

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

INLINE PLASTICS CORP.,
Plaintiff,

v.

LACERTA GROUP, INC.,
Defendant.

Civil No. 18-cv-11631-MRG

FINDINGS OF FACT AND CONCLUSIONS OF LAW

GUZMAN, J.

This matter comes before the Court following a bench trial on Defendant Lacerta Group, INC's ("Lacerta") affirmative defense of inequitable conduct. Lacerta contends that Plaintiff Inline Plastics Corp. ("Inline") procured its Patents-in-Suit through conduct that renders them unenforceable. The patents at issue claim tamper-resistant containers and methods of manufacturing such containers using thermoformed plastic, designed for food packaging applications. Specifically, Lacerta alleges that Inline: (1) failed to name joint inventors who contributed to the conception of the claimed inventions; and (2) materially misrepresented the teachings of a prior art reference known as Menshen to the United States Patent and Trademark Office ("PTO") during prosecution of the Patents-in-Suit. Having carefully considered the evidence presented at trial, the credibility of the witnesses, the parties' proposed findings of fact

and conclusions of law, and the applicable law, the Court now makes the following findings of fact and conclusions of law.

I. BACKGROUND

Inline, based in Shelton, Connecticut, manufactures plastic containers for the food industry, including the Safe-T-Fresh line of tamper-evident/tamper-resistant (“TE/TR”) plastic containers. [ECF No. 534 ¶¶ 1-2]. The Safe-T-Fresh containers are covered by five patents directed to TE/TR containers and to their methods of manufacture: United States Patent Nos. 7,118,003 (’003 Patent); 7,073,680 (’680 Patent); 8,795,580 (’580 Patent); 9,527,640 (’640 Patent); and 9,630,756 (’756 Patent) (collectively, the “Patents-in-Suit”). [Id.] One of the containers’ innovative features is a tear strip integral with the hinge portion that connects the lid to the base of the container. [Id. ¶ 32]. A user severs the strip to release the lid. [Id.] Severing the strip serves as evidence that the container has been tampered with. TX 1.11.¹

All five patents claim priority to provisional application No. 60/489,093, filed on July 21, 2003. [See id.] The ’003 Patent matured from an application filed on July 21, 2004. [ECF No. 534-41 ¶ 5]. The ’680 Patent is a continuation-in-part of the ’003 Patent and was filed on February 24, 2005. [Id. ¶ 6]. The ’580 Patent is a division of application No. 11/483,900, filed on June 10, 2006, which is itself a continuation-in-part of the ’680 Patent. [Id. ¶¶ 49, 60, 68]. The ’640 Patent is a continuation of the ’580 Patent. [Id.] The ’756 Patent is a continuation of the ’640 Patent. [Id.]

¹ “TX” refers to Trial Exhibit.

Lacerta, based in Mansfield, MA, introduced its own line of TE/TR containers, Fresh N' Sealed, in or about 2015. [ECF No. 534 ¶ 3]. Believing that Lacerta's designs and methods of manufacture practice the Patents-in-Suit, Inline sent Lacerta cease-and-desist letters and attempted to negotiate a resolution, but those proved efforts fruitless. [Id. ¶ 4]. In 2018, Inline instituted this action against Lacerta, alleging that eighteen of Lacerta's Fresh N' Sealed containers directly infringed on the Patents-in-Suit. [Id.] On September 14, 2021, after years of litigation, the Court granted summary judgment in Inline's favor as to infringement on claims 1-3 and 6 of the '640 Patent. [ECF No. ¶ 177]. The case proceeded to a jury trial on the remaining claims. [ECF No. 305]. After a thirteen-day trial, the jury determined that the remaining asserted claims were not infringed and that all the asserted claims, including those already held infringed on summary judgment, were invalid. [ECF No. 350]. The Court entered partial final judgment under Federal Rule of Civil Procedure 54(b) on May 25, 2022, embodying the jury's verdict and dismissing without prejudice twenty-one patent claims Inline had withdrawn late in the trial. [ECF No. 390]. Subsequently, the Court denied Inline's motions seeking judgment as a matter of law or a new trial on both validity and infringement. [ECF No. 422]. The Court also denied Lacerta's motion for attorney fees under 35 U.S.C. § 285, finding the case not exceptional. [ECF No. 421].

On June 23, 2022, Inline filed a timely notice of appeal. [ECF No. 404] The Court denied Inline's relevant posttrial motions and Lacerta's § 285 motion on August 31, 2022. [ECF No. 421-22]. The Federal Circuit reactivated Inline's appeal on September 9, 2022, and Lacerta filed a timely notice of cross-appeal on September 27, 2022. [ECF No. 425; ECF No. 429]. On appeal, Inline argued that it was entitled to judgment as a matter of law, rejecting Lacerta's obviousness challenge to the asserted claims and, alternatively, that an error in the jury instructions required a

new trial on invalidity. [ECF No. 444]. Lacerta cross-appealed, challenging the denial of attorney fees and the judgment's dismissal without prejudice of certain patent claims Inline voluntarily dropped from its asserted-claims list near the end of trial. [ECF No. 444-5].

The Federal Circuit rejected Inline's argument for judgment as a matter of law of no invalidity but agreed with Inline that the jury instruction on the objective indicia of nonobviousness constituted prejudicial legal error, requiring that the invalidity judgment be set aside. [ECF No. 445 at 2]. The court affirmed the judgment's adoption of the verdict's finding of no infringement, a finding separate from invalidity. [*Id.*] The court remanded for a new trial on invalidity as to all Inline-asserted claims and noted that damages would also have to be adjudicated for the claims already held infringed on summary judgment if newly held not invalid. [*Id.*] Because there was no longer a final judgment, the court vacated the without-prejudice dismissal of Inline's late-withdrawn claims and the denial of attorney fees. [*Id.* at 2-3].

Upon remand, the Court held a jury trial on the validity of claims 1-3, 5, and 6 of the '640 Patent. [ECF No. 571]. After a seven-day trial in November 2024, the jury found that Lacerta proved by clear and convincing evidence that claims 1, 3, and 6 were invalid, while it failed to meet its burden as to claims 2 and 5. [ECF No. 601]. A bench trial on Lacerta's inequitable conduct defense was held on November 6 and 13, 2024 and January 24, 2025. [ECF No. 610, 614, 627]. The Court directed the parties to file proposed findings of fact and conclusions of law, including supporting exhibits and deposition designations. [ECF No. 599]. Having considered the extensive record and the argument of the parties, the matter is ripe for disposition.

II. **FINDINGS OF FACT**

A. **Inventorship**

1. **Background and the Patents-in-Suit**

The Patents-in-Suit relate to tamper-evident, tamper-resistant (“TE/TR”) plastic containers for packaging food products. [ECF No. 534 ¶¶ 1-2]. United States Patent Nos. 7,118,003 (’003 Patent); 7,073,680 (’680 Patent); 8,795,580 (’580 Patent); 9,527,640 (’640 Patent); and 9,630,756 (’756 Patent) (collectively, the “Patents-in-Suit”). [Id.] The patents are related and have materially similar specifications. [ECF No. 33 ¶ 32]. Inline is the owner and assignee of the Patents-in-Suit. TX 1; TX 2; TX 3; TX 4; TX 5. The named inventors on the Patents-in-Suit are Robert Sellari, Peter Boback, Bruce Stein, Daniel Landan, Tadeusz Klimaszewski in various combinations across the different patents. [Id.]

The properties of significance claimed in the Patents-in-Suit are features which either deter unauthorized tampering or clearly indicate whether unauthorized tampering has occurred, or both. TX 750; Bench Tr. 3-13:5-15:24 (Orkisz). These so-called “tamper-resistant/evident” features deter theft and prevent the loss of product and income for the seller, as well as instill consumer confidence in the integrity of the contents within the container and confidence in the ability of the seller and/or manufacturer to provide and maintain quality goods. TX 1.11 (’003 Patent explaining that properties of significance are “features which either deter unauthorized tampering or clearly indicate whether unauthorized tampering has occurred, or both,” including features that “deter[] theft and prevent[] the loss of product and income for the seller, as well as instill[] consumer confidence in the integrity of the contents within the container and confidence in the ability of the seller and/or manufacturer to provide and maintain quality goods”).

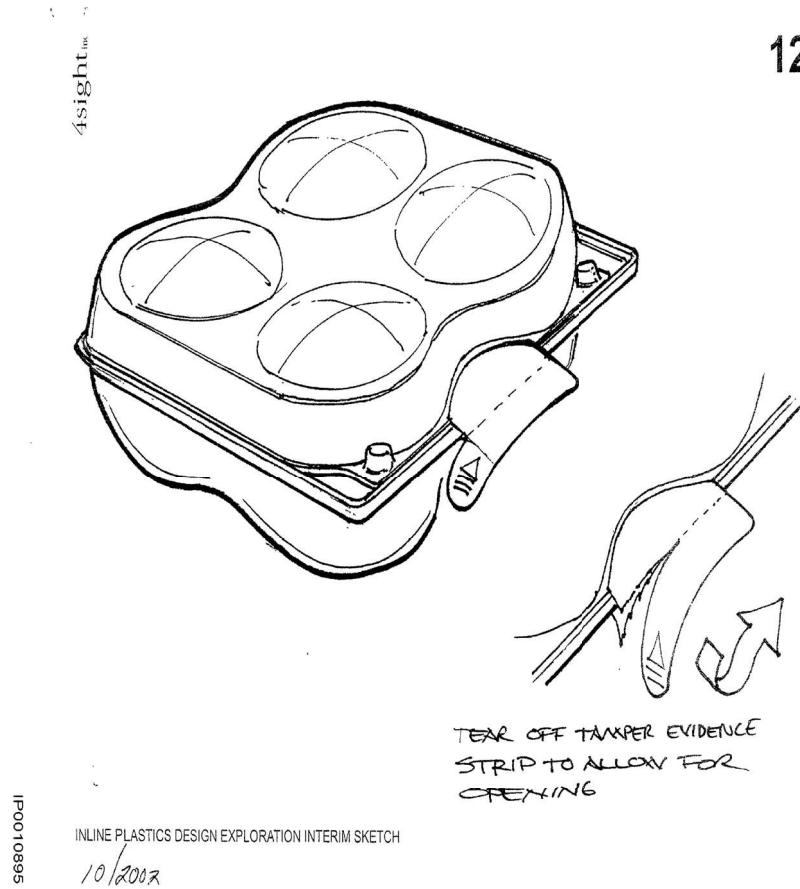
Each of the five patents relate to different aspects of this tamper-resistant/evident container technology. [ECF No. 534 ¶ 1]. For example, the '580 and '640 Patents are each directed to methods of thermoforming tamper-resistant/evident containers. [Id.] The '680 and '756 Patents are, like the '003 Patent, directed to various features of the containers themselves. [Id.]

