs. Stephen P. Magee and Devrim Ikizler were retained by SiGen to evaluate whether SiGen's domestic licensee SunEdison Semiconductor Limited has made investments in the exploitation of the

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Staff supported Soitec's MIL No. 2. while SiGen opposed it.²¹ (*See* Doc. ID No. 596671 (Dec. 2, 2016);²² Staff Resp. to Soitec's MIL No. 2; *see also* Doc. ID No. 696542 (Dec. 2, 2016)²³; Compl. Opp'n to Soitec's MIL No. 2.).

During the December 5, 2016 pre-hearing conference, SunEdison's late-filed documents, CX-0066C through CX-0076, and certain sections of SiGen's expert report and Pre-Hearing Brief, that is MIL No. 2, were stricken, and their use precluded as *admissible* exhibits during the Hearing because they were provided beyond the deadline for fact discovery. (Dec. 5, 2016 Tr. at 20-21, 32-35; *see also* n.17.). Those portions of the written expert reports that relied upon those

patents at issue in this Investigation. (CPSt. at 2.). At the time of their expert report, which is dated November 22, 2016, Dr. Magee was the Bayless/Enstar Corporation Professor of Finance and Economics and former chairman of the Department of Finance. (*Id.* at Ex. B.). At the time of their expert report and his testimony on December 7, 2016, Dr. Ikizler was an Antitrust Expert in Merger & Acquisitions, Price Discrimination, Industrial Organization, Monopolization, Trade Secrets, Vertical Integration, Exclusive Dealing etc., Provide Financial, Economic and Intellectual Property Consulting, Analyzing Market Definition and Structure, Profits/Loss Analysis Using Micro Level Data Employing Various Statistical/Computational Estimation Techniques, Calculating Damages, Preparing Expert Reports, Providing Expert Testimony on Damages and Liabilities. (*Id.* at Ex. C.).

²⁰ Respondent Soitec S.A.'s Motion-*in-Limine* (No. 2) to Preclude Complainant Silicon Genesis Corporation from Relying on Late Produced SunEdison Documents at the Hearing and to Strike those Portions of SiGen's Pre-Hearing Brief and SiGen's Expert Report that Rely on Those Documents ("Soitec's MIL No. 2").

²¹ Specifically, Staff pared back those sections that Soitec sought to strike, and suggested: parts of pages 13 (first paragraph under heading "SunEdison's Relevant Investments in Plant and Equipment"); page 18 (last paragraph beginning with "Internal SunEdison document"); and footnotes 3-6. (Soitec's MIL No. 2 at 1, 2.). With respect to the Expert Report of Professor Stephen P. Magee and Dr. Devrim Ikizler (Ex. A. to Soitec's MIL No. 2), Soitec sought to strike paragraph 48 (except for reference to median manufacturing engineer salary in the U.S. and citation in n.47); and paragraphs 12-14, 40-42, 48 and 60-67. (*Id.*). SiGen was permitted to rely upon documents as demonstratives under Fed. R. Evid. 703.

²² The Commission Investigative Staff's Response to Respondent Soitec S.A.'s Motion *in Limine* (No.2) to Preclude Complainant Silicon Genesis Corporation from Relying on Late Produced SunEdison Documents at the Hearing and to Strike Those Portions of SiGen's Pre-Hearing Brief and SiGen's Expert Report that Rely on Those Documents (Mt. Dkt. No. 1025-005) ("Staff Resp. to Soitec's MIL No. 2").

²³ Complainant's Opposition to Respondent's Motion *in Limine* No. 2 ("Compl. Opp'n to Soitec's MIL No. 2").

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stricken documents were also stricken. (*Id.*). However, the parties were advised that SunEdison's witness(s) would be permitted to use the excluded documents to refresh their recollection consistent with Federal Rule of Evidence 612. (*Id.* at 32-43).

Soitec's Motion *in Limine* No. 3 sought to strike late produced domestic industry contentions from SiGen's Pre-Hearing Brief and expert reports with regard to whether SunEdison's investments were significant or substantial.²⁴ (Motion Docket No. 1025-006 (Nov. 30, 2016; Soitec's MIL No. 3). SiGen opposed Soitec's MIL while Staff supported it.²⁵ (Doc. ID No. 596568 (Dec. 2, 2016); Compl. Opp'n to Soitec's MIL No. 3; Doc. ID No. 596618 (Dec. 2, 2016); Staff Resp. to Soitec's MIL No. 3). During the Dec. 5, 2016 pre-hearing conference, Soitec's MIL No. 3 was granted in part by striking those portions of SiGen's Pre-Hearing Brief and the expert report that referenced the SOI-related capital versus sales and R&D to sales ratios that were allegedly significant based upon SOI market share trends between 2012 and 2016 . (Dec. 5, 2016 Tr. at 51.). However, Soitec explored the significance of some of the information in a deposition, so that information was not precluded.

Soitec's Motion *in Limine* No. 4 sought to preclude the testimony of SiGen employee

²⁴ Respondent Soitec S.A.'s Motion *In Limine* (No. 3) to Preclude Complainant Silicon Genesis Corporation from Presenting Domestic Industry Contentions Not Disclosed During Discovery and to Strike Those Portions of SiGen's Pre-Hearing Brief and SiGen's Expert Report that Set Forth Those Contentions ("Soitec's MIL No. 3").

²⁵ Complainant's Opposition to Respondent's Motion *in Limine* No. 3 ("Compl. Opp'n to Soitec's MIL No. 3"); Commission Investigative Staff's Response to Respondent Soitec S.A.'s Motion *in Limine* (No. 3) to Preclude to Preclude Complainant Silicon Genesis Corporation from Presenting Domestic Industry Contentions Not Disclosed During Discovery and to Strike Those Portions of SiGen's Pre-Hearing Brief and SiGen's Expert Report that Set Forth Those Contentions ("Staff Resp. to Soitec's MIL No. 3"). Specifically, paragraphs 55-59, and Exs. 10, 10.1 and 11 were stricken, as were pages 19, 20 and the final paragraph of page 23 of SiGen's Pre-Hearing Brief. (Dec. 5, 2016 Tr. at 50-52.).

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Brad Dutton.²⁶ (Motion Docket No. 1025-006 (Nov. 30, 2016);²⁷ Soitec's MIL No. 4). Soitec withdrew its MIL No. 4. (Dec. 5, 2016 Tr. at 76.).

Complainant filed only one Motion *in Limine*, which sought to exclude Soitec's expert's Dr. Vander Veen's²⁸ report and testimony.²⁹ (Motion Docket No. 1025-008 (Dec. 1, 2016); SiGen's MIL No. 1.). SiGen's MIL No. 1 was denied. (Dec. 5, 2016 Tr. at 82.).

Other significant evidentiary issues are discussed below in Sections C 1. through C.6, and D.1 and D.3.

C. Threshold Issues: SiGen's Reliance Upon Its Licensee to Prove Its Case Is Well-Established Practice

1. SunEdison Need Not Be a Co-Complainant

As a threshold matter, Soitec argues that SunEdison should have been a co-complainant in this Investigation because SiGen is a "non-practicing" entity or "NPE" that has no industry of its own but that relies solely on its licensees (here SunEdison) to establish its domestic industry. (RPBr. at 22.). Soitec provided no case authority for its position because the legal precedent is to the contrary. Soitec made this same argument in a September 27, 2016 pre-institution, public interest letter to the Commission. (Doc. ID No. 591479 (Sept. 27, 2016); September 27, 2016 Letter from V. James Adducci, II to Secretary Lisa Barton ("Sept. 27, 2016 Letter") at 2.). In

²⁶ When he testified on December 6, 2016, Brad Dutton was a software engineer at SiGen who went to SunEdison's St. Peters, Missouri facility three (3) times total in 2015 and 2016, []. (Tr. (Dutton) at 180:4–184:17.).

²⁷ Respondent Soitec S.A.'s Motion *in Limine* (No. 4) to Exclude Testimony of Brad Dutton ("Soitec's MIL No. 4").

²⁸ At the time of the Hearing, Dr. Thomas D. Vander Veen was the Managing Director of Epsilon Economics. (RPSt. at App. 1.).

²⁹ Corrected Motion to Exclude Respondent's Expert Testimony of Dr. Thomas Vander Veen ("SiGen's MIL No. 1").

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that September 27, 2016 Letter, Soitec asked the Commission to decline to institute this Investigation based on a number of grounds. One such ground was based on Soitec's advocacy for a modification in the Commission's domestic industry practice whereby SiGen and other alleged "NPE's" would not be permitted to satisfy the economic prong of the domestic industry requirement thorough "unwilling third party licensees." (*Id.*). Notwithstanding Soitec's arguments, the Commission chose to institute this Investigation. Moreover, as Staff points out, the Commission did not require licensees in Investigation Nos. 882, 874, 781, 673/667 and 593 to be co-complainants. (SBr. at 15.). Given that there is no Commission rule that requires third-party licensees to be brought into Commission proceedings as co-complainants, as the Commission's actions reflect, Soitec's argument carries no legal weight.

2. Commission Precedent Permits SiGen to Rely Solely upon Its Licensee to Prove Domestic Industry

SiGen's reliance upon its licensee, SunEdison, for proof of its domestic industry is consistent with Commission Rule 210.12. This rule requires that "at least one complainant is the owner or exclusive licensee of the subject intellectual property." 19 C.F.R. § 210.12(a)(7). Rule 210.12(a)(9)(iii)-(iv) requires "an identification of each licensee under each involved U.S. patent" as well as "a copy of each license agreement(if any) for each involved U.S. patent that Complainant relies upon . . . to support its contention that a domestic industry as defined in section 337(a)(3) exists or is in the process of being established as a result of the domestic activities of one or more licensees." 19 C.F.R. § 210.12(a)(9)(iii)-(iv). As discussed below in Section IV.C.2, SiGen has satisfied the requirements of Commission Rule 210.12 and its pertinent subparts by providing the licensing agreements and amendments that trace SiGen's ownership and licensing of its patents. (*See* CX-0032C; CX-0033C.).

