

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HID GLOBAL CORPORATION, and	)	
ASSA ABLOY AB,	)	
	)	
Plaintiffs,	)	C.A. No. 22-362-GDW
	)	
v.	)	JURY TRIAL DEMANDED
	)	
WAVELYNX TECHNOLOGIES	)	
CORPORATION,	)	REDACTED
	)	
Defendant.	)	

**PLAINTIFFS' ANSWER TO DEFENDANT'S COUNTERCLAIMS AND
COUNTERCLAIMS IN REPLY**

Plaintiffs HID Global Corporation (“HID”) and ASSA ABLOY AB (“ASSA ABLOY”) hereby submit their Answer to the Counterclaims of Defendant WaveLynx Technologies Corporation (“WaveLynx”), and further submit Counterclaims in Reply.

INTRODUCTION

1. This case stems from a long line of legal disputes between HID/ASSA ABLOY and the founders of WaveLynx (Jean-Hugues “Hugo” Wendling and Mike Conlin), in which HID and ASSA ABLOY have been forced to assert their intellectual property rights against repeated infringement. In the late 1990s and early 2000s, Wendling and Conlin were engineers at HID. They were privy to HID’s technical and trade secret information concerning HID’s RFID reader devices. They left HID at nearly the same time and formed a new company called XceedID Corporation (“XceedID”) to make readers that competed with HID. But they did not compete fairly. Instead, they and XceedID engaged in a series of violations of HID and ASSA ABLOY intellectual property, including trade secret misappropriation, unfair competition, and trademark infringement.

2. After selling the XceedID business, Wendling and Conlin left XceedID and formed WaveLynx. But their actions at WaveLynx remain consistent with their track record: now they are willfully infringing HID/ASSA ABLOY patents.

3. The remainder of this introduction summarizes the history of the aforementioned legal disputes, which provide context for the current action brought by HID and ASSA ABLOY to protect the exclusive rights in certain inventions. In their First Amended Complaint (Doc. No. 12), HID and ASSA ABLOY asserted U.S. Patent Nos. 7,439,862 (“the ’862 patent”)¹ and 8,943,562 (“the ’562 patent”), which are both infringed by WaveLynx’s RFID readers. In this pleading, HID and ASSA ABLOY have added a third patent, U.S. Patent No. 10,452,877 (“the ’877 patent”), which is also infringed by WaveLynx’s RFID readers. HID and ASSA ABLOY also respond to WaveLynx’s counterclaims and submit additional defenses to those counterclaims.

ASSA ABLOY and HID

4. As stated in the First Amended Complaint, ASSA ABLOY and HID are global leaders in security solutions that are trusted by millions of customers throughout the world. HID was founded in 1991 and has become a pioneer in RF technology and a top supplier of contactless access control credentials and readers. HID’s products for access control include RFID access cards and card reader products using 125 kHz and 13.56 MHz radio signals and various communications protocols. HID’s products incorporate and rely on HID’s proprietary technology and intellectual property.

¹ In its Complaint and First Amended Complaint, HID asserted that WaveLynx infringed *at least* claims 1 through 4 of the ’862 patent. Doc. No. 12 ¶ 28. As demonstrated in Exhibit 1 hereto, which supplements Exhibit 11 to HID’s First Amended Complaint, WaveLynx has also infringed and continues to infringe, either literally or under the doctrine of equivalents, claims 5, 6, 9, 11, 14, 16, 17, 19, 20, 22, and 23 of the ’862 patent.

5. Since its inception, HID has worked hard to develop and protect its proprietary technology and intellectual property, including cutting-edge RFID readers that are deployed around the world. HID and ASSA ABLOY have an extensive patent portfolio protecting their inventions.

Wendling, Conlin, XceedID, and WaveLynx

6. WaveLynx was founded by and is comprised of former HID employees, including Wendling (CEO), Conlin (COO), and Mike Malone (Senior Product Architect). Wendling and Conlin have a long history of unfair competition and disrespect of HID and ASSA ABLOY intellectual property.

7. WaveLynx's founders, Wendling and Conlin in particular, have long been familiar with the technology developed and patented by HID. From 1999 until his resignation from HID on August 6, 2003, Wendling was involved in development of HID's RFID access control products. Wendling had access to sensitive and confidential technical information relating to HID's RFID access control products, including the proprietary customer credential coding formats and other codes and engineering documentation necessary for the operation of HID's RFID products. Similarly, from 1998 until he resigned from HID on July 30, 2003, Conlin was involved in the development of HID's 125 kHz and 13.56 MHz RFID access control products. Like Wendling, Conlin had access to sensitive and confidential technical information required for operation of HID's RFID products.