2. Inline's Engagement of 4sight and the October 2002 Drawings

In 2002, Inline retained 4Sight, Inc. ("4Sight") to explore new thermoformed packaging concepts as part of Inline's "next generation" packaging initiative. TX 736. The scope of work between Inline and 4Sight stated that 4Sight would explore a range of new thermoformed packaging concepts, and that the manufacturing process for new concepts would be limited to thermoforming. TX 736.2-3. During an initial meeting with 4Sight in September 2002, Inline discussed its interest in tamper-evident packaging. Leslie Dep. 29:9-13 (2020); Tr. 3-21:7-12 (Orkisz). Stuart Leslie ("Leslie") and Richard Curtiss ("Curtiss") were principals at 4Sight involved in the project with Inline. TX 741; TX 845; Leslie Dep. 37:22-38:4 (2020).

In October 2002, 4Sight provided Inline with design drawings depicting multiple thermoformed container concepts, representing its phase 1 design work. TX 741; TX 845; Leslie Dep. 37:22-38:4 (2020); Tr. 2-74:13-76:8 (Stein). Inline's senior management reviewed, commented on, and dated the 4Sight drawings "10/2002." Tr. 2-74:13-76:8 (Stein). The October 2002 4Sight drawings depicted thermoformed containers with several key features. Leslie Dep. 17:5-9, 29:16-9 (2020); TX 741; TX 845.

Specifically, Sheet 12 of the 4Sight drawings depicted a one-piece, hinged thermoformed plastic container with a skirt on the base portion extending around the perimeter of the container, a cover flange that is buried or hidden by the skirt, a tear strip consisting of at least one line of weakness that must be removed to open the container and access its contents, and peripheral locks. Tr. 2-76:9-77:11 (Stein); Tr. 3-27:3-30:24 (Orkisz); TX 741; TX 845.19 (depicted below).



Inline witnesses conceded at trial that the 4Sight drawings disclosed some of these elements.

See Tr. 2-76:9-77:11 (Stein); Tr. 3-27:3-30:24 (Orkisz). For instance, Mr. Orkisz acknowledged that 4Sight's drawings disclosed a container with a pull tab, a "remove to open" designation on the cover portion, a tear strip, a one-piece thermoformed construction, a hinge, corner locks, a skirt around the perimeter of the container with the cover portion abutting the base portion, a tear strip that has to be removed to allow for opening the container and accessing its contents, at least

one line of weakness, and two lines of weakness or two score lines. Tr. 3-27:3-30:24 (Orkisz).

Mr. Stein similarly acknowledged that the 4Sight drawings depicted a pull tab, a “remove to open” designation on the cover portion, and that removing the pull tab exposes the flange and makes the container tamper-evident. Tr. 2-76:9-77:11 (Stein).

4Sight drawings 11 and 12 depicted a frangible tear strip located at the hinge. TX 741.1-2; TX 845.17, .19. Mr. Stein distinguished Inline’s design from the 4Sight design, testifying that the tear strip Inline designed utilizes the material in the back of the container, whereas 4Sight’s tear strip was at the front of the container so the hinge remains intact. Tr. 2-116:14-24 (Stein). In any event, Mr. Orkisz testified that a tear strip that must be removed to open the container and access its contents was 4Sight’s concept. Tr. 3-30:21-24 (Orkisz).

On February 6, 2003, 4Sight sent Inline’s Marketing Manager, Vinny Mascola, an invoice for the “range of innovative new thermal formed” food containers that “4Sight ... created.” TX 748.

3. Inline’s Claimed Invention Date and Work by Named Inventors

Inline’s claimed invention date is late 2002 relative to the Patents-in-Suit. Tr. 3-40:12-16 (Orkisz); TX 863.5. However, none of the named co-inventors began work on the purported invention any earlier than November 2002. Tr. 2-126:16-21 (Stein); Tr. 3-73:19-21 (Sellari); Tr. 3-84:23-85:1 (Boback). This was after Inline received the 4Sight design drawings in October 2002. TX 741; TX 845; Leslie Dep. 37:22-38:4 (2020); Tr. 2-74:13-76:8 (Stein).

Mr. Klimaszewski testified that he “wasn’t aware that [4Sight was] the one[] that came up with” the tear strip and did not know “if that’s really accurate.” Tr. 3-115:25-116:14 (Klimaszewski). Mr. Klimaszewski is not a listed inventor on the Provisional Application or the

'003 Patent. TX 750.1, TX 1.2. He first appears as a named inventor on the '680 Patent filed in February 2005. TX 2.2. Mr. Klimaszewski testified that his contribution was essentially from the processing end and the manufacturability of the containers. Tr. 3-105:15-24 (Klimaszewski).

Each named co-inventor claimed that his individual contribution to the invention was the tear strip, with an emphasis on knife cuts to perforate the hinge. Tr. 2-90:22-91:1 (Stein); Tr. 2-133:5-8 (Orkisz); Tr. 3-73:22-24 (Sellari); Tr. 3-85:2-4, 3-86:11-16 (Boback); Tr. 3-115:25-116:14 (Klimaszewski). Mr. Sellari testified that he contributed the tear strip to the '003 Patent, but after January 13, 2003. Tr. 3-73:22-24 (Sellari). However, Mr. Boback testified that his contribution was the “combination hinge and tear strip detail” and that Mr. Sellari had no role in conceiving that idea. Tr. 3-85:2-4, 3-86:11-16 (Boback). Mr. Stein testified about the concept of a functioning tear strip in the plastic, Tr. 2-90:22-91:1 (Stein), recounting that the first thing he did with respect to the Safe-T-Fresh project was determine whether Inline could make a tear strip that would function consistently for consumers. Tr. 2-92:2-5 (Stein). He also testified that he became involved in the project when “the other design team hit a wall, and they wanted a new fresh set of eyes to take a look at it.” Tr. 2-92:16-18 (Stein). Mr. Stein testified during the invalidity jury trial that he had nothing to do with some of the Patents-in-Suit or the applications for those patents. Tr. 2-83:6-84:24 (Stein).

Mr. Orkisz testified that Inline’s work on manufacturing details spanned several years, none of which is claimed in the Patents-in-Suit and, even if credited, all that work post-dated the “late 2002” invention date. Tr. 6-75:8-15, 6-102:17-20 (Orkisz). Mr. Stein testified that it took Inline 18 months from November 2002 to develop a commercial product. Tr. 2-96:18-97:21 (Orkisz).

4. Inline's Statements About the Tear Strip Feature

Inline lauded the “tear strip” feature as the critical inventive step in its patents. TX 241.154-157, TX 241.177-81; TX 242.156-159. Inline has praised its “unique, patented pull tear strip” as inventive. TX 212.14. Mr. Orkisz testified that Inline was the first company to conceive of or develop product packaging containing a tear strip. Tr. 2-133:5-8 (Orkisz).

5. Inline's Separation from 4sight and Filing of the Provisional Application

On April 17, 2003, Mr. Mascola requested a referral from Mr. Curtiss for packaging patent attorneys. TX 747. After that, Inline went silent and never contacted 4Sight again about this project. Leslie Dep. 48:5-9 (2020). On July 21, 2003, Inline filed the Provisional Application, claiming to have invented a “tamper resistant plastic container” that included a “tamper-evident frangible pull strip.” TX 750; Bench Tr. 1-13:5-15:24 (Orkisz). The Provisional Application did not name Leslie or Curtiss as inventors. TX 750.

Claim 1 of the Provisional Application recited a tamper resistant container comprising a cover portion defining an outwardly extending peripheral flange, a base portion defining an upper peripheral edge forming at least in part an upwardly projecting bead extending substantially about the perimeter of the base portion and configured to render the outwardly extending flange of the cover portion relatively inaccessible when the container is closed, and a hinge joining the outwardly extending flange of the cover portion with the base portion, the hinge defining a frangible section which, upon severing, provides a projection that extends out beyond the upwardly projecting bead of the upper peripheral edge of the base portion, for facilitating removal of the cover portion from the base portion to open the container. TX 750.10; TX 1.14-1.15.

The Patents-in-Suit include claims that require key elements that 4Sight conveyed to Inline, including tamper-evidence, a one-piece hinged thermoformed plastic container, a buried flange, a base skirt, a tear strip that must be removed to open the container, and peripheral locks. TR. 2-76:9-77:11 (Stein); Tr. 3-27:3-30:24 (Orkisz); TX 272; TX 705. Each of the Patents-in-Suit includes at least one claim that requires one or more such elements. TX 1; TX 2; TX 3; TX 4; TX 5.

6. Inventor Declarations Submitted to the PTO

Inline submitted declarations to the PTO from the named inventors attesting that they were the original, first and joint inventors of the subject matter claimed in the applications for the Patents-in-Suit. TX 241.37-40; TX 242.42-46; TX 245.68-70. The named inventors declared that they believed themselves to be the original, first and joint inventors of the subject matter claimed in the applications. [Id.]

7. Mr. Orkisz’s Involvement and Knowledge Regarding Inventorship

Mr. Orkisz was the driving force behind the Safe-T-Fresh initiative and personally directed decisions regarding Safe-T-Fresh’s development. TX 259 reflects Mr. Orkisz’s direction as to development of the “next generation” of packaging. TX 272 is a Produce Task Force charter authored by Mr. Orkisz demanding a “bias for action.” TX 262 is an email from Mr. Orkisz directing that the produce packaging initiative be expanded in scope to include new shapes. Mr. Stein testified that he got involved in the Safe-T-Fresh project at the request of Mr. Orkisz. Tr. 2-94:10-18 (Stein).

Mr. Orkisz testified at length during the jury trial about Inline’s business model of innovation, development of the Safe-T-Fresh line, the benefits of Safe-T-Fresh, and his leadership role in that initiative and spurring innovation at Inline. Tr. 6-61:22-68:11, 6-75:8-

79:20 (Orkisz). He confirmed that Inline's patent attorneys acted under Inline's authority in prosecuting the Patents-in-Suit. Bench Tr. 1-29:13-30:1 (Orkisz). Evidence exists of significant involvement by Mr. Orkisz in Inline's patent prosecutions. TX 869; TX 870; TX 871; Bench Tr. 2-9:18-20, 2-39:10-41:9, 2-41:23-42:2 (Orkisz).

Across both the bench and jury trials, Mr. Orkisz's testimony was frequently evasive, inconsistent, and at times nonresponsive. During the bench trial on inequitable conduct, he repeatedly gave vague answers and refused to commit to yes-or-no responses unless confronted with documents to verify. Bench Tr. 1:7:22–41:25, 1:38:11–39:10 (Orkisz); Bench Tr. 2:8:10–53:8, 2:24:14–21 (Orkisz). When questioned about Inline's omission of Leslie and Curtiss as inventors, Mr. Orkisz attempted to minimize 4Sight's role, claiming that 4Sight "had nothing to do with the Safe-T-Fresh project" and was only helping Inline with its "bakery line." Tr. 3-20:18-22 (Orkisz). The Court observed during trial that when Inline called Mr. Orkisz to support its validity case before the jury, Mr. Orkisz was able to testify in detail about the purported benefits of Inline's claimed inventions, yet during the inequitable conduct bench trial, Mr. Orkisz systematically denied any knowledge or memory of the patents or events in question. Bench Tr. 2-25:23–26:4, 2-28:4–24, 2-37:8–12 (Orkisz).