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3. SiGen Can Rely upon Its Licensee for Proof of Its Domestic Industry

The Commission has held that “the domestic industry inquiry under Section 337 is not limited to the activities of the patent holder, but also involved the activities of any licensees.” (SBr. at 8 (quoting *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376 (Commission Op. on Remand at 7, USITC Pub. 3072 (Nov. 1997) (internal citations omitted); *id.* at 9 (citing *Certain Products Having Laminated Packaging and Components Thereof*, Inv. No. 337-TA-874, Comm’n Op. at 15 (Sept. 3, 2013)(“a licensor may rely upon a licensee’s domestic activities and investments”) (other citations omitted))). Moreover, Commission decisions have held that the economic prong of the domestic industry requirement can “be established where a complainant bases its claim exclusively on the activities of a contractor/licensee.” (SBr. at 9 (quoting *Certain Male Prophylactic Devices*, Inv. No. 337-TA-546, Order No. 22 at 7 (Mar. 15, 2006) (citing *Certain Methods of Making Carbonated Candy Prods.*, Inv. No. 337-TA-992, ID at 142 (Dec. 8, 1989) (unreviewed in relevant part) (finding that existence of a domestic industry based on a long-term, domestic production of candy by a contractor/licensee using the patented process))). SiGen is relying solely upon the activities of its licensee, SunEdison, for its domestic industry. (Compl. ¶¶ 28-30.).

4. SunEdison Is SiGen’s Licensee for Purposes of This Investigation

Soitec argues in its Pre-Hearing Brief that SiGen would be unable to prove that SiGen’s license with a company called MEMC Electronic Materials, Inc. (“MEMC”), SunEdison’s predecessor-in-interest, was transferred properly through SunEdison, Inc. to SunEdison Semiconductor Limited. (RPBr. at 21.). Similarly, Soitec has claimed that SiGen has not produced any document that effected the assignment of its patents. (*Id.*). Soitec then argues for the first time in its Post-Hearing Brief that SiGen cannot rely now on its licensee, SunEdison,

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because of its recent acquisition by a Taiwanese Company called GlobalWafers Co., Ltd. that was completed by Friday, December 2, 2016 (“GlobalWafers acquisition”). (RBr at 39-41; *id.* at 40 (citing Tr. (Fisher)³⁰ at 172:12-23)).

Soitec’s first argument is unsupported given the texts of the various documents that reflect unequivocally SiGen’s licensing of its patents to SunEdison and to its predecessors-in-interest. Dr. Graham Fisher and Mr. Theodore Fong corroborated the licensing and license transfers. As is explained in Section IV.C.5 below, SunEdison’s current status as a result of the GlobalWafers’ acquisition is largely irrelevant to this decision.

The evidence is that SiGen entered into a license agreement with respect to the ’672 and ’965 patents with MEMC, SunEdison’s predecessor-in-interest, which was effective as of January 21, 2004. (SBr. at 10 (citing (CX-0032C (“License Agreement”) at 1, Ex. B); JX-0001 and JX-0002; *see also* Tr. (Fong) at 186:11-25, 187:1-17.). [

] The License

Agreement provides [

] Additionally,

³⁰ At the time he testified on December 6, 2016, Dr. Graham Fisher held himself out as a consultant to SunEdison, a position he testified he has held since he retired from SunEdison in 2014. (Tr. (Fisher) at 10:2-13; *see also* JX-0003C, JX-0005C, JX-006C.). He worked at SunEdison for 30 years before he retired in December 2014. (Tr. (Fisher) at 10:13, 10:19, 10:22-23.). The last position he held as a full-time employee at SunEdison was as Chief Scientist and Director of Intellectual Property. (Tr. (Fisher) at 10:22-23; *see also* JX-0004.). He testified pursuant to a Hearing Subpoena and topics contained in Exhibit A thereto.

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another provision [

] Mr. Theodore Fong, SunEdison's Chief Executive Officer ("CEO") testified that in the event SunEdison's written consent is required for the transfer of SunEdison's rights in SiGen's patents, SunEdison would provide that consent. (Tr. (Fong) 213:8–214:17, 214:9-13.).

Then, in 2013, MEMC changed its name to SunEdison, Inc. (CX-0015 at SOITEC1025_0000951; *see also* RX-0039.0002 (Fong Deposition, Ex. 9, "MEMC Name Change"); *see also* CX-0033C; Tr. (Fong) at 188:4-12.).

Then, in May 2014, SunEdison, Inc. spun off its semiconductor wafer business with an initial public offering ("IPO") that became SunEdison Semiconductor Limited—the current SunEdison, at least with certainty until December 2016. (*See* SX-0001 (Separation Agreement); *see also* CX-0015C.0003 (SOITEC1025_0000951), CX-0015C.0004 (SOITEC1025_0000952); Tr. (Fong) 188:19-25.). [

] The Separation Agreement between SunEdison, Inc. and SunEdison is clear that virtually all of SunEdison's pertinent assets were transferred to SunEdison Semiconductor. (*See* SX-0001 at 3; SBr. at 11-12 (quoting SX-0001 ("SunEdison Board has determined it is appropriate and desirable for SunEdison and its applicable Subsidiaries to transfer the SSL Assets to SSL")); *see also* SX-0001 at 4-5 (definition of Assets),

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10 (definitions of SSL Assets and SSL Business, ¶2.1 (Transfer of Assets and Assumption of Liabilities).).

Dr. Fisher also confirmed that SiGen's licenses with SunEdison, Inc. transferred to SunEdison Semiconductor as a result of the Separation Agreement. (*See* Tr. (Fisher) at 110:15–112:5.). Moreover, the [

]

Thus, SiGen can trace the licenses of its '672 and '965 patents from 2004 up to at least the GlobalWafers' acquisition of SunEdison in December 2016.

5. SunEdison's Current Status Is Largely Unimportant to a Decisional Outcome

Soitec argues forcefully in its Post-Hearing Brief that that GlobalWafers is not a SiGen licensee as of the GlobalWafers' acquisition on or about December 2, 2016, the date that SunEdison's stockholders approved the GlobalWafers acquisition. (*See* RBr. at 39-41; *see also* Tr. (Fisher) 172:12-23.). Even if Soitec is correct that GlobalWafers is not a SiGen licensee, Soitec's argument carries no weight with regard to the determination of whether SiGen has proven the existence of a domestic industry.

First, there is some evidence that GlobalWafers may be a SiGen licensee, or alternatively, that SunEdison may still exist. Starting with the last available documentation, Staff makes the

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argument that the License Agreement between SiGen and SunEdison provides that [

] (SBr. at 12 (citing CX-0032C at

¶ 1.1)).

In that same vein, SiGen's CEO, Mr. Fong, testified that to his knowledge, SunEdison still exists, and that [

] (*See* Tr. (Fong) at 214:1-17, 215:11-25, 218:8-

21.). However, the evidence on the status of SunEdison's current existence and the licensing status of the '672 and '965 patents is not unequivocal.³¹

Nonetheless, to the extent that Soitec rests on an argument that SunEdison does not currently have standing to maintain this suit because of the GlobalWafers' acquisition, Soitec waived that issue pursuant to Ground Rule 7.2 because Soitec failed to raise it in its Pre-Hearing Brief. Soitec had notice before it filed its Pre-Hearing Brief that SunEdison was being acquired by GlobalWafers. On October 7, 2016 SiGen supplemented its Complaint with a letter that

³¹ In its Post-Hearing Brief, Soitec makes several arguments that SunEdison no longer exists as an entity. (RBr. at 40-41.). [

] Soitec also says that Mr. Theodore Fong's (SunEdison's President and Chief Executive Officer) lack of knowledge as to whether SiGen would grant GlobalWafers a [] license is evidence that SiGen no longer has a contractually authorized domestic industry at this point. (*Id.* at 41; *see also* Tr. (Fong) at 186:8-10.). Mr. Fong's testimony is not dispositive of this point. Staff argues that the fact that SunEdison produced a witness to testify at the Hearing, that is Mr. Fong, suggests that SunEdison has survived as an entity post acquisition. (SRBr. at 5.). Staff also takes the position that since there is no contrary testimony, it can be inferred that SunEdison still exists. (*Id.*). Staff also argues that since the License Agreement, [

] (*Id.* at 6 (citing CX-0033 at SIGEN-40815; CX-0032C; CX-003C)). Alternatively, Staff argues that GlobalWafers is either irrelevant because SunEdison still exists, or GlobalWafers is SunEdison's successor-in-interest to the [] license agreement with SiGen. (*Id.* at 6-7.).

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noted that “SunEdison was acquired in August 2016 by GlobalWafers Co. Ltd.” (Doc. ID No. 592331 (Oct. 7, 2016); *see also* SRBr. at 4; *see also* CX-0015C.0006 (SOITEC1025_0000954).). Additionally, through a November 25, 2016 declaration filed by SunEdison’s corporate counsel, SunEdison claimed it was unable to provide documents timely to the subpoenas SiGen issued because of an alleged staff shortage due to the GlobalWafers’ acquisition. (*See* Doc. ID No. 595594 (Nov. 21, 2016); Declaration of Robert M. Evans, Jr. (“Evans Decl.”) at 1.). Knowing that the GlobalWafers’ acquisition was in process, Soitec nonetheless failed to raise or preserve the issue of SunEdison’s current status.

The strongest argument in response to Soitec is that SunEdison’s current status is not that important or legally significant for purposes of determining domestic industry. The Commission has held that typically, the appropriate date for determining whether a domestic industry exists or is being established is the date of the filing of the complaint. (SBr. at 8 (citing *Certain Video Game Systems and Controllers* (“*Video Game Systems*”), Inv. No. 337-TA-743, Comm’n Op. at 5 (Jan. 20, 2012); *see also* CBr. at 6 (citing *Motiva LLC v. U.S. International Trade Comm’n*, 716 F.3d 596, 601 n.6 (Fed. Cir. 2013).). If there is evidence that a complainant’s domestic industry is dwindling, the Commission may consider activities and investments beyond the filing of the complaint. *Video Game Systems* at 5-6 (citing *Certain Television Sets, Television Receivers, Television Tuners, and Components Thereof*, Inv. No. 337-TA-910, Comm’n Op. at 56, 69-72 (Oct. 30, 2015)).

Thus, at least with respect to timing and SunEdison’s current status (or that of GlobalWafers’ as a SiGen licensee) the issue is largely irrelevant given that the focus for purposes of a domestic industry analysis is on the period before SiGen filed its Complaint, and through some period thereafter, or as of May 2016. (*See also* CBr. at 5-6.). There is evidence of

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SunEdison's, and therefore of SiGen's domestic industry from at least 2010 to December 2016.

6. []

Finally, with regard to SunEdison's current status given the GlobalWafers' acquisition, as Staff notes, the License Agreement that governs SunEdison's current status states:

[]

(CX-0032C at ¶ 14.3.).

[

] Therefore, as Staff argues,

GlobalWafers has been assigned SiGen's licenses. (*Id.*; *see also* SRBr. at 6.).³²

Unless there are other documents that changed SunEdison's status that have not been made available, at least according to the License Agreement, [

]. (CX-0032C at ¶ 14.3.).