8. After they left their employment at HID, Wendling and Conlin formed a new company and named it XceedID, starting a pattern of misappropriating and using HID's intellectual property without permission. This misconduct forced HID to file lawsuits against Wendling and Conlin and their former company XceedID on three prior occasions. Wendling and Conlin eventually sold XceedID and later formed their new company: WaveLynx.

9. HID and ASSA ABLOY were forced to file this lawsuit to address willful patent infringement by WaveLynx. Wendling, Conlin, and WaveLynx knew they were using HID's

intellectual property, and they reached out to request a license to HID’s intellectual property for low frequency and high-frequency readers—which they referred to as “combined readers”—including specifically the ’862 patent. Doc. No. 1-1 at 4–5. HID and ASSA ABLOY asserted the ’862 patent in the original Complaint that initiated this lawsuit.

10. In fact, WaveLynx acknowledged its need for a license to the ’862 patent, yet refused to accept HID’s reasonable license offer and instead continued to make and sell low- and high-frequency “combined readers” without permission or license from HID. Instead of acting in a commercially responsible manner and paying HID for rights to use HID’s intellectual property on such combined readers, WaveLynx (under the control of Wendling and Conlin) continued their pattern of violating HID’s intellectual property and daring HID to sue. When HID finally did file this lawsuit, WaveLynx asserted baseless counterclaims that are belied by its prior actions, including its acknowledgement that it needs a license to HID’s intellectual property.

HID was forced to file three prior lawsuits against XceedID, Wendling, and Conlin for misappropriation and infringement of HID’s intellectual property

11. On information and belief, Wendling and Colin founded XceedID to make and sell RFID readers and related products, using technology and information they had obtained while employed at HID. Further, on information and belief, Wendling and Conlin laid the groundwork for XceedID while still employed at HID and having access to HID’s *highly sensitive and proprietary* technology and intellectual property, including its trade secrets, and left HID with plans to directly compete with their former employer. Ex. 2 (Nov. 22, 2006 email). Just weeks after Wendling and Conlin left HID, HID heard from customers that XceedID was making and selling RFID readers that were compatible with HID products and capable of reading HID’s RFID access cards, indicating that its readers read HID propriety coding formats and utilized HID’s trade secrets. Doc. No. 14-5 ¶¶ 27–32. On October 5, 2004, HID and Identification Technology Group, Inc. (an ASSA ABLOY

company) sued XceedID, Conlin, Wendling, and John Menzel (another former HID employee and founder and CEO of XceedID) for trade secret misappropriation. *See HID Global Corp. v. XceedID Corp.*, No. 4-CV-3124 (Colo. Dist. Ct. Jefferson Cnty.).

12. Based on XceedID's representations HID agreed to withdraw its complaint for trade secret misappropriation *without prejudice*. *See* Ex. 3 (Oct. 18, 2004 email).

13. In March 2005, HID signed a license agreement with General Electric Security ("GES"). Ex. 4 ("GES–HID License Agreement"). HID licensed its propriety Prox technology using a 125 kHz communication protocol to GES with limited permission to sublicense to authorized companies. *Id.* On information and belief, XceedID subsequently took a sublicense from GES and began advertising and selling product lines that claimed HID compatibility, including the XACTT transition readers that purported to read the format of HID Prox cards and program a card to operate at 13.56 MHz, thereby negating any ongoing need for HID Prox cards.

14. HID, however, never intended the GES–HID License Agreement to be used to sublicense HID technology to allow other companies, including XceedID, to build HID-compatible products that transferred customers away from use of HID Prox cards.

15. In August 2005, HID met with XceedID and GES in hopes of avoiding litigation with XceedID, including Wendling and Conlin. Ex. 5 (Sept. 2, 2005 letter). The meeting raised further questions about misappropriation of HID's proprietary information by XceedID, Wendling, and Conlin. Ex. 6 (Sept. 1, 2005 letter). After the meeting, HID asked GES to stop making the XACTT products via XceedID. Ex. 5 (Sept. 2, 2005 letter).