B. Menshen Prior Art Reference

1. The Menshen Patent and Its Disclosures

Menshen is a German patent that was published in German and was not part of a patent family that had a related patent published in English. TX 711.1-6; see TX 241.110. The specification for Menshen addressed the problem of then-existing tamper-evident containers being difficult to reseal, and the aluminum covers of which prevented the user from seeing the contents of the container when closed. TX 711.15. The object of the Menshen invention was to

design a container such that it is possible to monitor the contents of the container for tampering and to seal the container without problems after it has been opened. TX 711.9.

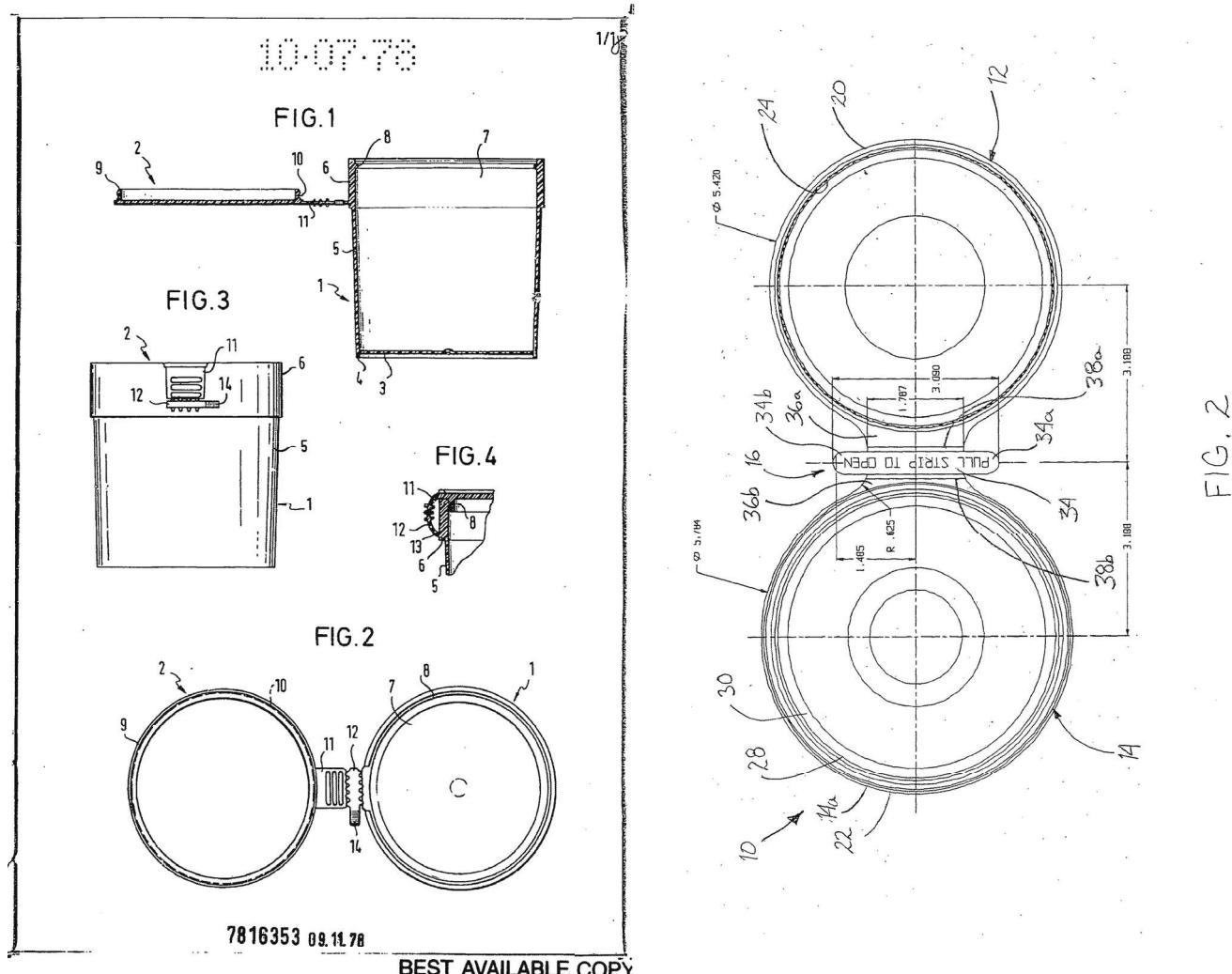
Page 2 of the certified Menshen translation states that known containers of the type usually have a lid made of aluminum that is pressed to the container opening to seal it, and that although this lid permits a tamper-proof monitoring of the container contents, reclosing such a container after it has been opened poses problems. TX 711.8. This reference to aluminum appears in the description of the prior art predating Menshen, describing problems that Menshen looked to solve. Id.

Menshen does not explicitly mention plastic, polymer, or PET anywhere in the document. Tr. 5-9:15-23 (MacLean). The European Patent Office (“EPO”) assigned classification codes to the Menshen patent, including codes B65D (for rigid containers), BD65D2543/00296, and BD65D2543/00518. Tr. 5-47:7-11, 5-49:16-19 (MacLean); TX 724. Classification code B65D2543/00296 refers to containers with lids made of a plastic material. Tr. 5-49:20-51:1 (MacLean); TX 722; TX 724. Classification code B65D2543/00518 refers to containers with a “skirt.” TX 723; 724; Tr. 5-49:16-51:18 (MacLean). Dr. MacLean, Lacerta’s expert, testified that to the extent that Menshen does not explicitly teach the use of plastics generally or transparent plastic material specifically, a person of ordinary skill in the art would find such a material obvious to try. TX 590.22. In his opinion, Menshen teaches a plastic container with a skirt that can be thermoformed. Tr. 5-51:10-18, 5-52:25-53:17. (MacLean).

The classification listed on the face of Menshen indicates “B65D 55-06” which relates to accessories for container closures that include means for discouraging or indicating unauthorized opening or removal of the closure such as tear strips. TX 711.1; TX 724; [see ECF No. 618 ¶ 32; ECF No. 621 ¶ 42]. The face of Menshen does not list the EPO Classification Codes

BD65D2543/00296 and BD65D2543/00518. TX 711.1. There is no evidence in the record that Inline was apprised of these EPO Classification Codes or as to when these codes were assigned to Menshen. TX 722; TX 724.

The container claimed in Menshen is nearly identical to Inline's claimed invention, as shown by a comparison of Figure 2 from Menshen (TX 711.6) and Figure 2 from the Provisional Application (TX 750.13 (depicted below)).



2. Inline's Patent Applications and the Deletion of Metal Disclosures

The specification for the '003 patent as filed on July 21, 2004, disclosed that the container can be made from various processes such as thermo-forming, injection molding or blow molding, and that the container can be made partially or entirely of metals and, specifically, light gauge aluminum. TX 241.18; TX 750.5. In connection with Inline's prosecution of an international application that corresponds to the '003 Application, an International Search Report dated November 15, 2004, identified the Menshen patent as "relevant" prior art. Tr. 5-45:18-47:6 (MacLean); TX 241.103-10.

In February 2005, three months after Inline received the International Search Report listing Menshen as relevant prior art, Inline filed the '680 Application. TX 242. In the '680 Application, Inline revised the Specification to delete the reference that the container of the present invention can be made from metals, including aluminum. See TX 242.18-19.

3. The September 2005 Office Action

In a September 16, 2005, Office Action, the PTO rejected applied-for claims of the '003 and '680 Applications as anticipated and rendered obvious by the Menshen patent under 35 U.S.C. §§ 102 and 103. TX 241.116-19; TX 242.112-15.

4. Inline's January 2006 Response and Representations Regarding Menshen

On January 17, 2006, Inline responded to the Office Action through its patent counsel, Attorney Pollack. TX 241.134. In this response, Inline submitted an uncertified translation of Menshen. TX 241. 159. The uncertified translation differed from a subsequently obtained certified translation. Compare TX 241.159-63 (uncertified translation) with TX 711.14-19 (certified translation). The uncertified translation identified an "annular ring bulge" element

where the certified translation identified an “annular bead” element. Compare TX 241.159-163 (uncertified translation with no mention of a “bead” element) with TX 711.13-19 (certified translation identifying “annular bead” element). The uncertified translation also repeatedly identified the invention of Menshen as a “tamper-proof container,” whereas the certified translation identified the invention of Menshen as a “tamper-evident container.” Compare TX 241.159, TX 241.160, TX 241.162 with TX 711.15.

In its January 17, 2006, response, Inline argued that Menshen disclosed a container made of aluminum. TX 241.142-143. Inline argued that Menshen cannot even be combined with prior art references that disclose plastic containers. TX 241.142-143. Inline’s support for the argument that Menshen discloses an aluminum container came from the portion of the uncertified translation of the Menshen reference that describes prior art containers pre-dating Menshen. TX 241.142.

Inline argued to the PTO that the container disclosed in Menshen is “self-destructive,” meaning it can only be opened by destroying the container, based on the uncertified translation. TX 241.143. In actuality, according to the certified translation, Menshen discloses that once the container has been opened, it “can be closed again, although it is clearly recognizable that the container has already been opened once.” TX 711.17.

Inline submitted declarations from Inline personnel emphasizing the purported inventive step of the tear strip feature and stating that the features required by the claims had enjoyed commercial success and satisfied a long-felt need. TX 241.143, 154-57; TX 241.173-74, 177-81.

5. Allowance of Claims

The Patent Examiner accepted Inline's statements distinguishing Menshen and withdrew related anticipation and obviousness objections. TX 241.209-10, TX 241.226; TX 242.200, TX 242.214. The PTO specifically cited the declarations emphasizing the tear strip as reasons for allowing the claims. TX 241.184.

Inline made four substantive amendments to Claim 1 of the '003 Patent before overcoming the rejections based on Menshen, only one of which related to the invention's material composition. TX 241.135. The PTO did not specify which amendments were relevant to its allowance of the claims. TX 241.184.

With respect to Claim 25 of the '003 Patent, Inline's assertion that Menshen disclosed an aluminum container was not relevant to that claim, as Claim 25 was never rejected based on Menshen and Inline never distinguished Menshen based on its disclosure of an aluminum container with respect to that claim. TX 241.117-19, 137-52.