Soitec argues that SiGen's written consent would be required for the assignment of the License Agreement to be valid. (*See* RBr. at 40-41.). That appears to be incorrect. (*See also*

³² Soitec made an offer of proof pursuant to Commission Rule 210.37(g), including RX-0046, that GlobalWafers, Japan, is a "competitor" that makes SOI wafers. (Doc. ID No. 597259 (Dec. 8, 2016).). That may be true, but up until December 2, 2016, that would still be irrelevant for purposes of SiGen's establishing a domestic industry.

SPBr. at 6.). [

] (*Id.*). When Mr. Fong was questioned, he testified that if SiGen's consent is required for transfer of the ownership of its assets to GlobalWafers, as SunEdison's CEO, he would provide any necessary consent. (Tr. (Fong) at 214:9-13 and generally 213:11-25, 214:1-9.).

D. Other Evidentiary Issues Resolved

1. The Administrative Procedures Act and Fed. R. Evid. 612 Provide Latitude in the Use of Documents to Refresh a Witness' Recollection³³

As part of the ruling on Soitec's MIL No. 2, the parties were advised that although SunEdison's late produced documents would be excluded, SunEdison's witness(es) would be permitted to use the excluded documents to refresh their recollections during the Hearing pursuant to Fed. R. Evid. 612. (Dec. 5, 2016 Tr. at 43-45.). Moreover, during the Hearing a ruling was made to provisionally allow all of the testimony with regard to the domestic industry

³³ SiGen argues in its Post-Hearing Reply Brief that after the December 5, 2016 ruling on Soitec's MIL No. 2, that ruling should have ended any additional discussion with regard to the applicability of Fed. R. Evid. 612. (CRBr. at 13.). SiGen makes a similar argument in its Post-Hearing Brief. (CBr. at 25, 29.). Soitec argues that it could not reasonably have objected to Dr. Fisher's testimony until he testified, which is the more reasonable argument. (RRBr. at 28.). Notwithstanding Soitec's argument, this decision disagrees that Dr. Fisher's testimony was improper and should have been excluded.

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and stricken documents, with the understanding that the testimony would be evaluated pursuant to Fed. R. Evid. 612 and under other rules of evidence. (Tr. at 59:5-10.).

Soitec says that even with Dr. Fisher's testimony admitted, SiGen has not proven its domestic industry case. (RRBr. at 1.). Soitec takes issue with the reliability of Dr. Fisher's testimony and contends that under Fed. R. Evidence 612, *all* of Dr. Graham Fisher's testimony pertaining to SunEdison's investments in a domestic industry should be excluded because: (1) Dr. Fisher relied upon excluded documents that he read (at times) into the record; and (2) he had no independent memory to refresh because he testified from domestic industry related records that others created. (RBr. at 42-45; RRBr. at 1, 5, 25,-27, and more generally 1-10.). Staff and SiGen disagree with Soitec's position as does this decision. (SBr. at 32-38; SRBr. at 17-18; CBr. at 24-25; CRBr. at 13-15.).

Soitec's position is unpersuasive, at least with respect to much of Dr. Fisher's testimony, and largely unsupported by evidence rules and legal precedent. Moreover, Soitec's continuous refrain that Dr. Fisher's testimony was "speculative" and "unreliable," which Soitec referenced with examples, was an attempt to delegitimize the foundational background that Dr. Fisher provided. At times, Soitec simply mischaracterizes what Dr. Fisher said by using how he testified against him (*see, e.g.*, RRBr. at 1, 5, 8.) or the fact that he did not himself generate the figures to which he testified. (RRBr. at 25-27.).

As a first principle, the Administrative Procedures Act, 5 U.S.C. §§ 500-596 ("APA") does not require strict adherence to the Federal Rules of Evidence during hearings. (*See* SBr. at 33 (citing *Certain Network Devices, Related Software and Components Thereof (I)*, 337-TA-944, Commission at 15 (July 26, 2016)("[T]he Commission is bound by the Administrative Procedures Act, 5 U.S.C. § 500-596, and can consider all relevant evidence."); *Certain Welded*

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Stainless Steel Pipe and Tube, Inv. No. 337-TA-29, Commission Determination and Action, 1978 WL 50692, at *16, n.60 (Feb. 22, 1978)(“Unlike the courts, administrative agencies are not bound by the strict rules of evidence applicable to trials. Due to this fact, an agency should appraise the totality of the situation presented by the evidence, this freedom in the admissibility of evidence which might be excluded otherwise, aids the agency in making a better informed final determination.”); *see also* Ernest Gellhorn, *Rules of Evidence and Official Notice in Formal Administrative Hearings*, Duke Law Journal, Vol. 1971, No. 1 at 3-5, 7.).

As a second principle, even under strict application of the Federal Rules of Evidence, Fed. R. Evidence 612 permits a witness to refresh his recollection using a writing. Fed. R. Evid. 612. There are three (3) elements to the Rule 612: (1) the witness once had knowledge about the matters in the document; (2) the witness’ recollection is insufficient to testify fully and accurately; and (3) the record was made or adopted by the witness at a time when the matter was fresh in the witness’ memory and reflected the witness’ knowledge. *In re Terminal Cash Solutions, LLC*, No. 05-22440-BKC-RBR, 2006 WL 3922108, at *1 (S.D. Fla. Nov. 27, 2006). The weight of authority construing this rule suggests that the trial court controls the use of writings used to refresh a witness’ memory. *See U.S. v. Rinke*, 778 F.2d 581, 587-588 (10th Cir. 1985 (trial court has discretion to withhold writing from witness if judge believes the document will be the source of direct testimony rather than as a cue for memory); *Doty v. Elias*, 733 F.2d 720, 725 (10th Cir. 1984) (“The trial court enjoys broad discretion in determining whether a witness is using a writing to refresh memory”). (*See also* SBr. at 32 (citing 5 HANDBOOK OF FEDERAL EVIDENCE § 612.2 (7th ed.); *see also* 4 WEINSTEIN’S FEDERAL EVIDENCE § 612.03[1] (2016) (citing *U.S. v. Boyd*, 606 F.2d 792,794 (8th Cir. 1979) (“The propriety of permitting a witness to refresh his memory from a writing prepared by another largely lies within the sound

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discretion of the trial court.”)).³⁴

There is also extensive authority that a writing used to refresh a witness’ memory need not have been prepared by the witness or even at his direction. 5 HANDBOOK OF FEDERAL EVIDENCE § 612 (7th ed). Moreover, as Staff argues correctly, when a matter is lengthy or complicated, a trial judge has discretion to permit a witness to consult a writing, records, accounting sheets, and the like. (See SBr. at 33 (citing 4 WEINSTEIN’S FEDERAL EVIDENCE § 612[04][ii](2016)). For example, “[w]here the matter is so lengthy that even a witness with a refreshed memory unaided by the writing would have trouble reciting all the facts without frequently looking at the writing, the court frequently will exercise its discretion to permit the witness to consult the writing as he speaks.” 5 HANDBOOK OF FEDERAL EVIDENCE § 612.2 (7th ed). Also, as noted, in some circumstances, permitting a witness to refer to records is encouraged: “[t]he trial court in many instances should liberally allow a witness to refer to records, accounting sheets and reports in testifying,” and that [g]enerally, doctors, engineers, accountants and other lay witnesses testifying should be allowed continuously to refer to data on their reports, etc.” (SBr. at 33-34 (citing *Goings v. U.S.*, 377 F.2d 753, 761 n.11 (8th Cir. 1967); *Rush v. Ill. Central R.R. Co.*, 399 F.3d 705, 718 n.16 (6th Cir. 2005) (“We recognize that there are limited circumstances in which the witness may refer to the writing used to refresh recollection while testifying, such as where the witness ‘is asked to testify about detailed or lengthy matters.’”)).

Finally, as both Staff and SiGen note, it is well-settled that a writing need not be

³⁴ Consistent with Fed. R. Evid. 612, Soitec had an opportunity to cross-examine Dr. Fisher. Soitec also had an opportunity to request and review during the Hearing the excluded SunEdison documents used to refresh Dr. Fisher’s recollection had it chosen to do so. See *E360 Insight v. The Spamhaus Project* (“*E360 Insight*”), 2010 WL 3853587, at *1 (N.D. Ill. Sept. 20, 2010); *Fendi Adele S.R.L. v. Burlington Coat Factory Warehouse* (“*Fendi Adele*”), 689 F. Supp. 2d 585, 594 (S.D.N.Y. 2010).

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admissible to refresh a witness' recollection. A writing need not even be accurate. (CRBr. at 12 (citing *U.S. v. Frederick*, 78 F.3d 1370, 1376 (9th Cir. 1996); *U.S. v. Muhammad*, 120 F.3d 688, 699 (7th Cir. 1997); see also SRBr. at 21 (citing 4 WEINSTEIN'S FEDERAL EVIDENCE § 612.03[3][b](2016) ("The writing need not be admissible in evidence. It may be completely false, but it must legitimately be intended to revive the witness's recollection."))). Staff also notes that WEINSTEIN'S FEDERAL EVIDENCE states that the writing may have been prepared by someone else. (*Id.*; see also *id.* (quoting 5 HANDBOOK OF FEDERAL EVIDENCE § 612.2 (7th ed.)("It is worth emphasizing that any document may be employed to refresh recollection. If counsel was so brash, he could write on a piece of paper, 'You idiot, I told you 20 times that John was also present.'"))).³⁵

The only real question here is whether Dr. Fisher "had personal knowledge" of the information about which he testified. That is the foundational requirement of Fed. R. Evid. 602, which states:

a witness may testify to a matter only if evidence is introduced sufficient to support a finding that the witness has personal knowledge of the matter. Evidence to prove personal knowledge may consist of a witness's own testimony.

Fed. R. Evid. 602; see *E60 Insight*, *supra*, and *Fendi Adele*, *supra*.

³⁵ Soitec argues that Dr. Fisher simply "read the subject matter of the excluded summaries into the record." (See RBr. at 44.). That was not my observation. Soitec also argues that a witness can only refresh his memory as to a pre-existing recollection "on an admissible subject of testimony." (*Id.*). Dr. Fisher's testimony was admissible. Moreover, it is not at all clear what Soitec means by a "pre-existing" recollection. The cases upon which Soitec relies to suggest that Dr. Fisher's memory was improperly refreshed are distinguishable or misapplied. (*Id.* (citing *U.S. v. Holden*, 557 F.3d 698, 703-704 (6th Cir. 2009); *Rush v. Ill. Cent. R.R. Co.*, 339 F.3d 705, 718 (6th Cir. 2005).). *Rush* stands for the proposition that a witness may refresh recollection using a writing in limited circumstances. In *Holden*, *supra*, the Court did not allow the witness to refresh his memory using certain documents because the Court had previously ruled the documents were not *relevant*, and therefore, held that Rule 612 did not apply. There was no question of relevancy with respect to the documents excluded in this Investigation. SiGen and Staff have effectively distinguished other cases to which Soitec has cited with respect to its argument that Dr. Fisher's testimony is inadmissible. (See e.g., CRBr. at 12-14; see also SBr. at 32-33.).