16. On information and belief, XceedID, Wendling, and Conlin had colluded with GES to have GES enter into the March 2005 GES–HID License Agreement with HID in bad faith, such that the agreement would allow XceedID to benefit from GES's ability to sublicense under the agreement and allow XceedID to sell HID-compatible products using HID confidential information

provided to GES through the GES–HID License Agreement. On further information and belief, Wendling and Conlin had actually been working with GES while both were employed at HID and had concealed this fact from HID to further their subsequent scheme to work with GES in violation of the GES–HID License Agreement.

17. On December 21, 2006, HID and ASSA ABLOY were again forced to sue XceedID, this time for multiple causes of action, including trademark infringement, unfair competition, trade secret misappropriation, and violation of California Business and Professional codes. *See HID Global Corp. v. XceedID Corp.*, No. 8:06-cv-1245 AHS (C.D. Cal.). As alleged in the case, on information and belief, among other things, Wendling and Conlin misappropriated HID’s trade secrets by filing for patent applications on inventions that were first conceived and/or reduced to practice while they were employed by HID and subject to their obligations to HID.

18. On January 29, 2008, XceedID and HID signed a settlement agreement, wherein XceedID acknowledged certain intellectual property of HID, and HID agreed to dismiss its claims against XceedID and release claims against Conlin and Wendling. Ex. 7 (Settlement and Release Agreement).

19. Following the 2008 settlement with XceedID, HID learned of false and misleading statements on XceedID’s website that advertised that certain proximity cards made by XceedID were fully compatible with readers made by HID. *See Ex. 8 (HID Global Corp. v. XceedID Corp.*, No. 2:09-CV-4736, Doc. No. 1, June 30, 2009). In April 2009, HID contacted XceedID (then owned by Ingersoll Rand, where Conlin and Wendling were still employees) and requested that XceedID remove the false and misleading statements from its website. *Id.* ¶¶ 12–13.

20. After months of non-compliance with HID’s requests, on June 30, 2009, HID was forced to sue XceedID a third time. *See generally id.*

21. HID's 2009 complaint outlined how XceedID continued to attempt to divert business away from HID through advertising that its security cards were fully compatible with HID's readers and falsely implied that XceedID was associated with HID.

22. On information and belief, only because HID had filed the third lawsuit did XceedID, still including Wendling and Conlin at the time, alter its website to reflect the repeated requests by HID to remove the false and misleading statements.

23. Wendling and Conlin left XceedID and formed WaveLynx, but they have continued their pattern of infringing HID's intellectual property. This infringement precipitated the present action. Given their prior association with XceedID, this is now the fourth time HID has been forced to resort to legal action against Wendling, Conlin, and their companies.

Farpointe litigation

24. This case is not the first time the '862 patent has been asserted, and WaveLynx's counterclaims are not the first time that the validity of the '862 patent has been challenged. Infringement and validity of the '862 patent were both litigated and adjudicated in *HID Global Corp. v. Farpointe Data, Inc.*, No. 8:10-CV-01954 (C.D. Cal.).

25. In the *Farpointe* litigation, the Court granted HID's Motions for Summary Judgment of Infringement and Validity of the '862 patent. In granting summary judgment of infringement, the court found that all except one of Farpointe's accused products infringed claims 1–4, 5–6, 9–10, 13, 14, 16, 17, 19, 20–22 of the '862 patent. Ex. 9 (*Farpointe* Litigation, Doc. No. 300, Apr. 13, 2012) at 17–31.

26. The court also found that all claims of the '862 patent were valid as a matter of law under 35 U.S.C. §§ 102 & 103. Ex. 9 at 43–44.

27. As similarly alleged in WaveLynx's counterclaims, the *Farpointe* defendants also made inflammatory allegations of document destruction when armed with no meritorious defense.