6. The '680 Patent Prosecution

With respect to the '680 Patent, Inline argued that Menshen was aluminum only in connection with Claim 25, which Inline later cancelled. TX 242.149, 208. Inline distinguished the claims that were ultimately allowed on various grounds unrelated to whether Menshen was aluminum, including but not limited to, the round shape of the container (Claim 1), the inclusion of a lock feature (Claim 1), the inclusion of a projection that extends out beyond the upwardly projecting bead (Claim 2), and the inclusion of a downwardly depending skirt (Claim 3). TX 242.143-242.144; TX 241.149. Inline also made amendments to the claims which were unrelated to whether Menshen was aluminum. TX 242.202-09.

During an April 19, 2006, interview with the Examiner, Inline's counsel proposed amendments to Claims 10 and 18 that included adding an amendment to require the hinge to include a frangible section, which upon severing provides a projection (including tabs, Claim 18) that facilitates removal of the cover from the base. TX 242.202-09. The proposed set of claims also reflected that Claim 25, the claim having the "plastic" limitation, would be cancelled. TX 242.202-09. In the Interview Summary, Examiner Ngo indicated that the Examiner agreed that the proposed amendment of Claims 10 and 18 would overcome Menshen, and that Claims 25 and 26 should be canceled. TX 242.200.

On the same day as the interview, Attorney Pollack filed a Response After Final under 37 C.F.R. § 1.116 in which Claims 10 and 18 were amended as proposed and Claim 25 was cancelled. TX 242.208. None of the independent claims of the issued '680 Patent, namely Claims 1, 10 and 17, require the claimed container to be plastic. TX 2.17-18.

7. Subsequent Patent Prosecutions

The Examiner did not reject any of Inline's subsequent patents in the family as anticipated by Menshen, or obvious over Menshen in combination with any other reference. TX 243; TX 244; TX 245. Menshen was cited in an Information Disclosure Statement by Inline Plastics in each of the subsequently filed related applications which matured into the '580 Patent, the '756 Patent, and the '640 Patent. TX 243.72; TX 244.73; TX 245.85. It was never argued or suggested during the prosecution of those applications that Menshen disclosed an aluminum container. TX 243; TX 244; TX 245.

During the prosecution of the '580 Patent, Inline submitted to the PTO papers from the then-pending litigation between Inline and EasyPak, which was also represented by Lacerta's lead counsel, Attorney Scott. TX 244.636-664. EasyPak had sought to amend its invalidity

contentions to allege that the patents were invalid because 4Sight should have been included as an inventor. Inline submitted to the PTO Lacerta's brief, Inline's response, and deposition testimony of 4Sight's witness, Leslie. TX 244.636-664. In its response, Inline argued that EasyPak failed to point to a natural person from 4Sight that should be considered an inventor and noted that Leslie testified that he did not even know who drew the concept sketches. TX 244.662. The examiner still issued the claims and did not reject the patent for failure to name all inventors. TX 244.776.

8. Inline's Litigation Positions Regarding Menshen

Dr. Kazmer, Inline's expert, initially adopted Inline's representations before the PTO that Menshen discloses an aluminum container and teaches away from the plastic container of the claimed invention in his rebuttal validity report. [ECF No. 397-1 ¶ 510; ECF No. 394 at 15-16]. During the February 2022 jury trial, however, Inline elicited testimony from Dr. Kazmer that Menshen discloses an injection molded, meaning plastic, container. [ECF No. 395-2 at 41 (2022 Trial Tr. 12-240:9-25)]. In June 2022 post-trial briefing, Inline admitted that Dr. Kazmer had determined prior to the February 2022 trial that Menshen does not disclose an aluminum container. [ECF No. 399 at 20].

Despite Dr. Kazmer's changed opinion, during closing argument in the 2024 jury trial, Inline argued to the jury that Menshen discloses an aluminum container. Tr. 6-171:16-172:5. Inline made such arguments to the jury during closing notwithstanding the absence of any such evidence from Dr. Kazmer, who maintained Menshen can be injection molded, or any other witness. Tr. 5-121:8-17 (Kazmer); Tr. 6-171:20-172:5.

At no time during the prosecution of any patent-in-suit or any subsequent patents in the same family, including the applications that were pending at the time Dr. Kazmer changed his

opinion at the 2022 trial, has Inline corrected its representation to the PTO regarding Menshen. TX 243; TX 244; TX 245.²

9. Mr. Orkisz's Testimony Regarding Menshen

Mr. Orkisz testified that he did not review Menshen before it was discussed with the PTO and has not read Menshen. Bench Tr. 1-30:19, 1-31:17–18 (Orkisz); Bench Tr. 2-51:17–19 (Orkisz). Mr. Orkisz testified that he does not know whether Menshen teaches or claims an aluminum container. Bench Tr. 1-39:2-10 (Orkisz). Mr. Orkisz testified that he did not direct Inline's counsel to misrepresent Menshen to the PTO. Bench Tr. 1-34:11-14 (Orkisz).

However, as already noted, during the bench trial, Mr. Orkisz vacillated between not knowing anything about Menshen to stating "I seem to recall Menshen was like aluminum. I seem to recall that." Bench Tr. 1-31:15-33:10 (Orkisz). When asked from where this recollection came, Mr. Orkisz testified it came from "dialogue with attorneys and just the - - the chatter that goes on when you're applying for a patent and the back-and-forth action that happens." Bench Tr. 1-32:22-33:10 (Orkisz). During his continued examination the following week, Mr. Orkisz had no recollection of any such discussion with counsel. Bench Tr. 2-52:18-53:2 (Orkisz).

Mr. Orkisz testified that Mr. Stein interfaced with patent counsel and was "the lead person in the prosecution of the patents." Bench Tr. 2-51:23-52:1, 2-53:3-6 (Orkisz). However, Inline did not call Mr. Stein as a witness during the bench trial portion on inequitable conduct.

² The Court notes that Mr. Orkisz testified that he did not remember whether representations to the PTO regarding Menshen were corrected. Bench Tr. 2-45:6-16 (Orkisz). As discussed *infra*, the Court finds significant issues with Mr. Orkisz's credibility and, accordingly, will not credit his testimony on this or related matters.

10. Other Participants in Patent Prosecution

Each of the relevant exchanges with the PTO in connection with the '003 and '680 Patents were conducted between Attorney Pollack and the patent examiner assigned to the application. TX 241; TX 242. None of the documents cited by Lacerta that relate to the substantive prosecution of Inline's patents were directed to or included Orkisz.

Evidence exists of communications between Attorney Pollack and Ozzie Parente, V.P. of Administration and General Counsel, and Bruce Stein, Manager of Research and Development, relating to patent prosecution. TX 589; TX 749; TX 870. Lacerta did not depose Parente and offered no testimony from him. Lacerta did not call Attorney Pollack as a witness.

11. The Difference Between Aluminum and Plastic Containers

The difference between an aluminum container and a plastic container is material. Bench Tr. 1-34:24-35:7 (Orkisz) (testifying that due to the material difference between a container made of aluminum and a container made of plastic, Inline could represent to the patent examiner that the Menshen reference was not prior art).

C. Credibility Determinations

1. Mr. Orkisz's Credibility Regarding Inventorship

The Court observes that Mr. Orkisz presented himself to the jury as intimately involved in all aspects of Inline's innovation and patent development during the jury trial, yet during the bench trial on inequitable conduct, he claimed minimal knowledge or involvement. Bench Tr. 2-25:23-26:4, 2-28:4-24, 2-37:8-12 (Orkisz).

Mr. Orkisz's testimony regarding 4Sight's role was evasive and contradictory. He attempted to minimize 4Sight's contributions by claiming they had "nothing to do with the Safe-T-Fresh project" despite documentary evidence showing that Inline discussed tamper-evident

packaging with 4Sight and that 4Sight created design drawings depicting containers with tear strips. Tr. 3-20:18-22 (Orkisz).

The Court observes that Mr. Orkisz purposely prevented the matter from being prosecuted by being obstructionist. Bench Tr. 2-26:7-18 (Orkisz). He falsely presented himself as having no knowledge or recollection of fundamental facts. Bench Tr. 1-22:1-19, 1-43:11-44:14 (Orkisz). Mr. Orkisz dragged his feet at every turn, refusing to answer yes or no questions unless confronted with a document that forced him to answer. Bench Tr. 1-38:18-40:05 (Orkisz); Bench Tr. 2-24:14-21 (Orkisz). The Court permitted opposing counsel to lead Mr. Orkisz testimony due to Mr. Orkisz evasiveness. Bench Tr. 2-24:17-21 (Orkisz).

2. Mr. Orkisz's Credibility Regarding Menshen

Mr. Orkisz's testimony regarding Menshen was likewise inconsistent and evasive. Initially, he testified that he seemed to recall Menshen was "like aluminum" based on "dialogue with attorneys" during the "back and forth action" when applying for a patent. Bench Tr. 1-32:22-33:9 (Orkisz). However, during his continued examination the following week, he had no recollection of any such discussion with counsel. Bench Tr. 2-52:18-53:2 (Orkisz).

At other times, Mr. Orkisz claimed he did not review Menshen before it was discussed with the PTO, has not read Menshen, does not know whether Menshen teaches or claims an aluminum container, and did not direct Inline's counsel to misrepresent Menshen to the PTO. Bench Tr. 1-30:19, 1-31:17-18, 1-39:2-10 (Orkisz); Bench Tr. 2-51:17-22 (Orkisz).

Mr. Orkisz's selective memory and inability to provide straight answers when questioned by Lacerta's counsel, contrasted with his ability to remember details when it served Inline's interests, undermines his credibility. The Court observes that Mr. Orkisz either misrepresented

himself to the jury as being in control of Inline and its patents and innovation, or he misrepresented himself to the Court as being incompetent to testify as to any fact or issue relating to Lacerta's inequitable conduct allegations. Bench Tr. 2-37:8-12 (Orkisz).

3. The Named Inventors' Testimony

The named inventors provided contradictory testimony regarding their contributions to the invention. Tr. 2-90:22-91:1 (Stein); Tr. 2-133:5-8 (Orkisz); Tr. 3-73:22-24 (Sellari); Tr. 3-85:2-4, 3-86:11-16 (Boback); Tr. 3-115:25-116:14 (Klimaszewski). Each claimed that his individual contribution was the tear strip, yet their accounts conflicted with one another. Id. Mr. Boback testified that his contribution was the "combination hinge and tear strip detail" and that Mr. Sellari had no role in conceiving that idea. Tr. 3-85:2-4, 3-86:11-16 (Sellari). However, Mr. Sellari testified that he contributed the tear strip. Tr. 3-73:22-24 (Sellari).

Mr. Stein was careful to testify that the concept of a functioning tear strip was his idea, yet he also testified that the first thing he did on the Safe-T-Fresh project was determine whether Inline could make a tear strip that would function, and that he became involved when "the other design team hit a wall." Tr. 2-90:22-91:1, 2-92:2-5, 2-92:16-18 (Stein). This suggests that the tear strip concept already existed when Mr. Stein became involved.

The vagueness and contradictions in the named inventors' testimony regarding their contributions, combined with the fact that none of them began work on the project until November 2002 after receiving the 4Sight drawings in October 2002, raises questions about the accuracy of their accounts.