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In this case, this decision finds that most, if not all, of Dr. Fisher's testimony meets the predicate Fed. R. Evid. 602 and falls within the bounds of Fed. R. Evid. 612. His testimony (or most of it), is therefore, admissible. The exceptions are discussed in more detail in Section IV.D.1, above.

2. Dr. Fisher Had Foundational, Personal Knowledge Consistent with Fed. R. Evid. 602 and Had Knowledge of Information Comprising Domestic Industry, Consistent with Fed. R. Evid. 612

Dr. Fisher's personal knowledge of SunEdison's operations and the elements that comprise SunEdison's domestic industry appeared to be extensive. Dr. Fisher was the primary fact witness who testified during the Hearing with regard to SunEdison's investments in SOI products and manufacturing processes using SiGen's patent licenses that SiGen relies upon for its domestic industry. (Tr. (Fisher) at 10-178; *see also* CX-0011.). His testimony was corroborated in certain respects by Mr. Fong's testimony, and that of another SiGen witness, Brad Dutton. Dr. Fisher was subject to a fairly extensive *voir dire* with regard to the sources of and bases for his knowledge about SunEdison and its processes given his reliance on documents he did not prepare. (Tr. (Fisher) at 10-49.).³⁶

Dr. Fisher testified that he was employed by SunEdison for 30 years, from approximately 1984 until he retired and became a consultant for SunEdison in 2014. (Tr. (Fisher) at 10:18-23, 13:11-14; *see also* JX-0004C, JX-0005C, JX-0006C.). From 2004 until he retired, Dr. Fisher was the Chief Scientist at SunEdison. (Tr. (Fisher) at 11:9-14; *see also* JX-0004C-JX-0006C.). In his role as Chief Scientist, Dr. Fisher, *inter alia*, was involved in the early development of

³⁶ Among my observations were that Dr. Fisher appeared to be unbiased and credible. He was quite clear that he was not taking sides and did not even know the substance of the lawsuit. (Tr. (Fisher) at 65:16-20.). To use his own words: "Like I said, I'm not taking sides. I'm just trying my best to tell you what I found out" (*Id.* at 70:15-19.).

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SunEdison's SOI products after it acquired its licenses for the '672 and '965 patents from SiGen. He also had responsibility for ensuring that others' patents or patent rights were not infringed. (Tr. (Fisher) at 11:9-14, 12:8-21, 13:1-10, 14-23, 49:3-6.). While he was employed at SunEdison, Dr. Fisher said he had access "to anything I needed in terms of information or places within the company to go, including, by the way, plants internationally." (*Id.* at 35:7-9.). Before he became Chief Scientist at SunEdison, he was involved in marketing and was "responsible for manufacturing worldwide" which involved "tracking down root causes for problems in manufacturing at all the plants around the world." (*Id.* at 35:12-17.).

Additionally, Dr. Fisher had familiarity with the manner in which SunEdison manufactured certain of its SOI products from the license and technology transfer from SiGen in 2004 through at least early 2016. (*Id.* at 13:14-23, 14:5-8, 94:4-14.). He was familiar with, or had first-hand knowledge of SunEdison's purchase of equipment, from 2010 at least through his retirement and knew the likely costs of the major pieces of equipment used in the SOI manufacturing process at SunEdison. (*Id.* at 31:6-15 (refreshing memory with CX-0068C); *see also* CX-0011C.). He worked with the research and development ("R&D") researchers on SOI projects from 2010-2014, all of whom worked on SOI in SunEdison's St. Peters, Missouri facility ("St. Peters facility"), which served both as SunEdison's headquarters and as the primary facility in the United States in which SunEdison has manufactured its SOI wafers. (Tr. (Fisher) at 92:10-19; *see also id.* at 68:18-25, 69:1-25 (refreshing memory with CX-0071C).). He was familiar with the research and sales figures of [REDACTED]. (Tr. (Fisher) at 69:3-25 (refreshing with CX-0071C).).

With regard to sales and sales figures, Dr. Fisher testified that he was involved in trying to obtain funding for new projects, including funding from the U.S. government, and to do that

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he had access to and used sales figures. (*Id.* at 26:9-25, 27:1-23, 29:1-25, 30:1-31:20.). Dr. Fisher recognized that the number of [] in sales from 2010-2016 seemed “reasonable,” although he refreshed his memory from the document presented. (*Id.* at 73:1-25, 74:1-14 (refreshing memory from CX-0066C).).

Dr. Fisher drafted the script and approved modifications to the script that describes the processes by which Dr. Fisher testified that SunEdison manufactures all of its SOI products. (*Id.* at 52:6-9, 14:9-13, 49:17-21, 51:9-25, 52:3-8; *see also* CX-00011 (MEMC Perfect SOI Video and Transcript)). After the video describing how SunEdison manufactures its SOI products was shown during the Hearing, Dr. Fisher was questioned extensively about the SOI manufacturing process that occurs at SunEdison’s St. Peters facility. (*See, e.g.,* Tr. (Fisher) at 97-120.). [

]

Dr. Fisher also testified to his foundational knowledge with regard to the size of SunEdison’s St. Peters facility and its current uses from his direct and recent observations. (*Id.* at 32:11-25, 34:19-35:17, 35:23-36:14.). As Dr. Fisher explained, during his past two (2) years as a consultant for SunEdison, he has visited the St. Peters facility approximately “two or three times in a month.” (Tr. (Fisher) at 46:23). He testified that he had most recently visited SunEdison’s St. Peters facility approximately two (2) weeks before the Hearing. (*Id.* at 45:22-25.). He testified that as a consultant, in 2015 he was asked to photograph various pieces of equipment [] for a tour. (*Id.* at 33:7-12.). Dr. Fisher testified of his own

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knowledge with regard to the equipment and tools that are involved in the manufacturing process at St. Peters, together with his best estimates of the costs of the various tools and equipment. (*Id.* at 61:16-25, 62:1-25, 63:15-25, 64:1-24 (refreshing recollection with CX-0068C).). He was familiar with the manufacturing space in the St. Peters facility, including the [] (*Id.* at 147:1-149:4.).

Finally, Dr. Fisher gathered information responsive to SiGen's document subpoenas that supports SunEdison's investments in its domestic SOI products that SiGen relies on for its domestic industry case. (*See* CBr. at 13 (citing Tr. (Fisher) at 45:2-21, 70:15-17); *see also* Tr. (Fisher) at 27:11-25, 28:1-25, 29:1-10, 30:13-25, 31:1-25, 44:10-22.).

Dr. Fisher explained that in gathering information pertaining to SunEdison's domestic industry pursuant to SiGen's document subpoena, he contacted SunEdison employees in different departments at SunEdison's St. Peters facility, including employees in the accounting department and facilities management. (Tr. (Fisher) at 44:20-44, 45:9-21, 70:8-19.). He testified unequivocally that he knew who to contact for information, and in some instances provided names of those whom he contacted for information. (*Id.* at 27:11-21, 45:2-6, 70:15-17.). To the extent he relied for his testimony upon certain accounting or facilities or R&D related documents prepared by others at SunEdison, Dr. Fisher also noted that while he had not memorized the numbers, that when he first received the documents, he reviewed them and found most of the numbers to be "reasonable." (*Id.* at 27:8-24, 28:3-24, 29:4-6, 30:1-18; *see also id.* at 142:16-25, 143:1-3.). He also testified that the "[t]he numbers all seemed reasonable because they were commensurate with my memory when I was working full time." (*Id.* at 143:9-11.). When the numbers he was given did not appear to be accurate, he testified that he "made a couple of queries" or he called individuals he trusted to obtain the correct information. One such example

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he gave pertained to the facilities square footage which looked incorrect, so he went to “the facilities guy to get it.” (*Id.* at 147:10-14.). Dr. Fisher made it quite clear that he had not even tried to commit all of the figures he received to memory. (*Id.* at 143:13-22.).

Dr. Fisher had first-hand knowledge of the [] where the SOI manufacturing occurred in the St. Peters facility. (*Id.* at 32:21-25, 33:1-10, 34:19-25, 63:15-20, 82:25–83:8, 102:17-25, 123:13-17, 125:11-18, 166:4-25, 167:1-10.). Even if he did not have committed to memory all of SunEdison’s investments in plant, equipment, labor and material, he knew enough from first-hand knowledge of the SOI manufacturing process, and of the equipment that SunEdison used in that process, and of the approximate costs of certain pieces of equipment without consulting the documents that supported his memory. (*See generally id.* at 27:8-24, 28:3-24, 29:4-6, 30:1-18; *see also id.* at 142:16-25, 143:1-3, 97-120.). []

Soitec argues generally that SunEdison’s domestic industry information was “unreliable” and based upon “generalized estimates,” “supposition,” and “conjecture.” (RBr. at 22; *see also generally id.* at 21-22.). With respect to Dr. Fisher, Soitec argues that “[t]he record developed during Dr. Fisher’s testimony on December 6, 2016, shows that virtually all of his testimony was unsupported by any prior personal knowledge and therefore was not subject to any prior recollection that could be refreshed under Federal Rules of Evidence.” (*Id.* at 43; *see also generally id.* at 42-53.). Soitec’s characterization of Dr. Fisher’s foundational knowledge is inaccurate and diminishes Dr. Fisher’s testimony unnecessarily and unreasonably. The pauses, hesitations or the qualifications that Soitec suggests undermine Dr. Fisher’s testimony, may be

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viewed from the perspective of someone trying to tell the truth and not mislead. (Tr. (Fisher) at 65:16-18 (“I’m not sitting here trying to tell you I’m an expert at everything. I’m just telling you what I know truthfully.”). Dr. Fisher was clear that he had not memorized all the numbers pertaining to SunEdison’s investments, and at times needed to look at documents. (*Id.* at 143:9-14 (“The numbers all seemed reasonable because they were commensurate with my memory of when I was working full-time. And they [numbers][sic] came from people I trusted and that I knew those people knew how to collect the information that was required. I did not try to memorize everything.”).