Yet the *Farpointe* court did not find that anyone at HID had destroyed relevant evidence. Instead, the court asked HID to provide more information, which HID readily did through sworn declarations from its counsel and employees. These declarations established that no relevant evidence had been destroyed, establishing instead that out of an abundance of caution, HID had gathered eight boxes that fell into two categories: (1) four boxes that included documents related to the inventor of the '862 patent, Ralph Quan (“Quan boxes”); and (2) four additional boxes that bracketed the Quan boxes (“bracketing boxes”), two of which were stored ahead of, and the other two behind, the Quan boxes. Ex. 10 (*Farpointe* Litigation, Doc. No. 121, Feb. 8, 2012), Ex. 11 (*Farpointe* Litigation, Doc. No. 123, Feb. 8, 2012), Ex. 15 (*Farpointe* Litigation, Doc. No. 295, Mar. 29, 2012). The purpose of collecting the bracketing boxes was out of an abundance of caution to ensure nothing from Ralph Quan was missing. Ex. 13 (*Farpointe* Litigation, Doc. No. 120, Feb. 8, 2012) at 15–16. As the declarations made clear, the bracketing boxes contained nothing of relevance to the litigation, and the four Quan boxes, which did contain Quan’s documents, were produced. *Id.*

28. Specifically, HID’s outside counsel, Ron Oines, submitted a sworn declaration stating that he and Masha Davis (then Michael Davis²) had reviewed the contents of the four bracketing boxes on February 22, 2011, and they found “nothing in these boxes relating to the invention of the '862 Patent or otherwise relevant to the issues in [the *Farpointe*] lawsuit. It was not even clear to me that these boxes had anything whatsoever to do with Ralph Quan.” Ex. 14 (*Farpointe* Litigation, Doc. No. 294, Mar. 29, 2012) ¶ 2.

29. HID’s Human Resources Representative Mari Jo Crouse also submitted a sworn declaration stating that she assisted in locating boxes relating to Ralph Quan, who left employment

² Michael Lawrence Davis, as referenced in the Counterclaims, is now known as Masha Davis, which name will be used throughout this document.

with HID in October 2008. Crouse stated that, “[a]s part of HID’s efforts to locate documents relating to Quan, in December 2010, HID retrieved eight boxes of documents from long term storage. Four boxes had been identified on an inventory list as being related to Mr. Quan. HID had these four boxes pulled, as well as two boxes listed before and after the four boxes identified a being related to Mr. Quan. Thus, although HID retrieved eight boxes from storage, only four of them had been identified as relating to Mr. Quan.” Ex. 15 (*Farpointe* Litigation, Doc. No. 295, Mar. 29, 2012) ¶ 2. The contents of the four bracketing boxes (which were destroyed) consisted of “travel related and other expense documents, approximately three or four evaluation boards for evaluating integrated circuits, empty anti-static packaging, vendor part catalogs, and data sheets for integrated circuits.” *Id.* ¶ 6; *see also* Ex. 16 (*Farpointe* Litigation, Doc. No. 296, Apr. 6, 2012) ¶ 3.

30. HID’s then-Senior Director of Product Engineering and Development, David Andresky, also submitted a sworn declaration stating, “[i]n approximately October, 2011, at the request of Mari Jo Crouse, I reviewed the contents of four boxes of documents at HID’s facility in Colorado. I understand these four boxes had been pulled from long term storage and had been identified on an inventory list as relating to Ralph Quan, a former HID employee. When the Quan boxes were retrieved, HID also retrieved two boxes listed before and two boxes listed after the Quan boxes on the inventory list. Thus, a total of eight boxes were in the room when I did my review of the documents. However, a stated above, I reviewed only the four boxes that were related to Quan. To the best of my recollection, the only items that I identified from these boxes to be sent to be destroyed consisted of approximately three or four evaluation boards for evaluating integrated circuits, empty anti-static packaging, vendor part catalogs, and data sheets for integrated circuits.” Ex. 17 (*Farpointe* Litigation, Doc. No. 297, Apr. 5, 2012) ¶ 2.

31. In this case, WaveLynx has made allegations regarding the four bracketing boxes to support its “inequitable conduct” defense and counterclaim. Doc. No. 14 at 43. However, as

evidenced by the declarations addressed above, WaveLynx’s pleading is misleading and inflammatory. It alleges that Davis “shredded” documents, yet is silent about the detailed factual explanations provided in the declarations. Instead of acknowledging the truth, WaveLynx baselessly alleges that “HID destroyed up to eight (8) boxes of documents” from Ralph Quan that contained information relating to conception of the ’862 patent (*id.*)—allegations that are demonstrably false in light of the declarations summarized above. Had WaveLynx conducted any sort of diligence as to the publicly available records in the *Farpointe* litigation, it could not have made such baseless claims against Davis or HID.