III. CONCLUSIONS OF LAW

A. Inequitable Conduct

“Inequitable conduct is an equitable defense to patent infringement that, if proved, bars enforcement of a patent.” Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1285 (Fed. Cir. 2011). The defense of inequitable conduct is entirely equitable in nature, and thus not an issue for a jury to decide. PerSeptive Biosystems, Inc. v. Pharmacia Biotech, Inc., 225 F.3d 1315, 1318 (Fed. Cir. 2000).

Central to patent prosecution is the duty for applicants to prosecute their patent applications in the PTO with candor, good faith, and honesty. GS Cleantech Corp. v. Adkins Energy LLC, 951 F.3d 1310, 1330 (Fed. Cir. 2020). If inequitable conduct is found, the remedy is known as the “atomic bomb” of patent law, rendering the entire patent unenforceable. Therasense, 649 F.3d at 1288. The severity of this remedy is distinct from validity defenses. Id. While validity defenses are claim specific, inequitable conduct regarding any single claim renders the entire patent unenforceable. Id. Further, “the taint of a finding of inequitable conduct can spread from a single patent to render unenforceable other related patents and applications in the same technology family.” Id. at 1288-89.

To prevail on the defense of inequitable conduct, the accused infringer must prove that: (1) an individual associated with the filing and prosecution of a patent application made an affirmative misrepresentation of material fact, failed to disclose material information, or submitted false material information; and (2) the individual did so with specific intent to deceive the PTO. Exergen Corp. v. Wal-Mart Stores, Inc., 575 F.3d 1312, 1327 n.3 (Fed. Cir. 2009). These threshold determinations, materiality and intent, are reviewed under the clearly erroneous

standard of Federal Rule of Civil Procedure 52(a). PerSeptive Biosystems, Inc., 225 F.3d at 1319.

Once the accused infringer has established both the requisite elements, the Court must then balance the substance of those now-proven elements and all the equities of the case “to determine if the applicant’s conduct before the PTO warrants rendering the entire patent unenforceable.” Therasense, 649 F.3d at 1287; accord Star Sci., Inc. v. R.J. Reynolds Tobacco Co., 537 F.3d 1357, 1367 (Fed. Cir. 2008). This judgment should be made considering all the circumstances. Siemens Gamesa Renewable Energy A/S v. GE Co., 617 F. Supp. 3d 55, 62 (D. Mass. 2022); PerSeptive Biosystems, Inc., 225 F.3d at 1319. Courts must be vigilant in not permitting the defense to be applied too lightly because while it would be inequitable to permit a patentee who obtained a patent through deliberate misrepresentation or omissions of material information to enforce the patent against others, it would be equally inequitable to strike down an entire patent where the patentee only committed minor missteps or acted with minimal culpability or in good faith. Star Sci., Inc., 537 F.3d at 1366.

Materiality and intent are assessed separately and cannot be conflated. Therasense, 649 F.3d at 1290. The Federal Circuit has disallowed the use of a “sliding scale,” under which a strong showing of materiality could compensate for weak evidence of intent, or vice versa. Therasense, 649 F.3d at 1290. Indeed, materiality does not presume intent, and intent cannot be inferred solely from the materiality of the information. Id.; GFI, Inc. v. Franklin Corp., 265 F.3d 1268, 1274 (Fed. Cir. 2001).

The materiality required to establish inequitable conduct is but-for materiality. Therasense, 649 F.3d at 1291. A reference is but-for material if the PTO would not have allowed the claim had it been aware of the undisclosed prior art. Id. In making this determination, the

Court applies a preponderance of the evidence standard and gives the claims their broadest reasonable interpretation. Id. at 1291-92. Information may be considered material for the purposes of establishing inequitable conduct if there is or was a “substantial likelihood that a reasonable patent examiner would have considered the information important in deciding whether to approve a patent.” Honeywell Int’l Inc. v. Universal Avionics Sys. Corp., 488 F.3d 982, 1000 (Fed. Cir. 2007). However, the fact that information later found but-for material was not disclosed cannot, by itself, establish deceptive intent. Star Sci., Inc., 537 F.3d at 1366.

An exception to the but-for materiality requirement exists where the patentee has engaged in affirmative acts of egregious misconduct. See In re Method of Processing Ethanol Byproducts & Related Subsystems (‘858) Pat. Litig., No. 110CV00180LJMDML, 2016 WL 4919980, at *25 (S.D. Ind. Sept. 15, 2016), aff’d sub nom. GS Cleantech Corp., 951 F.3d at 1329; see, e.g., Therasense, 649 F.3d at 1292 (finding the filing of an unmistakably false affidavit was an affirmative act of egregious material misconduct). The rationale being that a patentee is unlikely to go through great lengths to deceive the PTO with falsehoods unless under the impression that the falsehood will affect issuance of the patent. Therasense, 649 F.3d at 1292. The failure to correct statements that are “patently false” can similarly demonstrate “strong evidence of intentional deceit.” GS Cleantech Corp., 951 F.3d at 1330.

The inequitable conduct defense requires the accused infringer to prove that the applicant misrepresented or omitted material information with the specific intent to deceive or defraud the PTO. Therasense, 649 F.3d at 1287. The standard of proof in a misrepresentation or omission case is clear and convincing evidence. Id. A gross negligence or “should have known” standard is insufficient to compel a finding of intent to deceive. See Kingsdown Medical Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 876 (Fed. Cir. 1988). Rather, “the involved conduct, viewed in

light of all the evidence, including evidence indicative of good faith, must indicate sufficient culpability to require a finding of intent to deceive.” Id.

“Because direct evidence of deceptive intent is rare, a district court may infer intent from indirect and circumstantial evidence.” Therasense, 649 F.3d at 1290. However, the specific intent to deceive or defraud the PTO must be the single most reasonable inference. Star Sci., Inc., 537 F.3d at 1366. When there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found. Therasense, 649 F.3d at 1290-91; Scanner Techs. Corp. v. ICOS Vision Sys. Corp., 528 F.3d 1365, 1376 (Fed. Cir. 2008) (“Whenever evidence proffered to show either materiality or intent is susceptible of multiple reasonable inferences, a district court clearly errs in overlooking one inference in favor of another equally reasonable inference.”). The Court is permitted to infer intent where there is a pattern of deceptive conduct and lack of candor. Regeneron Pharm., Inc. v. Merus N.V., 864 F.3d 1343, 1351 (Fed. Cir. 2017) (finding intent to deceive the PTO where the applicant repeatedly makes factual representations contrary to the true information he had in his possession). Only after materiality and intent are established “does the decisionmaker exercise its discretion to decide whether, considering all the circumstances, inequitable conduct should be found.” Hupp v. Siroflex of America, Inc., 122 F.3d 1456, 1465 (Fed. Cir. 1997).

B. Inventorship

1. Legal Standards

Inventorship is a question of law which is premised on underlying questions of fact, and thus appropriate for the Court to determine. GE Co., 617 F. Supp. 3d at 62. The inventors named in an issued patent are presumed correct and can only be disproven by a clear and convincing standard. GE Co., 617 F. Supp. 3d at 62-3 (citing Univ. of Pittsburgh of Commonwealth Sys. of

Higher Educ. v. Hedrick, 573 F.3d 1290, 1297 (Fed. Cir. 2009)). The burden to prove improper inventorship is on the alleged infringer. Star Sci., Inc., 537 F.3d at 1365. A “patentee need not offer any good faith explanation unless the accused infringer first prove[s] a threshold level of intent to deceive by clear and convincing evidence.” Id. at 1368 (quoting Nordberg, Inc. v. Telsmith, Inc., 82 F.3d 394, 398 (Fed. Cir. 1996)).

Inventorship, determining who conceived the patent, can be material as it is a critical requirement for obtaining a patent. PerSeptive Biosystems, Inc., 225 F.3d at 1321. Pursuant to 35 U.S.C. § 116(a),

[w]hen an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent.

Id. If a joint inventor refuses to join the application for a patent or cannot be found after diligent effort, then the patent application may be made by the other joint inventors on behalf of themselves and the omitted inventor, with leave for the omitted inventor to subsequently join the application. 35 U.S.C. § 116(b).

To be a joint inventor, one must: “(1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventor well-known concepts and/or the current state of the art.” Pannu v. Iolab Corp., 155 F.3d 1344, 1351 (Fed. Cir. 1998). There is “no explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor.” Eli Lilly & Co. v. Aradigm

Corp., 376 F.3d 1352, 1358 (Fed. Cir. 2004) (quoting Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997)).

Conception is the touchstone of inventorship, consisting of the completion of the mental part of invention. GE Co., 617 F. Supp. 3d at 63. Conception is complete only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation. Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994); Dana-Farber Cancer Inst., Inc. v. Ono Pharm. Co., 964 F.3d 1365, 1372 (Fed. Cir. 2020) (holding conception is complete when an idea is definite and permanent enough that one of skill in the art could understand the invention). “An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan.” Burroughs Wellcome, 40 F.3d at 1228 (citing Fiers v. Revel, 984 F.2d 1164, 1169 (Fed. Cir. 1993)). “Because it is a mental act, courts require corroborating evidence of a contemporaneous disclosure that would enable one skilled in the art to make the invention.” Id. (citing Coleman v. Dines, 754 F.2d 353, 359 (Fed. Cir. 1985)). As such, a “bare idea” or “general hope” of an invention is not enough for conception. Id. at 1220-30. “[A]n inventor need not know, however, that an invention will work for its intended purpose in order for conception to be complete, as verification that an invention actually works is part of its reduction to practice.” Dana-Farber Cancer Inst., 964 F.3d at 1372.

Under the Patent Act of 1952, 35 U.S.C. §§ 1 et seq., conception and reduction to practice are distinct stages of invention, with conception referring to the mental formulation of the idea and reduction to practice referring to its actual embodiment or testing. One who simply reduce[s] the inventor's idea to practice” or “provides the inventor with well-known principles or explains the state of the art” does not qualify as a joint inventor. Siemens Gamesa Renewable

Energy A/S v. GE Co., 617 F. Supp. 3d 55, 63 (D. Mass. 2022). “People may be joint inventors even though they do not physically work on the invention together or at the same time, and even though each does not make the same type or amount of contribution.” Burroughs Wellcome, 40 F.3d at 1227 (citing 35 U.S.C. § 116). “If an inventor seeks the input or advice of another in reducing an invention to practice such input or advice does not automatically rise to the level of joint inventorship. . . . The analysis turns on whether that contribution contains the necessary element of ‘conception’ and thereby rises beyond the simple reduction to practice of the inventor’s previously conceived idea.” Murdock Webbing Co. v. Dalloz Safety, Inc., 213 F. Supp. 2d 95, 100 (D.R.I. 2002). However, inventors may consult with others during development without rendering each consultant a co-inventor. Abbott Biotechnology Ltd. v. Centocor Ortho Biotech, Inc., 35 F. Supp. 3d 163, 171 (D. Mass. 2014).