From the testimony described, and based upon my own close observation, it was apparent that Dr. Fisher made every effort to testify to his own personal knowledge, with appropriate caveats about the sources of his knowledge, including when he needed to rely upon the documents that others at SunEdison had prepared. Although his testimony was provisionally admitted during this Hearing, this decision finds that most, if not all, of Dr. Fisher’s testimony is admissible under Federal Rules of Evidence 602 and 612.³⁷ In sum, he had foundational knowledge, he knew numbers that appeared reasonable, even if he had not committed the accounting and other numbers to memory, and he needed to have his recollection refreshed.

3. Federal Rule of Evidence 1006 in This Instance Is Not an Independent Basis for Precluding Dr. Fisher’s Testimony³⁸

³⁷ During the Hearing, there was extensive colloquy pertaining to the admissibility of Dr. Fisher’s testimony. (Tr. at 56-59.). Soitec preserved its running objection to Dr. Fisher’s testimony rather than continuing to interject its objections after every question. (*Id.* at 60.). Dr. Fisher’s testimony was allowed provisionally at that time. (*Id.* at 59.).

³⁸ Soitec’s counsel appropriately raised Fed. R. Evid. 1006 during the Hearing in the context of preserving its objections to Dr. Fisher’s testimony. (Tr. at 56.). Given some of the confusion with, and the late production of, SunEdison’s documents, it is understandable that Fed. R. Evid. 1006 was not raised until it became an issue during the Hearing. In this instance, the Hearing was an appropriate time to raise the objection as the testimony was given.

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Soitec argues in its Post-Hearing Brief that Fed R. Evid. 1006 is a separate and independent basis, in addition to Fed. R. Evid. 602 and 612, for rejecting Dr. Fisher's testimony. (RBr. at 44, 53-55.). SiGen points out that Soitec failed to object to any SunEdison documents that might be summary compilations before the Hearing, which it could have done through either a motion *in limine* or through a high priority objection. (CRBr. at 11-12.). Staff contends not only that Soitec's reading of Fed. R. Evid. 1006 is incorrect, but also that Rule 1006 does not provide an independent basis for excluding evidence. (SRBr. at 21.). Staff contends that even if Rule 1006 applies, the documents to which it would apply were excluded through the ruling on MIL No. 2. (*Id.*). SiGen argues that any evaluation of testimony under Fed. R. Evid. 1006 should be disallowed because: (1) Soitec did not file a pre-hearing motion on the issue; and (2) the ruling on Fed. R. Evid. 612 should have taken care of the issue of "summaries" or summary documents that Fed. R. Evid. 612 addresses. (CBr. at 29.).

Staff's arguments on this point are more compelling and correct. Fed. R. Evid. 1006 is largely irrelevant, even if not waived for not having raised it earlier. Fed. R. Evid. 1006 merely states:

The proponent may use a summary, chart, or calculation to prove the content of voluminous writings, recordings, or photographs that cannot be conveniently examined in court. The proponent must make the originals or duplicates available for examination or copying, or both, by other parties at a reasonable time and place. And the court may order the proponent to produce them in court.

The Notes of the Advisory Committee on Proposed Rules [to the Federal Rules of Evidence Rule 1006] suggest that summaries may be used when documents, books or references are voluminous and summaries are the only practical means of making their content available to the judge or jury. (Notes of Advisory Committee on Proposed Rules, Pub. L. 93-595, § 1, Jan. 2, 1975, 88 Stat. 1945; Apr. 26, 2011, eff. Dec. 1, 2011.).

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Contrary to Soitec's argument, in this instance, Fed. R. Evid. 1006 does not serve as an independent basis for excluding Dr. Fisher's testimony or as foundational requirement. (RBr. at 44.). Even if SunEdison's documents were summaries, they were already excluded pursuant to the ruling on Soitec's MIL No. 2.³⁹ Moreover, contrary to Soitec's reading of Fed. R. Evid. 1006, by its straightforward language, it appears that in conjunction with Fed. R. Evid. 612, summaries are allowable and could be used to refresh Dr. Fisher's recollection given the complexity of the records/documents that are used to prove domestic industry.⁴⁰ In other words, even if the SunEdison records that Dr. Fisher consulted during his testimony were summaries, they did not run afoul of either Fed. R. Evid. 1006 or Fed. R. Evid. 612.

V. DOMESTIC INDUSTRY

A. Technical Prong Legal Standard

A complainant in a patent-based Section 337 investigation must demonstrate that it is practicing or exploiting the patents at issue. *See* 19 U.S.C. § 1337(a)(2) and (3); *Certain Microsphere Adhesives, Process for Making Same, and Prods. Containing Same, Including Self-Stick Repositionable Notes*, Inv. No. 337-TA-366, Comm'n Op. at 8, Pub. No. 2949 (U.S.I.T.C., Jan. 16, 1996) ("*Microsphere Adhesives*"). The technical prong of the domestic industry requirement is satisfied when the complainant establishes that it is practicing or exploiting the patents at issue. *See Id.*

³⁹ The documents at issue were already excluded regardless of whether or not they were summaries. How many times can the same documents be excluded? Not more than once.

⁴⁰ It is my understanding that Soitec was given an opportunity the week of November 20, 2016 to review the SunEdison records and documents that were produced to SiGen as a result of its subpoena to SunEdison. Moreover, the documents that Dr. Fisher relied upon in court were available to the Respondent to review.

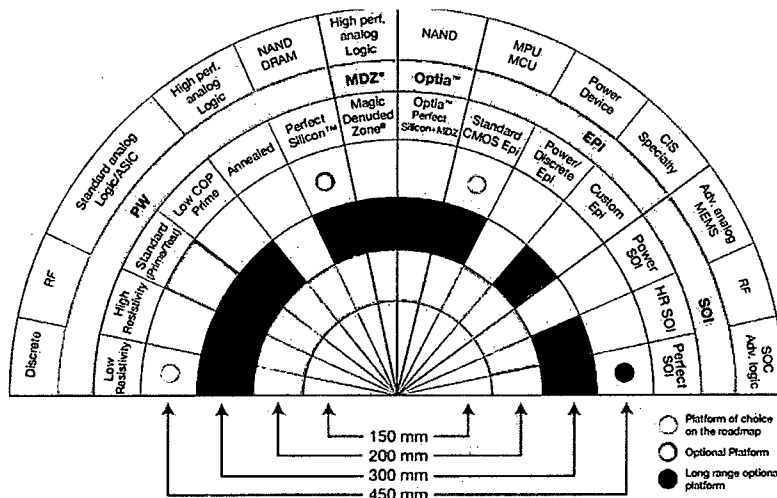
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The test for claim coverage for the purposes of the technical prong of the domestic industry requirement is the same as that for infringement. *Certain Doxorubicin and Preparations Containing Same*, Inv. No. 337-TA-300, Initial Determination at 109, 1990 WL 710463 (U.S.I.T.C., May 21, 1990), *aff'd*, Views of the Commission at 22 (October 31, 1990). “First, the claims of the patent are construed. Second, the complainant’s article or process is examined to determine whether it falls within the scope of the claims.” *Id.* The technical prong of the domestic industry can be satisfied either literally or under the doctrine of equivalents. *Certain Dynamic Sequential Gradient Devices and Component Parts Thereof*, Inv. No. 337-TA-335, Initial Determination at 44, Pub. No. 2575 (U.S.I.T.C., Nov. 1992). “In order to satisfy the technical prong of the domestic industry requirement, it is sufficient to show that the domestic industry practices any claim of that patent, not necessarily an asserted claim of that patent.” *Certain Ammonium Octamolybdate Isomers*, Inv. No. 337-TA-477, Comm’n Op. at 55 (U.S.I.T.C., Jan. 2004) (“*Certain Isomers*”).

1.

Evidence reflects that SunEdison produces a variety of semiconductor substrates, which are reflected in the figure below that SunEdison has labeled on its website as “Products at a Glance.”

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(RX-0016 (“Products at a Glance”) (SOITEC1025_00001493-1494).).

The figure above depicts a section labeled “SOI,” which appears to include three (3) types of SOI products, that is “HR SOI,” “Power SOI,” and “Perfect SOI.” (RX-0016; *see also* RX-0020.). Since the inception of this Investigation, SiGen has maintained that SunEdison’s SOI products identified above are manufactured by the same process depicted in a video labeled “MEMC Perfect SOI.” (*See* CPBr. at 7-11; *see also* CX-00011; Tr. (Fisher) at 52:6-10.). That would include the “Power SOI,” the “Perfect SOI,” and the “HR SOI” depicted in the figure above. (RX-0016, *supra*.).

SiGen has maintained from the inception of the Investigation that SunEdison’s SOI manufacturing process, as depicted in the “MEMC Perfect SOI” video practices at least claim 1 of the ’672 patent and claim 1 of the ’965 patents. (CPBr. at 2-3, 7-9; *see also* CBr. at 8-10; Compl. at ¶¶ 13, 27.). From the inception of the Investigation, SiGen has contended also that the “plain and ordinary” meanings of the claim terms contained in claims 1 of the ’672 and ’965 patents control, and therefore, there is no question of claim construction. (CPBr. at 3-5; *see also* CBr. at 8-9.).

During the Hearing, Dr. Fisher, SunEdison’s primary witness on SunEdison’s economic

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domestic industry and its domestic investments in SOI products, appeared to testify that [

]. (See Tr. (Fisher) at 52:6-10, 53:9-16,

80:14-82:2, 100:14-25.). [

]

Additionally, SiGen argues Dr. Jack Lee⁴¹ provided persuasive expert testimony that the manufacturing process shown in the “MEMC Perfect SOI” video practices claim 1 of the ’672 patent (i.e., the process for cleaving a silicon film from a silicon substrate.). (See CBr. at 8 (citing Tr. (Lee) at 244:19-245:1).). As SiGen also notes, SiGen provided SunEdison with proprietary documents describing the [

]. (See CBr. at 8; *see also id* at 8 n.2 (citations omitted).).

Similarly, SiGen argues that Dr. Lee’s “unrebutted” testimony proves that claim 1 of the ’965 patent is also shown as being practiced in the “MEMC Perfect SOI” video. (*Id.* at 9-10 (citing CPX-001; Tr. (Lee) at 234:7-14, 235:1-24, 237:3-22 (other citations omitted))). SiGen argues that Dr. Lee’s testimony is unrebutted because while Soitec had planned to call Dr. John Bravman, it chose not to. (See *id.* at 11.). SiGen and Staff generally agree that based upon Dr. Fisher’s and Dr. Lee’s testimonies, the preponderance of evidence supports a finding that SiGen has shown the required nexus between SunEdison’s economic investments and its practice of the

⁴¹ At the time he testified on December 6 and December 7, 2016, Dr. Jack Lee was a professor in the Dept. of Electrical and Computer Engineering at the University of Texas, Austin, and was called as SiGen’s expert on the technical aspects of SiGen’s domestic industry. (Tr. (Lee) at 230:10-21, 232:20-21.).