32. In addition, with respect to the *Farpointe* litigation, WaveLynx alleges that HID attempted to “block competition,” but this too is demonstrably and objectively false. In fact, as stated above, the *Farpointe* court granted summary judgment of infringement and validity as to claims 1–4, 5–6, 9–10, 13, 14, 16, 17, 19, 20–22 of the ’862 patent. Ex. 9 (*Farpointe* Litigation, Doc. No. 300, Apr. 13, 2012) at 17–31. Rather than blocking competition, the *Farpointe* litigation was an example of HID enforcing its valid and infringed patent rights. The same is true in the present action.

WaveLynx’s patent infringement and baseless inequitable conduct defense

33. The present lawsuit stems from more recent violations of HID intellectual property by Wendling and Conlin’s new company, WaveLynx. After WaveLynx was founded by Wendling and Conlin, the company entered the market for low- and high-frequency combined RFID readers. Recognizing HID’s intellectual property portfolio around this technology, Conlin, on behalf of WaveLynx, reached out in 2016 for a license to HID’s “combined reader” IP portfolio. Doc. No. 12-1. The parties discussed various aspects of HID’s combined reader IP, including the ’862 patent. In fact, Conlin stated in writing: “I am pleased with your offer to license the ’862 patent.” Doc. No. 12-1 at 2.

34. As part of these discussions, HID made a reasonable licensing offer to WaveLynx, but WaveLynx refused to take a license. Instead, WaveLynx reversed course and continued its efforts to make and sell such “combined readers” without permission from HID. Having changed its mind about trying to become a legitimate licensee to HID’s IP, WaveLynx shifted strategies and resorted to subterfuge. After refusing to take a license from HID, on October 25, 2016, Conlin messaged the inventor of the ’862 patent, Ralph Quan, saying that he “saw that [Quan was] the author,” that he “was surprised that this patent ever issued,” and fishing for statements from Quan that he might be able to use against HID and the ’862 patent: “I am struggling to understand what the utility of this patent is and thought that perhaps you could explain this to me?” Ex. 18 (Conlin messages). In reality, the ’862 patent was not new to Conlin as he had been discussing taking a license to it from HID for months. Conlin’s inappropriate fishing attempt suggests that WaveLynx was not acting in good faith during the license negotiations.

35. HID ultimately filed this lawsuit, initially asserting the ’862 patent and adding the ’562 patent in the First Amended Complaint. Doc. No. 12. By this pleading, HID and ASSA ABLOY have added a claim to obtain redress for WaveLynx’s infringement of the ’877 patent.

36. In its Answer and Counterclaims (Doc. No. 14), WaveLynx has asserted an affirmative defense and counterclaim alleging that the ’862 patent is unenforceable due to “inequitable conduct.” However, these allegations are baseless and are belied by WaveLynx’s own conduct prior to this litigation, at a time when WaveLynx was not trying to concoct legal defenses.

37. More than ten years ago, the Federal Circuit recognized that “[i]nequitable conduct ‘has been overplayed, is appearing in nearly every patent suit, and is cluttering up the patent system.’ [T]he habit of charging inequitable conduct in almost every major patent case has become an absolute plague. Reputable lawyers seem to feel compelled to make the charge against other reputable lawyers on the slenderest grounds, to represent their client’s interests adequately, perhaps.” *Therasense, Inc.*

v. Becton, Dickinson & Co., 649 F.3d 1276, 1289 (Fed. Cir. 2011) (en banc) (quoting *Kimberly–Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1454 (Fed. Cir. 1984)).

38. These warnings from the Federal Circuit are exemplified by WaveLynx’s charge of inequitable conduct. WaveLynx has cobbled together a wide range of alleged “prior art” that it claims HID should have disclosed during prosecution of the ’862 patent, without undertaking the kind of due diligence that would have avoided the baseless claims WaveLynx has leveled against reputable lawyers and engineers, and a reputable company.

39. Because of the harm caused by such accusations, the standard required to establish inequitable conduct is appropriately high—i.e., the specific intent to deceive must be “the ***single most reasonable inference*** [that can] be drawn from the evidence,” *Therasense*, 649 F.3d at 1290. WaveLynx’s inequitable conduct counterclaims are therefore legally unsustainable, devoid of the specific facts that would be necessary to assert counterclaims of this type, and unfairly harmful to HID, its former employees, and its former counsel.

40. There is no evidence that anyone at HID (past or present) or its legal counsel intended to deceive the U.S. Patent and Trademark Office (Patent Office) in the prosecution of the ’862 patent.