If an error is made in naming the inventors, the PTO Director may permit the application to be amended. 35 U.S.C. § 116(c). Although section 256 permits correction of inventorship when an omitted inventor acted without deceptive intent, a patent remains vulnerable to unenforceability for inequitable conduct if the named inventors themselves intentionally omitted co-inventors. See Stark v. Advanced Magnetics, Inc., 119 F.3d 1551, 1556 (Fed. Cir. 1997).

2. Materiality

As inventorship is a critical requirement for obtaining a patent, inventorship is material. PerSeptive Biosystems, Inc., 225 F.3d at 1321. The Court concludes that Lacerta has proven by clear and convincing evidence that Stuart Leslie and Richard Curtiss of 4Sight were joint inventors of the Patents-in-Suit, and that Inline’s failure to name them as inventors was material.

The October 2002 4Sight drawings depicted a one-piece, hinged thermoformed plastic container with a tear strip consisting of at least one line of weakness that must be removed to

open the container, a buried cover flange, a base skirt extending around the perimeter, and peripheral locks. TX 741; TX 845; Tr. 2-76:9-77:11 (Stein); Tr. 3-27:3-30:24 (Orkisz). These elements materially contributed to the conception of the claimed inventions.

The 4Sight drawings reflect a definite and permanent idea, a particular solution to the problem of creating a tamper-evident container, not just a general goal or research plan. See In re VerHoef, 888 F.3d at 1366; Dana-Farber Cancer Inst., 964 F.3d at 1372. 4Sight's contribution of the combination of elements depicted in the October 2002 drawings constitutes a key contribution to the conception of at least one claim of each of the Patents-in-Suit. TX 741; TX 845; see Blue Gentian, LLC v. Tristar Prods., Inc., 70 F.4th 1351, 1362 (Fed. Cir. 2023) (holding that the proper lens for determining inventorship requires considering the elements in combination, not in isolation, and it is the significance of the overall contribution that matters for determining inventorship, not the significance of certain elements standing alone).

The fact that none of the named inventors began work on the invention until November 2002 or later, Tr. 2-126:16-21 (Stein); Tr. 3-73:19-21 (Sellari); Tr. 3-84:23-85:1 (Boback), after receiving the 4Sight drawings in October 2002, TX 741; TX 845; Leslie Dep. 37:22-38:4 (2020); Tr. 2-74:13-76:8 (Stein), further supports the conclusion that Leslie and Curtiss conceived of key aspects of the claimed inventions. The named inventors' testimony that each contributed the tear strip feature, despite conflicting accounts, Tr. 2-90:22-91:1 (Stein); Tr. 3-73:22-24 (Sellari); Tr. 3-85:2-4, 3-86:11-16 (Boback), combined with Mr. Orkisz's acknowledgment that the tear strip that must be removed to open the container was 4Sight's concept, Tr. 3-30:21-24 (Orkisz), demonstrates that 4Sight conceived of this critical inventive feature.

Inline lauded the tear strip as the critical inventive step in its patents and submitted declarations to the PTO emphasizing the tear strip feature. TX 241.154-157; TX 241.177-81; TX

242.156-159. Mr. Orkisz testified that Inline was the first company to conceive of product packaging containing a tear strip. Tr. 2-133:5-8 (Orkisz). Inline has praised its “unique, patented pull tear strip” as inventive. TX 212.14. Yet the evidence establishes that 4Sight provided drawings depicting containers with tear strips in October 2002, TX 741; TX 845, before any named inventor began work on the project. Inline’s submission to the PTO of declarations from the named inventors attesting that they were the original, first and joint inventors of the subject matter claimed in the applications for the Patents-in-Suit was material. These declarations were false because they omitted Leslie and Curtiss as joint inventors. The omission of a co-inventor with deceptive intent may render a patent unenforceable for inequitable conduct. Stark, 119 F.3d at 1555-56.

The Court therefore concludes that Leslie and Curtiss made contributions to the conception of the claimed inventions that were not insignificant in quality when measured against the dimension of the full invention, and that they did more than merely explain well-known concepts or the current state of the art to the named inventors. Pannu, 155 F.3d at 1351. Accordingly, Leslie and Curtiss qualify as joint inventors on the Patents-in-Suit.

3. Specific Intent

The Court concludes that Lacerta has proven by clear and convincing evidence that Inline, through Mr. Orkisz, acted with specific intent to deceive the PTO when it omitted Leslie and Curtiss as inventors on the Patents-in-Suit.

The inequitable conduct analysis focuses not only on the fact of inventorship itself, but also statements and representations made to the PTO, including statements and representations as to inventorship. GE Co., 617 F. Supp. 3d at 66. Because direct evidence of deceptive intent is rare, a district court may infer intent from indirect and circumstantial evidence. Therasense, 649

F.3d at 1290. However, the specific intent to deceive or defraud the PTO must be the single most reasonable inference. Star Sci., Inc., 537 F.3d at 1366.

The record demonstrates that specific intent to deceive the PTO is the single most reasonable inference that can be drawn from the following circumstances:

First, Leslie and Curtiss of 4Sight first conceived the tear strip feature that Inline claims is a key inventive feature of the Patents-in-Suit, Tr. 2-133:5-8 (Orkisz); TX 241.154-157; TX 241.177-81; TX 242.156-159, and presented drawings with that and other claimed features to Inline in October 2002. TX 741; TX 845; Tr. 2-74:13-76:8 (Stein). None of the inventors named on the Patents-in-Suit performed any work on a tear strip or any tamper-resistant/tamper-evident container for Inline prior to 4Sight's October 2002 disclosure of the tear strip concept to Inline. Tr. 2-126:16-21 (Stein); Tr. 3-73:19-21 (Sellari); Tr. 3-84:23-85:1 (Boback).

Second, Inline has maintained an invention date of late 2002, Tr. 3-40:12-16 (Orkisz); TX 863.5; Tr. 6-202:16-23, even though none of the named inventors began work on the Safe-T-Fresh project until November 2002 at earliest, Tr. 2-126:16-21 (Stein); Tr. 3-73:19-21 (Sellari); Tr. 3-84:23-85:1 (Boback), and it took Inline 9-10 months from that date to develop a working prototype. Tr. 2-96:18-97:21 (Stein testifying it took 18 months from November 2002 to develop a commercial product). This temporal inconsistency, combined with the fact that the 4Sight drawings were provided in October 2002, TX 741; TX 845; Tr. 2-74:13-76:8, suggests that Inline backdated its invention date to exclude 4Sight from inventorship.

Third, the named inventors offered contradictory and vague testimony as to what they contributed to the claimed invention. Each claimed credit for the tear strip feature, yet their accounts conflicted with one another. Tr. 3-73:22-24 (Sellari testifying that he contributed to the

tear strip feature after January 13, 2003); Tr. 2-90:22-91:1 (Stein testifying that the “concept of a functioning tear strip” was his idea); Tr. 3-85:2-4, 3-86:11-16 (Boback testifying that his contribution was the “combination hinge and tear strip detail” and that Sellari had no role in conceiving that idea). This lack of consistency undermines their credibility and suggests a coordinated effort to claim credit for work actually performed by 4Sight.

Fourth, after Inline requested referrals to packaging patent attorneys from 4Sight in April 2003, TX 747, Inline never contacted 4Sight again regarding this project. Leslie Dep. 48:5-9 (2020). Then in July 2003, Inline filed a provisional patent application that did not name Leslie or Curtiss as inventors and did not otherwise acknowledge any contribution of 4Sight to the claimed invention. TX 750; Bench Tr. 1-13:5-15:24 (Orkisz). This sequence of events suggests a deliberate effort to cut 4Sight out of the patent process after obtaining valuable design concepts from them. TX 748 (February 6, 2003, invoice from 4Sight for the “range of innovative new thermal formed” food containers that “4Sight . . . created”).

Fifth, Mr. Orkisz was the driving force behind the Safe-T-Fresh initiative and personally directed decisions regarding its development. TX 259; TX 272; TX 262; Tr. 2-94:10-18 (Stein testifying he got involved at Mr. Orkisz’s request); Tr. 6-61:22-68:11, 6-75:8-79:20 (Orkisz testifying about his leadership role). He confirmed that Inline’s patent attorneys acted under Inline’s authority in prosecuting the Patents-in-Suit. Bench Tr. 1-29:13-30:1 (Orkisz). Evidence exists of Mr. Orkisz’s involvement in Inline’s patent prosecutions. TX 869; TX 870; TX 871; Bench Tr. 2-9:18-20, 2-39:10-41:9, 2-41:23-42:2. The Court may infer substantive involvement where the patentee’s founder and president participated in all aspects of company operations, appeared in patent-related communications, and gave testimony that was not credible. Avid Identification Sys. Inc. v. Crystal Import Corp., 603 F.3d 967, 974-76 (Fed. Cir. 2010).

Sixth, Mr. Orkisz's testimony regarding 4Sight's contributions and inventorship was evasive, contradictory, and not credible. Courts have affirmed the finding of intent to deceive where the named inventor offered evasive, argumentative, and contradictory testimony about their status as an inventor and was unable and/or unwilling to articulate their own claimed invention. Advanced Magnetic Closures, Inc. v. Rome Fastener Corp., 607 F.3d 817, 830 (Fed. Cir. 2010). Here, Mr. Orkisz attempted to minimize 4Sight's role by claiming they had nothing to do with the Safe-T-Fresh project despite documentary evidence to the contrary. Tr. 1-20:18-22. He dragged his feet when questioned, refusing to answer yes or no questions. Bench Tr. 1-38:11-39:10 (Orkisz); Bench Tr. 2-24:14-21 (Orkisz). When Inline called Mr. Orkisz to support its validity case before the jury, he was able to testify in detail about the purported benefits of Inline's claimed inventions, Tr. 6-61:22-68:11, 6-75:8-79:20 (Orkisz), yet during the inequitable conduct bench trial, he systematically denied any knowledge or memory of the patents or events in question. Bench Tr. 2-25:23-26:4, 2-28:4-24, 2-37:8-12 (Orkisz).

The Court may find intent to deceive where the patentee's founder and chairman, despite attempting to disclaim knowledge of the prosecution, was found to be highly familiar with patent prosecution and enforcement litigation, selectively lacked memory at trial, and was deemed not credible. Apotex Inc. v. UCB, Inc., 763 F.3d 1354, 1359-60 (Fed. Cir. 2014). Mr. Orkisz's conduct fits this pattern. He presented himself to the jury as intimately involved in all aspects of Inline's innovation and patent development, Tr. 6-61:22-68:11, 6-75:8-79:20 (Orkisz), yet claimed minimal knowledge during the bench trial on inequitable conduct. Bench Tr. 2-25:23-26:4, 2-28:4-24, 2-37:8-12 (Orkisz). This selective memory and inability to provide straight answers undermines his credibility.