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asserted patents. (SBr. at 15 n.4; CBr. at 12-13.).

Soitec, however, contests this testimony and point and says that Dr. Fisher testified that some portion of the SOI manufacturing process at the St. Peters facility is devoted to a [

]. (RRBr. at 1-2 (citing Tr. (Fisher) at 88:25–89:23)).⁴² Accordingly, Soitec argues that the “claimed quantum of economic activities includes products that are not covered by the asserted patents, and thus are overinclusive and unreliable.” (RRBr. at 2.).

SiGen takes umbrage at Soitec’s “effort to create an issue where none exists.” (CRBr. at 1; *see also generally id.* at 1-2.). Indeed, SiGen takes the position (and Staff appears to agree) that []. (CRBr. at 2; SRBr. at 7-8, 10.).

In this instance, since a legitimate question has been raised (even if the evidence to support it is thin to hypothetical) it is appropriate to preserve the technical prong issue to the later hearing in this Investigation, scheduled for June 2017. It is appropriate to assume that all of SunEdison’s SOI products manufactured in at least the St. Peters facility are [

]. (SBr. at 16-17 (quoting *Certain Microcomputer Memory Controllers, Components Thereof and Prods. Containing Same*, Inv. No. 337-TA-331, Initial Determination, 1992 WL 811299 at *1 (Jan. 8, 1992) (holding that the technical prong would proceed to trial but for purposes of discussing the economic prong “it

⁴² SiGen challenges Soitec’s right to raise [] at all in its Post-Hearing Reply Brief because Soitec never raised the issue of [] in its Pre-Hearing Brief, and therefore has waived this issue under Ground Rule 10.1. (CRBr. at 3-4.).

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will be assumed that complainant has proved that it sells products that practice each of the patent claims in issue”)); *see also id.* at 17 (citing *Certain Graphics Processing Chips, Sys. on a Chip and Prods. Containing the Same*, Inv. No. 337-TA-941, Order No. 12 at 1 (July 16, 2013) (holding that the economic prong was satisfied even though the technical prong remained a contested issue))).).

2. There May Be Disputed Claim Terms that Affect the Technical Prong

While it is my observation that Soitec exaggerates the unreliability of Dr. Fisher’s testimony and what Soitec describes as the “one size fits all” SOI wafering manufacturing process, there is a question raised, albeit a very small one, sufficient to request more evidence on this point if it is available. (*See* RRBBr. at 3.).

Specifically, Dr. Fisher testified only that [] (Tr. (Fisher) at 113:14–114:18.). More specifically, []

The only other testimony on this point was by Dr. Jack Lee, who agreed that [] (Tr. (Lee) at 249:13–250:5, 269:11.). While the economic numbers can be adjusted by [] if necessary to account for any “possible” (even if unlikely) [], there may be the possibility of a simple clarification that could

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resolve this issue during the next phase of discovery.⁴³

Out of an abundance of caution, it also appears that there is an issue of claim construction that warrants reserving the technical issue to the remainder of the Investigation for additional development. Soitec's initial Post-Hearing Brief makes it clear that there are disputes regarding the interpretation of several claim terms, including, for example, the "said cleaved surface comprising a surface roughness of a predetermined value" and "applying a combination of thermal treatment and an etchant to said cleaved surface" terms from claim 1 of the '965 patent. (*See* Tr. (Lee) at 253:11-20, 254:3-17, 257:22–266:23; RBr. at 15-19.).

Whether or not correctly, or with any support, Soitec has raised the issue whether the plain language of claim 1 of the '975 patent *requires* a combination of a thermal treatment and an etchant to the cleaved service. (*Id.* at 16-17.).⁴⁴ While SiGen calls this a belated claim construction issue that Soitec did not raise in its Pre-Hearing Brief, it may have been difficult at that time simply because [

].⁴⁵ Dr. Fisher's testimony opened that door, even if only very slightly. SiGen makes strong arguments in its Post-Hearing Reply Brief with respect to how the preponderance of evidence, as contained in the MEMC video and in Dr.

⁴³ SiGen performs a [] discount and reduces SunEdison's more than [] total domestic expenditures and its capital expenditures of [] to account for any alleged [] manufacturing by SunEdison. (CRBr. at 11.). SiGen notes that Dr. Vander Veen would call even the discounted domestic expenditures significant. (*Id.* (citing Tr. (Vander Veen) at 23.).

⁴⁴ SiGen notes that Soitec has not made an argument that calls into question whether SunEdison's SOI manufacturing process practices the '672 patent. (CRBr. at 5 n.1.). This issue will be addressed in the next phase of the proceedings in this Investigation.

⁴⁵ Staff argues that Soitec had the "MEMC Perfect SOI" video, CXP-0011/CPX-0001, as well as copies of the technology transfer documents that SiGen licensed to MEMC/SunEdison (CX-0004C) before the close of fact discovery, but made no arguments in any of the documents it filed before the Hearing that SunEdison did not practice claim 1 of the '965 patent. (SRBr. at 11 n.2.).

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Fisher's testimony, reflects the method by which SunEdison makes its SOI products. (See CRBr. at 4-9.). However, it may well be that claim construction will lay to rest any doubts.

Accordingly, there is no finding now whether SiGen has established the technical prong of its domestic industry case through SunEdison's manufacture of SOI products.

B. Economic Prong Legal Standard

Section 337(a)(3) sets forth the following economic criteria for determining the existence of a domestic industry in such investigations:

(3) For purposes of paragraph (2), and industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned –

- (A) significant investment in plant and equipment;
- (B) significant employment of labor, or capital; or
- (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

Given that these criteria are listed in the disjunctive, satisfaction of any one of them will be sufficient to meet the economic prong of the domestic industry requirement. *Certain Integrated Circuit Chipsets and Prods. Containing Same*, Inv. No. 337-TA-428, Order No. 10, Initial Determination (un-reviewed)(May 4, 2000). Whether an investment is substantial or significant under 19 U.S.C. § 1337(a)(3) depends upon the context. *Certain Printing and Imaging Devices and Components Thereof* (“*Printing and Imaging Devices*”), Inv. No. 337-TA-690, Comm’n Op. at 31 (Feb. 17, 2011.). As the Commission noted in *Printing and Imaging Devices*, “the magnitude of the investment cannot be assessed without consideration of the nature and importance of the complainant’s activities to the patented products in the context of the marketplace or industry in question.” (*Id.*). Moreover, to establish a domestic industry, a complainant “need only demonstrate a sufficiently focused and concentrated effort to lend

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support to a finding of substantial investment.” (CBr. at 6 (citing *In re Matter of Certain Wireless Commc’n Devices, Portable Music and Data Processing Devices, Computs. and Components Thereof*, Inv. No. 337-TA-745, Initial Determination at 153 (Apr. 24, 2012) (quoting *Certain Personal Data and Mobile Commc’s Devices and Related Software*, Inv. No. 337-TA-710, Order No. 102 (Apr. 6, 2011.)). However, *Lelo Inc. v. Int’l Trade Comm’n*, 786 F.3d 879,885 (Fed. Cir. 2015) changed the analysis and “requires a quantitative analysis to determine whether there is a ‘significant’ [or ‘substantial’] increase or attribution by virtue of claimant’s asserted commercial activity in the United States.” *Id.* at 883. There is still no “bright line” for the size of the investments that would be considered “substantial” or “significant” even after *Lelo*.

1. SunEdison’s Domestic Industry: Capital Investments in Plant and Equipment: Section 337(a)(3)(A)

a) Dr. Fisher’s Testimony Establishes SunEdison’s Significant Investments in Plant and Equipment

As this decision finds in Section IV.D, above, Dr. Fisher established his foundational knowledge of SunEdison’s SOI manufacturing process so as to be able to testify with regard to certain of SunEdison’s investments in plant, equipment and capital from 2010 through September 2016. (Tr. (Fisher) at 27:8–28:8, 45:2-21, 54:17–55:25, 140:20–143:22.). The documents upon which Dr. Fisher relied include the square footage of SunEdison’s St. Peters facility where, as Dr. Fisher testified, [

]. (See CX-0031; Tr. (Fisher) at 77:25–78:24, 112:16–113:13.).

The un rebutted evidence, both testimonial and documentary, is that SunEdison’s [] square foot St. Peters facility is SunEdison’s corporate world headquarters and serves as SunEdison’s primary domestic research and development facility. (CX-0031.). There were

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no objections to the exhibit, and Dr. Fisher confirmed the square footage. (Tr. (Fisher) at 112:6-25.).

Additionally, documents upon which Dr. Fisher relied contained numbers he verified regarding SunEdison's SOI related capital expenditures, manufacturing labor costs, research and development expenses, and less reliably regarding depreciation. (*See generally* Tr. (Fisher) 43:16-172:2.). Dr. Fisher testified unequivocally that SunEdison's manufacturing process conducted in its St. Peters facility, and as shown in the video, [

]. (*Id.* at 78:10-12; *see also* CX-0011.). Because Dr. Fisher's testimony reflects SunEdison's domestic investments related to the SOI products, and SiGen asserts that all of SunEdison's SOI investments are relevant domestic industry investments, no additional allocation seems to be either possible or necessary. (Adopting in part Staff's argument, SBr. at 17-18.).

Dr. Fisher' testimony, also unrebutted, was that [

]. (*Id.* at 77:25-78:24, 112:16-113:13; Tr. (Lee) at 272:23-274:15; Tr. (Ikizler) at 390:22-393:18; CX-0031, SX-0003 to SX-0009.). Dr. Fisher established that as of 2016, some [] of the St. Peters facility has been used in connection with the manufacture of SOI wafers, with some [

] ⁴⁶ (Tr. (Fisher) at 146:20-150:19.). According to Dr. Fisher, [

⁴⁶ [

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], based upon his direct observation (he was employed full time then and was in the facility most recently in November 2016). (*Id.* at 166:26–167:10.).

With respect to capital expenditures, and without needing to refresh his recollection, Dr. Fisher testified that from 2010 through at least the first half of 2016, SunEdison has invested some [] in the United States on capital expenditures related to SOI products/manufacturing. (*Id.* at 70:20–71:24, 141:14-25.).⁴⁷ Dr. Fisher indicated that a large portion of the [] would have been for investments in tools and equipment, but he also noted that SunEdison also had capital investments in information technology and infrastructure. (*Id.* at 136:24–138:11, 140:14-25.). While Dr. Fisher was quite certain about the total of [] that SunEdison had invested in capital expenditures [

]. (*Id.* at 140:24-25, 141:13.). Similarly, while Dr. Fisher was unsure how certain building expansion or infrastructure for such items as the [] were capitalized for accounting purposes, he nonetheless thought it would be included in the [] in capital expenditures. (*Id.* at 138:4-16, 140:14-25). Notwithstanding any uncertainty he expressed pertaining to individual allocations within the capital expenditures, Dr. Fisher was unequivocal that all the capital expenditures except for [

] (*Id.*).