41. **First**, as will be described in more detail below, in making its baseless accusations of inequitable conduct and attacking the character of reputable engineers and attorneys, WaveLynx makes no mention of a key fact: that the conception date of at least some claims in the ’862 patent traces back to at least as early as February 2004, and earlier, based on work done prior to that date. WaveLynx’s Answer and Counterclaims cites to the earlier *Farpointe* litigation, including a March 21, 2012 court order. Ex. 19 (*Farpointe* Litigation, Doc. No. 290, Mar. 21, 2012). This court order addressed motions that related to the conception dates of the ’862 patent. WaveLynx played fast and loose with the contents of that order, alleging that HID destroyed documents that contained information concerning the conception date of the ’862 patent. Doc. No. 14 at 43. However,

WaveLynx—presenting only half-truths to this Court—is silent about the four declarations in the *Farpointe* litigation establishing that the documents at issue related only to travel expenses and other irrelevant matters. *See supra* Exs. 14–17 (*Farpointe* Litigation, Doc. Nos. 294–297).

42. Moreover, had WaveLynx looked at the relevant briefing that preceded this *Farpointe* order, WaveLynx would have discovered in the record that at least claims 1–4, 14, and 16 of the ’862 patent are entitled to a conception date “[a]t least as early as February 12, 2004.” Ex. 20 (*Farpointe* Litigation, Doc. No. 123-8, Feb. 8, 2012) at 6. WaveLynx’s inequitable conduct counterclaim is based on claims 1–4 of the ’862 patent. *See, e.g.*, Doc. No. 14 at 82–85. As to the priority date for claims 1–4, WaveLynx alleges that they claim “new matter” that “first appears” in Application No. 11/016,576 (“the ’576 application”), which was filed on December 16, 2004. Doc. No. 14 at 47. WaveLynx later alleges that “the earliest possible priority date for claim 1 of the ’862 patent, and any claim that depends from claim 1, is December 16, 2004.” *Id.* at 48.

43. These priority allegations for claims 1–4 are incorrect. Even without a careful review of the *Farpointe* record—which WaveLynx either decided not to undertake or just selectively cited—the cover page of the ’862 patent states that it is a continuation-in-part of an application filed on May 18, 2004. That May 18, 2004 application clearly discloses the invention recited in claims 1–4 of the ’862 patent. And, as stated in Ex. 20 (*Farpointe* Litigation, Doc. No. 123-8, Feb. 8, 2012), these claims trace back even further: to at least as early as February 12, 2004.

44. WaveLynx’s inequitable conduct counterclaim relies primarily on products and references that are dated after February 12, 2004:

- XF1100, XF2100, XF2110 readers were allegedly sold by XceedID and GES “starting in 2004.” Doc. No. 14 at 37. Later, WaveLynx alleges that “GES’s dual frequency reader ultimately [came] to market in September 2004.” *Id.* at 50.

- U.S. Provisional Patent Application No. 60/553,677 was filed on March 15, 2004. *Id.* at 37.
- U.S. Provisional Patent Application No. 60/553,685 was filed on March 15, 2004. *Id.*
- “Transition Series” readers were allegedly “launched” in September 2004. *Id.* at 38.

45. These products and references do not support a claim of inequitable conduct.

46. As to the other products and references cited by WaveLynx in its inequitable conduct counterclaim, they are also unavailing. The alleged “HID Material Prior Art Products,” the ’167 Application, the Davis Presentation, the Smart Card Alliance Report, and the Cross Point XM3 MICROPROX reader are not material prior art, and/or are cumulative of art that was before the Patent Office.

47. These facts alone reveal the baseless nature of WaveLynx’s inequitable conduct charge. Had WaveLynx more carefully reviewed the publicly available record of the ’862 patent’s file history and the *Farpointe* litigation, it could not have reasonably asserted the unfounded inequitable conduct claim full of false and harmful allegations directed at reputable professionals.