Intent may also be inferred where the inventors' testimony reflects a complete disregard for the patent prosecution process and their duty of candor to the PTO. In re Method of Processing Ethanol Byproducts & Related Subsystems ('858) Pat. Litig., 2016 WL 4919980, at *11. The named inventors' contradictory testimony regarding their contributions, Tr. 2-90:22-91:1 (Stein); Tr. 3-73:22-24 (Sellari); Tr. 3-85:2-4, 3-86:11-16 (Boback), combined with Mr. Orkisz's evasive conduct, reflects such a disregard.

Deceptive intent as to inventorship may be found based on the aggregate of the patentee's conduct. Apotex, 763 F.3d at 1362 (affirming finding of deceptive intent based on the cumulative effect of the patentee's conduct, which demonstrated a pattern of lack of candor toward the PTO); PerSeptive Biosystems, 225 F.3d at 1321 (affirming that the patentee's persistent course of material misrepresentation, omissions, and half-truths to the PTO established by clear and convincing evidence deceptive intent on inventorship). Here, the aggregate of the circumstances demonstrates a pattern of conduct designed to exclude 4Sight from inventorship despite their significant contributions to the conception of the claimed inventions. Tr. 2-76:9-77:11 (Stein); Tr. 3-27:3-30:24 (Orkisz); TX 741; TX 845.

The Court finds no reasonable alternative inference that explains this pattern of conduct. The temporal sequence of events—4Sight providing the drawings in October 2002, TX 741; TX 845; Tr. 2-74:13-76:8, the named inventors not beginning work until November 2002 or later, Tr. 2-126:16-21 (Stein); Tr. 3-73:19-21 (Sellari); Tr. 3-84:23-85:1 (Boback), Inline requesting patent attorney referrals in April 2003, TX 747, ceasing contact with 4Sight, Leslie Dep. 48:5-9 (2020), and filing the provisional application without naming Leslie or Curtiss in July 2003, TX 750—the contradictory testimony, Mr. Orkisz's evasive conduct, and the deliberate cessation of contact with 4Sight immediately before filing the provisional application all point to a deliberate

decision to exclude Leslie and Curtiss from inventorship. Accordingly, the Court concludes that specific intent to deceive the PTO is the single most reasonable inference.

4. Balancing and Equitable Considerations

Having found both materiality and intent to deceive with respect to inventorship, the Court must balance the substance of those elements and all the equities of the case to determine if the applicant's conduct before the PTO warrants rendering the entire patent unenforceable. Therasense, 649 F.3d at 1287. The Court concludes that the equities favor a finding of inequitable conduct. Inline deliberately omitted true joint inventors from the Patents-in-Suit and submitted false declarations to the PTO stating that the named inventors were the original, first and joint inventors. Inline obtained patents on inventions that were significantly conceived by Leslie and Curtiss of 4Sight, TX 741; TX 845; Tr. 3-30:21-24, yet excluded them from inventorship and profited from the patents without acknowledging their contributions. See TX 748.

The conduct here was not a minor misstep or an act of minimal culpability. Rather, it amounts to a deliberate scheme to exclude joint inventors after obtaining valuable design concepts from them. The severity of the conduct, combined with Mr. Orkisz's evasive and non-credible testimony designed to obscure the truth, Bench Tr. 1-38:11-39:10 (Orkisz); Bench Tr. 2-24:14-21, 2-25:23-26:4, 2-28:4-24, 2-37:8-12 (Orkisz); Bench Tr. 3-38:11-39:10 (Orkisz), warrants rendering the patents unenforceable. Accordingly, the Court concludes that Inline's deceptive failure to name Leslie and Curtiss as inventors renders the Patents-in-Suit unenforceable due to inequitable conduct.

C. Prior Art Misrepresentations

1. Legal Standards

A patent is invalid if it is anticipated by, or is obvious considering, prior art as defined by 35 U.S.C. §§ 102, 103. As relevant here, Section 102 provides:

A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

...

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language

35 U.S.C. §§ 102(a), (e). In the context of inequitable conduct claims, prior art is “but-for” material if the PTO would have rejected the claim had it been aware of the undisclosed information. Therasense, 649 F.3d at 1291. While a patentee may advocate in good faith for a reasonable interpretation of prior art, it may not “affirmatively and knowingly misrepresent material facts regarding the prior art.” Apotex, 763 F.3d at 1362.

Misrepresentations to the PTO may constitute but-for materiality where the examiner initially rejected the claims based on prior art but subsequently allowed the claims after being misled by inaccurate characterizations of that same prior art. Apotex, 763 F.3d at 1361. However, courts have clarified that the mere failure to disclose material information, standing alone, is insufficient to show deceptive intent. See Star Sci., Inc., 537 F.3d at 1366.

Attorney argument interpreting prior art that the examiner has access to and is therefore free to reach his or her own conclusions about it, does not constitute an affirmative misrepresentation of a material fact. Innogenetics, N.V. v. Abbott Labs, 512 F.3d 1363, 1379 (Fed. Cir. 2008). Evidence that an applicant attempted to distinguish the patent-in-suit from the prior art does not constitute a material omission or misrepresentation. Akzo N.V. v. U.S. Int'l Trade Comm'n, 808 F.2d 1471, 1482 (Fed. Cir. 1986). Examiners are free to reach their own conclusions and determine if there are in fact distinctions. Id. Furthermore, because only individuals, rather than corporations, owe a duty of candor to the PTO, a specific individual who was “substantively involved in the preparation or prosecution of the application” and “associated with the inventor or assignee” must be shown to have committed the misconduct. 37 C.F. R. § 1.56(c)(3).

Intent to deceive may be inferred where a patentee provides a partial disclosure of material information about the prior art if the disclosure is intentionally selective. Am. Calcar, Inc. v. Am. Honda Motor Co., 768 F.3d 1185, 1190 (Fed. Cir. 2014). Even where the PTO has access to complete information, a misleading affidavit or partial provision of prior art could leave the examiner with the impression that no further investigation was necessary. eSpeed, Inc. v. BrokerTec USA, L.L.C., 480 F.3d 1129, 1136 (Fed. Cir. 2007).

2. Materiality

The Court concludes that Lacerta has not proven by clear and convincing evidence that Inline’s statements regarding Menshen were but-for material to the allowance of the claims in the Patents-in-Suit.

Inline maintained to the PTO that Menshen disclosed an aluminum container and that Menshen cannot be combined with prior art references disclosing plastic containers. TX

241.142-143. The Examiner accepted Inline's arguments and withdrew anticipation and obviousness rejections based on Menshen. TX 241.209-10, TX 241.226; TX 242.200, TX 242.214. Nevertheless, the but-for materiality inquiry requires the Court to determine whether the PTO would not have allowed the claims had it been aware of accurate information about Menshen. Therasense, 649 F.3d at 1291.

With respect to the '003 Patent, Inline made four substantive amendments to Claim 1 before overcoming the rejections based on Menshen, only one of which related to the invention's material composition. TX 241.135. The PTO did not specify which amendments were relevant to its allowance of the claims. TX 241.184. The PTO specifically cited declarations about commercial success and long-felt need as reasons for allowing the claims. TX 241.184; TX 241.143, 154-57; TX 241.173-74, 177-81. These secondary considerations of non-obviousness were independent of the aluminum/plastic distinction. TX 241.184. The Court cannot determine with certainty that Inline's argument regarding Menshen disclosing an aluminum container was the but-for reason any '003 Patent claims were allowed.

Regarding Claim 25 of the '003 Patent, Inline's assertion that Menshen disclosed an aluminum container was wholly irrelevant, as Claim 25 was never rejected based on Menshen and Inline never distinguished Menshen based on its disclosure of an aluminum container with respect to that claim. TX 241.117-19, .137-52.

With respect to the '680 Patent, Inline argued that Menshen was aluminum only in connection with Claim 25, which Inline later cancelled. TX 242.149, .208. Inline distinguished the claims that were ultimately allowed on various grounds unrelated to whether Menshen was aluminum, including the shape of the container, the lock feature, the upwardly projecting bead, and the downwardly depending skirt. TX 242.143-44, TX 241.149. The Examiner agreed that

proposed amendments unrelated to the aluminum/plastic distinction would overcome Menshen. TX 242.200 (Interview Summary stating “Examiner agreed that the proposed amendment of the Claims 10 and 18 (as the attachment) would overcome Menshen”). Accordingly, the aluminum/plastic distinction was not but-for material to the allowance of the ’680 Patent claims.

Moreover, Inline’s argument to the PTO that Menshen disclosed an aluminum container was attorney argument interpreting a reference that the examiner had before him. Attorney argument interpreting prior art that the examiner has access to does not constitute an affirmative misrepresentation of a material fact. Innogenetics, 512 F.3d at 1379; Akzo, 808 F.2d at 1482 (“The mere fact that [the applicant] attempted to distinguish the [claimed] process from the prior art does not constitute a material omission or misrepresentation. The examiner was free to reach his own conclusion regarding the [claimed] process based on the art in front of him.”).

The differences between the uncertified translation Inline submitted and the certified translation do not relate solely to whether Menshen discloses an aluminum or plastic container. The uncertified translation used different terminology for structural elements (e.g., “ring bulge” versus “annular bead”), compare TX 241.159-163 with TX 711.13-19, and characterized the invention as “tamper-proof” rather than “tamper evident.” Compare TX 241.159, TX 241.160, TX 241.162 with TX 711.15. These differences, while notable, do not establish that the Examiner’s allowance of the claims depended on the aluminum/plastic distinction.

The fact that Menshen does not explicitly mention plastic, polymer, or PET, Tr. 5-9:15-23 (MacLean testifying that plastic “is not explicitly stated” anywhere in Menshen), and that aluminum is mentioned only in the description of prior art that Menshen sought to improve, TX 711.8, supports the conclusion that Inline’s interpretation of Menshen as disclosing aluminum was not unreasonable. While the EPO classification codes suggest that Menshen relates to

containers with lids made of plastic material, Tr. 5-49:20-51:1; TX 722, 724, there is no evidence that Inline was aware of these classification codes or that they appeared on the face of the Menshen patent as submitted to the PTO. TX 711.1 (showing only classification “B65D 55-06” on face of Menshen).

Furthermore, with respect to the subsequent patents (the ’580, ’640, and ’756 patents), During the prosecution of those patents, Inline never argued that Menshen disclosed aluminum. TX 243; TX 244; TX 245. The Examiner did not reject these patents based on Menshen, TX 243; TX 244; TX 245, suggesting that the aluminum/plastic distinction was not central to patentability across the patent family.

While Inline’s conduct in litigation regarding Menshen raises concerns, particularly its argument to the jury in 2024 that Menshen discloses aluminum despite Dr. Kazmer’s contrary opinion, Tr. 5-121:8-17 (Kazmer); Tr. 6-171:16-172:5, litigation positions do not establish but-for materiality during prosecution. The Court must assess whether the PTO would not have allowed the claims had it been aware of accurate information about Menshen at the time of prosecution.