⁴⁷ SiGen made an offer of proof on the economic prong of the domestic industry that show various figures for investments in equipment, depreciation, R&D, labor and capital investments taken from documents stricken as part of the ruling on Soitec's MIL No. 2. (Doc. ID No. 597360 (Dec. 9, 2016); Complainant's Offer of Proof on the Economic Prong of Domestic Industry ("SiGen's Offer of Proof").). Dr. Fisher's memory of the figures appears to have been very close to the exact number with respect to SunEdison's capital expenditures from 2010-2016.

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], was invested in the United States. (*Id.* at 61:16-25, 62:1-22.). Any uncertainty Dr. Fisher may have had about individual allocations was immaterial since the total figure of capital expenditures of [] was relatively consistent with the figures that Dr. Fisher had reviewed. (*Id.* at 141:14-16.).⁴⁸

With respect to SunEdison's equipment and tooling, Dr. Fisher estimated that some [] would be a "reasonable figure" to allocate to such expenditures. (*Id.* at 137:22-138:18.).

[

]

Dr. Fisher also testified extensively about his knowledge of the types of equipment in which SunEdison has invested for the manufacture of SOI wafers at the St. Peters facility. (*Id.* at 116:4-131:2). For example, without looking at documents, Dr. Fisher testified that SunEdison

⁴⁸ Soitec quotes Dr. Fisher's qualifications in his testimony, when he used such phrases as "can't swear to it" (RBr. at 28 (citing Tr. (Fisher) at 117:12-22)); or with regard to []—"don't know the actual cost" (*id.* (citing Tr. (Fisher) at 123:10-19)); or with regard to []—"[a]gain, it's a guess. I don't know the actual price" (*id.* at 28-29 (citing Tr. (Fisher) at 125:19-23.)), as examples of Dr. Fisher's testimony that was too speculative to be probative." (RBr. at 29.). I disagree with Soitec's characterization. In context, Dr. Fisher was fairly certain about most of the subjects about which he was asked. Soitec's quoted qualifications of Dr. Fisher's testimony can be interpreted as less an expression of Dr. Fisher's lack of reliability than they were of his efforts to say (as he said a number of times) that he had not memorized all of the numbers and he did not wish to be perceived as either dishonest or untruthful. (*See, e.g.*, RBr. at 25-27 (Soitec's characterizations)).

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has [

]. (*Id.* at 117:14–121:23.). Dr. Fisher would not guess at those costs or the method that was used for depreciation, but he thought the number of and types of tools looked correct. (*Id.* at 116:1-25, 117-25, 119-121.). After refreshing his recollection (allowed over objection), Dr. Fisher testified that the purchase of the [] was consistent with his recollection that there was [

].

(*Id.*). Dr. Fisher described other SOI-related manufacturing equipment in some detail with respect to purpose, and their costs, without refreshing his memory, based largely upon his knowledge and involvement in, and observation of SunEdison SOI wafer production. These included: [

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] (Tr. (Fong) at 211:19–212:12, 220:17–221:3.).

In connection with SunEdison’s capital expenditures, Dr. Fisher testified that since 2010, SunEdison has incurred some [] in depreciation for its SOI manufacturing equipment. (Tr. (Fisher) at 59:1-19; *see also id.* at 54:17–55:1-25, 59:14–64:6, 136:24–137:21.). He testified that he contacted a Mr. Ninemann and “he put the spreadsheet together and sent it to me.” (*Id.* at 55:1-5.). Dr. Fisher noted that when he was employed at SunEdison full-time, he relied upon the accounting department to provide him with the figures. (*Id.* at 55:17-24.). However, of his own knowledge and based upon his review of the depreciation figures to refresh his recollection, Dr. Fisher testified that some of the depreciation was over-inclusive and may have reflected [], at least based upon their coding, with which he was familiar. (*Id.* at 61:16-25, 62:1-22.). Dr. Fisher seemed less knowledgeable about depreciation, and he did not testify with regard to the depreciation method that SunEdison used. To a certain extent, therefore, Soitec’s argument that Dr. Fisher’s testimony with respect to depreciation is not wholly reliable has some merit. (RRBr. at 6.).

Notwithstanding his less reliable testimony about the actual amount of depreciation SunEdison has taken on its equipment over time, and his lack of knowledge how the depreciation was derived, Dr. Fisher’s testimony as a whole, particularly with respect to plant, equipment and tools investments, was both credible and reliable. Moreover, Dr. Vander Veen, Soitec’s expert, acknowledged that if a company establishes that it has invested more than [] to manufacture products [] practice the patents and are carried out in the United States, the Commission practice would be to find that investment to be significant. (*See* Tr. (Vander Veen) at 46:8–47:4.).

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SiGen has established domestic industry under Section 337(a)(3)(A) as a result of the more than [] that SunEdison invested in capital expenditures from 2010 through mid-2016, plus at least another [] in equipment expenditures for SOI manufacturing related activities in the United States from 2010 through at least the first half of 2016.

b) SiGen's Sales-Based Allocation Figures for Capital Expenditures for Plant and Equipment Are Unreliable

Through Dr. Fisher, SiGen contends that between 2010 and 2016, SunEdison experienced a [] sales of SOI wafers that generated almost [] during that time. (Tr. (Fisher) at 27:8–30:11, 72:1–73:21, 114:19–115:4).⁴⁹

In the event that Dr. Fisher's testimony was ruled to be inadmissible, SiGen offers an alternative, sales-based allocation method to estimate SunEdison's domestic investments in plant, equipment and capital. (CBr. at 13-14, 16.). SiGen uses the percentages it derived based upon the estimates of SunEdison's SOI wafer sales as compared with its total semiconductor sales to SunEdison's total, worldwide semiconductor related capital, depreciation and amortization expenses as reported in SunEdison's 10-K and 10-Q Reports to the Securities and Exchange Commission ("SEC").

Using sales figures, SiGen provided estimates of sales from 2011 through mid-2016 as follows:

⁴⁹ Dr. Fisher testified somewhat equivocally that less than [] in SunEdison sales from 2010 to 2016, was related to [] processes. (Tr. (Fisher) at 115:1-25.). To simplify the meaning of this, Soitec's argument at its most basic level is that []. (RRBr. at 1-3.). Soitec uses this argument to undermine SiGen's proof that most of SunEdison's domestic SOI wafers practice the '672 and '965 patents at the St. Peters facility and to suggest that there are material disputes of fact. (*Id.*).

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Table 1: SOI Sales Estimates (in millions of dollars)⁵⁰

| Sales | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--|----------|---------|---------|---------|---------|---------|
| Semiconductor sales | \$1021.3 | \$934.2 | \$920.6 | \$840.1 | \$777.5 | \$713.3 |
| Estimated SOI Sales | [| | | | | |
| Estimated SOI Sales % of total Semiconductor Sales | | | | | |] |

(See CDX-0001C; Tr. (Ikizler) at 301:11–306.22.).

One problem with the numbers reflected in Table 1 results from their source; one problem results from the methodology used for constructing the figures. Dr. Devrim Ikizler, SunEdison’s economics expert on domestic industry, testified that the total semiconductor sales were derived from SunEdison’s 10-K and 10-Q SEC filings, while sales for the last quarter of 2014 and the full year of 2015 came from a press release. (Tr. (Ikizler) at 304:2–305:4 (citing CX-0017; CX-0018; CX-0019; CX-0020).). By contrast, SunEdison’s SOI sales from 2013–2016 were derived from [

] (*Id.* at 305:5–306:22 (citing RX-0032C).). SunEdison’s SOI sales for 2011 and 2012 came from yet a different source, that is a compilation published by a research company called [] in a study that was produced for Soitec. (*Id.* at 305:5–306:22 (citing CX-0046).).

After reviewing the figures and their sources, it is a finding of this decision that SunEdison’s sales figures are generally unreliable. Dr. Thomas Vander Veen, Soitec’s economic expert on domestic industry, testified that the numbers for 2011 and 2012 are unreliable because

⁵⁰ This is the Table No. provided in CDX-0001C from which this table was copied.

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they were obtained from a third-party research firm whose numbers were not authenticated and whose methodology was unknown. (Tr. (Vander Veen) at 406:11–407:4; Tr. (Ikizler) at 354:7–355:9.). Although Soitec disavows and claims the 2013-2016 SOI SunEdison sales figures are unreliable, Staff has the better argument that these are probably the most reliable figures of all since [] to ensure the accuracy of []

[] and had an incentive to ensure that the sales figures upon which [] were correct. (*See* RPBr. at 16; JX-0003C; Tr. (Cordina)⁵¹ at 56:8-17; *see also* SBr. at 19 n.5). In short, there are at least five (5) different sources from which SiGen’s sales figures and/or semiconductor figures derive, virtually none of which have been authenticated by someone who knows how they were derived. It is not possible to rely on a SunEdison press release which is the source for SiGen’s 2015 total semiconductor sales. (CX-0018; Tr. (Ikizler) at 304:2–305:4.). Consequently, if the sources of the numbers are suspect, then it follows that any attempt to derive a different set of numbers from the underlying numbers is also suspect.

Moreover, if Dr. Fisher’s [] for SOI sales from 2010 to 2016 is compared against the figures that SiGen produced as contained in Table 1, that total some [] dollars from 2011 to 2016, it appears that total sales in Table 1 overstates sales, or the accounting figures that Dr. Fisher used understates sales. Although the sales figures are impressive regardless, it is impossible to decide which figures are accurate or reliable.

SiGen offered alternative estimates for its capital expenditures as reflected in the following table:

⁵¹ At the time of his deposition testimony, Mr. Christophe Cordina was the Central Sales Manager of Soitec. (JX-0003C at 5:7-10.).

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Table 5: Estimated SOI Related Capital Expenditures (in millions of dollars)⁵²

| Expenditures | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|----------------------|-------|-------|-------|-------|-------|-------|
| Capital Expenditures | \$4.6 | \$3.2 | \$2.7 | \$3.3 | \$6.4 | \$6.1 |

(CDX-0003; Tr. (Ikizler) at 315:4–318:17; CPBr. at 16 (citing CX-0017-CX-0020).).

SiGen argued that Soitec’s own analysis of SunEdison’s sales and internal spending verifies that capital expenditures reflected in SunEdison’s 10-K Report contain reliable measures for calculating SunEdison’s investments in its SOI wafer Capacity and technology. (Tr. (Ikizler) at 318:18–320:15; CX-0027C at SOITEC 1025_0000294.). However, Dr. Ikizler acknowledged that CX-0027C was not “a very well organized document.” (Tr. (Ikizler) at 318:20-25.).

Moreover, Soitec’s own witness, Christophe Cordina, testified that CX-0027 is a copy of a report that Soitec’s analyst obtained from an unknown source. (JX-0003C (Dep. Tr. of Christophe Cordina) at 47:5-49:10.). Additionally, he acknowledged that CX-0027C also is a compilation of miscellaneous information including notes, articles and analyses from unknown sources. (*Id.* at 39:6-12, 39:24–40:20, 47:5–49:10.). Just as there were problems with SiGen’s sales-based allocation method, the data in Table 2 also suffers from the similar unreliability problems. Dr. Vander Veen testified that capital expenditures typically occur prior to the production of a product, with investment in such items at machinery and equipment. (Tr. (Vander Veen) at 421:9–424:20.). Dr. Vander Veen testified that there was unlikely to be a linear or proportional relationship between SunEdison’s sales in a given year, and its capital expenditures, as SiGen tried to suggest. (*Id.*). Moreover, Dr. Vander Veen showed that applying the percentage of sales

⁵² This is the Table No. provided in CDX-0003 from which this table was copied.

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to SunEdison's worldwide expenditures for capital (and for depreciation and amortization), potentially co-mingles domestic and foreign expenses. (*Id.* at 419:23–423:10.). Therefore, SiGen's efforts to use such unreliable evidence do not help it establish capital expenditures.⁵³

2. SunEdison's Domestic Industry: Investments in Research and Development: Section 337(a)(3)(C)

a) Dr. Fisher's Testimony Establishes SunEdison's Substantial Investment in Research and Development but There Is a Question with Respect to Practice of the Patents

Dr. Fisher testified that between 2010 and 2016, SunEdison invested some [] in research and development [] (Tr. (Fisher) at 64:17, 91:13–92:8.). Dr. Fisher testified that []

[] (*Id.* at 92:9–93:7, 136:20–23.). He also testified that SunEdison did not account for research and development on a product basis, because it seemed he testified that []

[] (*Id.*).⁵⁴

Staff argues that if Dr. Fisher's testimony that only [], and that if SunEdison's expenditures for research and development in St. Peters is accepted as evidence, then they together prove that [] satisfies the nexus requirement of Section 337(a)(3)(C). (SBr. at 26-

⁵³ SiGen attempted to prove its depreciation and amortization expenditures using the same unreliable sales allocation methodology. (Tr. (Ikizler) at 352:17–354:6, 370:1–371:25 (citing CX-0017 to CX-0020); *see also* CDX-0037.). Just as this decision rejects the sales-based allocation methods for SunEdison's capital expenditures, so too does it reject the same methodology as SiGen has tried to offer for SunEdison's depreciation and amortization expenditures. (*See* Tr. (Vander Veen) at 421:9–424:20.).

⁵⁴ []

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27 (citing *Certain Integrated Circuit Chips and Prods. Containing The Same*, Inv. No. 337-TA-859, Comm’n Op. at 49-50 (Aug. 22, 2014).).

While Dr. Fisher was quite certain that [] , consistent with the MEMC video and the transcript that he authored and then approved, he was uncertain enough whether there was [

] . (See Tr. (Fisher) at 52:6-10, 53:9-16, 80:14–82:2, 100:14-25, 113:14–115:22; SX-0002.). He was fairly unequivocal about the SOI process used at St. Peters. (*Id.* at 53:15-16 []; *id.* at 54:11-16 (“Q. [

]

However, once the issue whether [

] (*Id.* at 113:14-24, 114:1-18); *id.* at 113:24-114:4 [

] Dr. Fisher

also said with regard to the [

] (*Id.* at 114:7-10.).

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As Staff notes, and I agree, there is, in fact, little counter evidence (and then only in a slide titled “SSL SOI Wafer Product Roadmap” in a presentation by the [] whom Soitec hired), to suggest that SunEdison manufactures [] product domestically. (SBr. at 16 n.4.). Dr. Fisher’s testimony was for the most part unequivocal. However, there is enough of a question about whether Dr. Fisher’s momentary “doubt” was justified about the SOI products made at SunEdison’s St. Peters facility and the practice of at least one (1) of the claims of each of the ’672 and ’965 patents as to reserve the question either to obtain additional evidence, or to clarify the evidence on this point, if possible. (See *id.* at 15 n.3, n.4.). Provisionally, however, the [] that SunEdison appears to have spent domestically on research and development of SOI products appears to be substantial and related to SunEdison’s manufacture of SOI products practicing the ’672 and ’965 patents.

b) SiGen’s Sales-Based Allocation Estimates for Research and Development Expenditures Are Unreliable

SiGen offered an alternative to Dr. Fisher’s testimony for research and development, once again using a sales-based allocation method. (Tr. (Ikizler) at 306:23–312:13.). SiGen applies percentages it derived from estimates of SunEdison’s SOI wafer sales compared with its total semiconductor sales to SunEdison’s worldwide research and development expenses reported in SunEdison’s SEC filings. (*Id.*).

Accordingly, SiGen estimates the following research and development expenditures from 2011 to mid-2016:

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**Table 4: Estimated SOI Related Research and Development
(in millions of dollars)⁵⁵**

| Research & Development | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| R&D Expenditures | \$1.3 | \$1.1 | \$1.0 | \$1.2 | \$1.8 | \$1.4 |

(CDX-0002.).

Dr. Vander Veen testified that the sales-based allocation method is inappropriate in this instance because it is not necessarily true that R&D expenditures would be proportional to sales. (Tr. (Vander Veen) at 421:9–424:20.). Moreover, there was nothing in the estimates to suggest why the R&D estimates were relatively stable until 2015 when they jumped (again, without explanation.). Dr. Vander Veen explained that a significant portion of R&D expenditures occur before a product is commercialized. (*Id.*). An inference can be drawn from Dr. Fisher’s testimony that [

], but that is the most that can be inferred given the weakness of the sales allocation method for research and development.

⁵⁵ This is the Table No. provided in CDX-0002 from which this table was copied.

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3. SunEdison's Domestic Industry: Capital Investments in Marketing and Administration

a) SiGen Offered No Proof of Marketing and Administration Expenditures

SiGen contends that SunEdison's investments in marketing and administration would lend to proof of the existence of a domestic industry. (CPBr. at 14-15.). During the Hearing, SiGen failed to elicit any testimony from Dr. Ikizler or any other witness pertaining to SunEdison's investments in marketing and administration. At best, the only evidence of SunEdison's marketing and administration were worldwide figures contained in its SEC filings. (CX-0020.). There was no authentication of the figures, or how they were derived. There is no basis for allocating these expenditures to SunEdison's domestic SOI products.

4. SunEdison's Investment in Labor: Section 337(a)(3)(B)

a) Dr. Fisher's Testimony Establishes SunEdison's Expenditures for Labor Related to SOI Manufacturing Under Section 337(a)(3)(B)

Dr. Fisher testified that between 2010 and 2016, SunEdison's SOI manufacturing-related labor expenses have [] (Tr. (Fisher) at 171:25–172:2.). In 2010, SunEdison's labor expenses, including salary and benefits associated with salary, were [] (Id. at 144:19–145:2, 170:25–171:4.). Between 2011 and 2014, SunEdison invested some [] that was directly for SOI related activities. (Id. at 171:10–24.). In 2015, SunEdison's labor expenses [] (Id. at 142:1–145:17.). According to Dr. Fisher's testimony, in the first three quarters of 2016 alone, SunEdison invested an additional [] solely for SunEdison's employees who are engaged in the SOI manufacturing process. (Id. at 170:20–24, 145:18–146:6.). These investments are significant and satisfy Section 1337(a)(3)(B).

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b) SiGen's Sales-Based Allocation Estimates for Labor Expenditures Are Unreliable

SiGen attempted to provide estimates of SunEdison's investments in its SOI related work force through Dr. Ikizler, but by using suspect information. (Tr. (Ikizler) 322:16–326:11, 337:9–339:9.). Using SiGen's information, Dr. Ikizler testified that SunEdison employs [

] at the St. Peters facility. (*Id.* at 322:16–326:11 (citing CX-0030).). SiGen also asserts that of these, [

]. (*Id.* (citing CX-0014C).). Mr. Fong testified that at most, [

]. (*Id.*). SiGen contends that [

]. Dr. Ikizler calculated an average wage of [] per employee per year, and estimated average annual labor expenses of []. (*Id.* at 337:9–339:9.). Dr. Ikizler then multiplied the annual figure of [] and concluded that was the average amount that SunEdison spent each year between 2011 and 2016, using an assumption that the labor force was stable, and that an average salary could even be calculated. (*Id.*).

The labor figures that Dr. Ikizler and SiGen offer are at odds. None of the figures was corroborated. Virtually all of the numbers and the calculations were suspect. The 2013/2014 figures were taken from an internet post by a Congressional Representative who was apparently hosted by SunEdison and issued a press report citing the employment figures. (CX-0030). The [] report is from 2015 and reports that SunEdison had [] employees. (CX-0014C at SOITEC1025_0000997.). The source of that figure is not reported. Finally, Dr. Ikizler used a website estimate of engineering salaries rather than from well-known sources such as the Bureau of Labor Statistics Occupational Handbook.

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However, even without these figures, Dr. Fisher's testimony establishes that SunEdison made significant investments in labor up to the time SiGen filed its complaint. (Tr. (Fisher) at 77:4-24.).

VI. CONCLUSION

In accordance with the discussion of the issues contained herein, it is held that Silicon Genesis Corporation, through its licensee SunEdison Semiconductor Limited, has established contingently by a preponderance of evidence the economic prong of the domestic industry requirement, and more specifically under Section 337(a)(3)(A), (a)(3)(B) and (a)(3)(C). Whether Silicon Genesis Corporation, through its licensee, SunEdison Semiconductor Limited, has established the required nexus that SunEdison Semiconductor Limited practices at least one claim of each of the asserted patents is established provisionally, but reserved for final decision to the remainder of this Investigation.

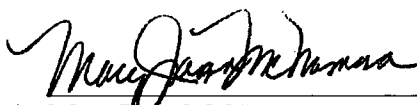
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the Commission Secretary.

SO ORDERED.



Mary Jean McNamara
Administrative Law Judge

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **INITIAL DETERMINATION** has been served by hand upon the Commission Investigative Attorney, **Courtney Hoecherl, Esq.**, and the following parties as indicated, on **March 1, 2017**.



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