Based on the totality of the circumstances, including the multiple grounds on which the Examiner allowed the claims, TX 241.184; TX 242.200, the secondary considerations cited by the Examiner, TX 241.184, and the fact that the aluminum/plastic distinction was not relevant to the allowance of the ’680 Patent or the subsequent patents, TX 242.200; TX 243; TX 244; TX 245, the Court concludes that Lacerta has not established by clear and convincing evidence that Inline’s statements about Menshen were but-for material.

3. Specific Intent

Even if the Court were to find that Inline's statements about Menshen were but-for material, the Court concludes that Lacerta has not proven by clear and convincing evidence that a specific individual with a duty of candor to the PTO acted with specific intent to deceive the PTO regarding Menshen.

Because only individuals, rather than corporations, owe a duty of candor to the PTO, a specific individual who was substantively involved in the preparation or prosecution of the application and associated with the inventor or assignee must be shown to have committed the misconduct. 37 C.F.R. § 1.56(c)(3). The specific intent to deceive or defraud the PTO must be the single most reasonable inference. Star Sci., Inc., 537 F.3d at 1366. When there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found. Therasense, 649 F.3d at 1290-91.

All substantive prosecution exchanges with the PTO regarding the '003 and '680 patents were conducted between Attorney Pollack and the patent examiner. TX 241; TX 242. None of the documents relating to substantive prosecution were directed to or included Mr. Orkisz. Lacerta did not call Attorney Pollack as a witness and offered no direct evidence of what Attorney Pollack knew or intended regarding Menshen.

Mr. Orkisz testified that he did not review Menshen before it was discussed with the PTO, has not read Menshen, does not know whether Menshen teaches or claims an aluminum container, and did not direct Inline's counsel to misrepresent Menshen to the PTO. Bench Tr. 1-30:19, 1-31:17-18, 1-39:2-10 (Orkisz); Bench Tr. 2-51:17-22 (Orkisz). While Mr. Orkisz's testimony was inconsistent and evasive in some respects, particularly his vacillation between not knowing anything about Menshen and stating that he seemed to recall Menshen was "like

aluminum" based on dialogue with attorneys, Bench Tr. 1-31:15-33:10, 1-32:22-33:9 (Orkisz), this inconsistent testimony does not establish by clear and convincing evidence that he possessed specific knowledge that Menshen disclosed plastic and deliberately directed counsel to misrepresent it as aluminum.

Mr. Orkisz also testified that Mr. Stein was the lead person in patent prosecution. Bench Tr. 2-51:23-52:1, 2-53:3-6 (Orkisz). Evidence exists of communications between Attorney Pollack and Ozzie Parente and Bruce Stein relating to patent prosecution. TX 589; TX 749; TX 870. However, Inline did not call Mr. Stein as a witness during the bench trial on inequitable conduct, and Lacerta neither deposed Parente nor offer testimony from him. Mr. Stein testified during the jury trial that he had nothing to do with some of the Patents-in-Suit or their applications. Tr. 2-83:6-84:24 (Stein). Without testimony from these individuals, the Court cannot conclude that any of them possessed specific knowledge that Menshen disclosed plastic and deliberately misrepresented it as aluminum.

Multiple reasonable inferences can be drawn from the evidence. One inference is that Inline deliberately misrepresented Menshen as disclosing aluminum; another reasonable inference is that Attorney Pollack and others interpreted Menshen in good faith as disclosing aluminum based on the uncertified translation, TX 241.159-163, which explicitly referenced aluminum, TX 711.8; TX 241.142, and did not explicitly mention plastic, Tr. 5-9:15-23 (MacLean). See Ohio Willow Wood Co. v. Alps South, LLC, 735 F.3d 1333, 1351 (Fed. Cir. 2013) (the lack of a reasonable explanation for misrepresentations made to the PTO may demonstrate intent to deceive).

While the EPO classification codes suggest Menshen relates to containers with plastic lids, Tr. 5-49:20-51:1 (MacLean); TX 722, 724, and that Inline deleted the reference to metal and

aluminum from the specification when filing the '680 Application after receiving the International Search Report identifying Menshen as relevant prior art, TX 241.18 (disclosing container can be made from metals including aluminum); TX 241.103-110 (November 15, 2004 International Search Report); TX 242 (February 2005 '680 Application); TX 242.18-19 (deleting reference to metals and aluminum), there is no evidence that anyone at Inline was aware of the EPO classification codes at the time of prosecution. Moreover, the deletion of the metal disclosure from the '680 Application could reflect a narrowing of the invention's scope rather than evidence of intent to deceive.

Purposeful omission or misrepresentation of key teachings of prior art references may be indicative of a specific intent to deceive the PTO. See Luv n' Care, Ltd. v. Laurain, 98 F.4th 1081, 1099 (Fed. Cir. 2024). If a patentee knows of a material issue toward patentability and fails to correct false information submitted to the PTO, intent to deceive can be found. GS Cleantech Corp., 951 F.3d at 1331. Here, Inline's failure to correct its representation about Menshen even after Dr. Kazmer changed his opinion in 2022, ECF No. 364 at 240 (2022 Trial Tr. 12-240:9-25); [ECF No. 399 at 20], including in applications that were pending at that time, TX 243, 244, 245; Bench Tr. 2-45:6-16 (Orkisz), and its argument to the jury in 2024 that Menshen discloses aluminum despite the absence of supporting evidence, Tr. 5-121:8-17 (Kazmer); Tr. 6-171:16-172:5, raise serious concerns about Inline's candor. However, these litigation activities occurred years after the patent prosecution and do not establish that a specific individual with a duty of candor during prosecution acted with intent to deceive the PTO at the time the representations were made.

Mr. Orkisz's evasive testimony regarding Menshen is troubling. Bench Tr. 1-31:15-33:10, 1-32:22-33:9 (Orkisz); Bench Tr. 2-52:18-53:2 (Orkisz). Indeed, the Court is permitted to

find intent to deceive based on witness credibility and evasive testimony. In re Method of Processing Ethanol Byproducts, 2016 WL 4919980, at *3, *27-28; Synthon IP, Inc. v. Pfizer Inc., 472 F. Supp. 2d 760, 779, 781-82 (E.D. Va. 2007). However, his evasiveness and lack of credibility, standing alone, are insufficient to establish specific intent to deceive by clear and convincing evidence when multiple reasonable inferences can be drawn from the evidence and when the primary participants in the prosecution (Attorney Pollack, Mr. Parente, and Mr. Stein with respect to the early patents) did not testify regarding their knowledge and intent.

Because multiple reasonable inferences can be drawn from the evidence regarding Menshen, and because specific intent to deceive must be the single most reasonable inference, Star Sci., Inc., 537 F.3d at 1366, the Court concludes that Lacerta has not proven by clear and convincing evidence that a specific individual with a duty of candor to the PTO acted with intent to deceive regarding Menshen.

IV. CONCLUSION

The Court concludes that Lacerta has proven by clear and convincing evidence that Inline engaged in inequitable conduct by failing to name Stuart Leslie and Richard Curtiss of 4Sight as joint inventors on the Patents-in-Suit. Leslie and Curtiss made significant contributions to the conception of the claimed inventions through the October 2002 design drawings they provided to Inline, TX 741; TX 845; Tr. 2-76:9-77:11 (Stein); Tr. 3-27:3-30:24 (Orkisz), which depicted key elements including the tear strip feature that Inline has lauded as the critical inventive step. TX 241.154-157; TX 241.177-81; TX 242.156-159; Tr. 2-133:5-8 (Orkisz). Inline's omission of Leslie and Curtiss as inventors was material, and the specific intent to deceive the PTO is the single most reasonable inference that can be drawn from the totality of the circumstances, including the temporal sequence of events (4Sight providing drawings in October 2002, TX 741;

TX 845; Tr. 2-74:13-76:8, named inventors not beginning work until November 2002 or later, Tr. 2-126:16-21 (Stein); Tr. 3-73:19-21, 3-84:23-85:1 (Sellari), Inline requesting patent attorney referrals in April 2003, TX 747, ceasing contact with 4Sight, Leslie Dep. 48:5-9 (2020), and filing without naming Leslie or Curtiss in July 2003, TX 750), the contradictory testimony of the named inventors, Tr. 2-90:22-91:1 (Stein); Tr. 3-73:22-24, 3-85:2-4, 3-86:11-16 (Sellari), Mr. Orkisz's evasive and non-credible testimony, Bench Tr. 1-38:11-39:10 (Orkisz); Bench Tr. 2-24:14-21, 2-25:23-26:4, 2-28:4-24, 2-37:8-12 (Orkisz); Tr. 3-20:18-22 (Orkisz), and the deliberate cessation of contact with 4Sight immediately before filing the provisional application. Balancing the substance of the proven elements and all the equities of the case, the Court concludes that Inline's conduct before the PTO warrants rendering the Patents-in-Suit unenforceable due to inequitable conduct. Therasense, 649 F.3d at 1287; Hupp, 122 F.3d at 1465.

With respect to Inline's representations to the PTO about the Menshen prior art reference, the Court concludes that Lacerta has not proven by clear and convincing evidence that Inline engaged in inequitable conduct. While concerns exist regarding Inline's characterization of Menshen as disclosing aluminum, TX 241.142-143, the Court cannot conclude that these representations were but-for material to the allowance of the claims, as the Examiner allowed the claims based on multiple grounds including secondary considerations, TX 241.184, and amendments unrelated to the aluminum/plastic distinction, TX 241.135; TX 242.143-144; TX 242.200. Moreover, the Court cannot conclude that a specific individual with a duty of candor to the PTO acted with specific intent to deceive regarding Menshen, as multiple reasonable inferences can be drawn from the evidence and the primary participants in the prosecution (Attorney Pollack, Mr. Parente, and Mr. Stein) did not testify regarding their knowledge and

intent. TX 241; TX 242; Bench Tr. 1-30:19, 31:17-18, 1-39:2-10 (Orkisz); Bench Tr. 2-51:17-22 (Orkisz); Tr. 2-83:6-84:24 (Stein).

Accordingly, the Court finds in favor of Lacerta on the inequitable conduct defense based on the omission of Leslie and Curtiss as joint inventors, rendering the Patents-in-Suit³ unenforceable. The Court finds in favor of Inline with respect to the alleged inequitable conduct regarding Menshen. Because the Patents-in-Suit are rendered unenforceable due to inequitable conduct based on inventorship, the taint of this finding spreads to render unenforceable all related patents in the same technology family. Therasense, 649 F.3d at 1288-89.

SO ORDERED.

Dated: November 13, 2025

/s/ Margaret R. Guzman
Margaret R. Guzman
United States District Judge

³ United States Patent Nos. 7,118,003 ('003 Patent); 7,073,680 ('680 Patent); 8,795,580 ('580 Patent); 9,527,640 ('640 Patent); and 9,630,756 ('756 Patent).