48. **Second**, as stated in HID’s Amended Complaint (Doc. No. 12), prior to this litigation, WaveLynx’s request to license the ’862 patent belies its allegations that the patent is invalid and unenforceable. WaveLynx reached out to HID in 2016 asking for a license to HID’s multi-frequency intellectual property, which includes the ’862 patent. That act, which occurred years before this litigation was filed, reveals WaveLynx’s objective opinion concerning the ’862 patent—that WaveLynx infringes the patent and needs a license—and thus the lack of merit of its invalidity and inequitable conduct defenses. In its Answer and Counterclaims, WaveLynx tried to downplay this outreach by asserting it sought a license at a cost of \$0 per reader, but that allegation is misleading. In fact, in WaveLynx’s initial outreach on March 16, 2016, Conlin asked Daniel Bailin of HID “to discuss licensing the appropriate IP around LF [low frequency] & HF [high frequency] combined

readers.” Doc. No. 12-1 at 4–5. On information and belief, Conlin and WaveLynx knew that their request for such IP involved the ’862 patent. To that end, Daniel Bailin of HID responded on March 22, 2016, extending an offer to WaveLynx to license “the use of HID IP related to RFID readers,” which specifically included “[u]se of 862 patent for multi-frequency readers.” *Id.* at 3. Conlin responded on March 24, 2016: “I am pleased with your offer to license the ’862 patent.” *Id.* at 2.

49. At no point in this email exchange did Conlin or anyone else from WaveLynx assert that the ’862 patent is not infringed or is invalid or unenforceable. In fact, Conlin’s March 24, 2016 email took issue with the merits of HID’s “Corporate 1000” IP, alleging that HID would not win a claim for infringement of this IP, but no such remarks were made with respect to the ’862 patent. To the contrary, as stated above, Conlin expressed appreciation for HID’s offer to license the ’862 patent. Those facts are telling.

50. This exchange—which occurred outside the context of litigation, in licensing discussions *initiated* by WaveLynx—speaks volumes about the lack of merit in WaveLynx’s current defenses and counterclaims against the ’862 patent. Both parties expressly considered licensing of the ’862 patent. At that time, WaveLynx was aware of the inventions claimed in the ’862 patent. And WaveLynx has not alleged that, at the time, it did not review the ’862 patent.

51. **Third**, as will also be described in more detail below, WaveLynx’s own patents and patent applications belie its allegations that the ’862 patent is invalid and unenforceable.

52. WaveLynx claims to be the assignee of several issued patents (Doc. No. 14 at 39):

- U.S. Patent No. 10,916,078 (“the ’078 patent”)
- U.S. Patent No. 10,553,054 (“the ’054 patent”)
- U.S. Patent No. 10,467,830 (“the ’830 patent”)
- U.S. Patent No. 9,747,738 (“the ’738 patent”)
- U.S. Patent No. 9,558,377 (“the ’377 patent”)

53. A review of these patents reveals a disturbing pattern—that *WaveLynx almost never discloses prior art* to the Patent Office with respect to its own patents, a fact that also undermines WaveLynx’s inequitable conduct allegations in this case. WaveLynx did not disclose *any prior art* to the Patent Office during prosecution of the ’078, ’054, ’830, and ’738 patents. The only prior art referenced in those patents was cited by the Patent Office examiner. However, WaveLynx’s Answer and Counterclaims reveals that the company and its principals, including the inventors listed on these patents, are aware of prior art references and sources of prior art. Yet no such art was cited to the Patent Office in any of those four patents.

54. This pattern of non-disclosure is relevant to WaveLynx’s inequitable conduct claim at least with respect to the WaveLynx ’830 patent, which is the subject of a petition for *Inter Partes* Review that HID is filing concurrently today with the Patent Trial and Appeal Board (PTAB). *See HID Global Corp. v. WaveLynx Techs.*, IPR2023-00046, Paper 1 (PTAB Oct. 17, 2022). WaveLynx alleges inequitable conduct based on Ellsworth having prosecuted both the ’862 patent and U.S. Application No. 11/470,660 (“the ’660 application”) to Andresky, et al. Doc. No. 14 at 91. WaveLynx alleges that because the Davis Presentation was cited during prosecution of the ’660 application, Ellsworth “knew that the Davis Presentation was material prior art to the pending claims of the ’862 patent,” and that at least Ellsworth, Davis, and Hulusi should have disclosed the Davis Presentation during prosecution of the ’862 patent. *Id.* WaveLynx makes similar allegations with respect to the ’677 Application, the ’167 Publication, and the Smart Card Alliance Report. *Id.* at 93–100.

55. The ’660 application published as U.S. Patent Application Publication 2007/0057057 (“the ’057 publication”). On August 24, 2018, the ’057 publication was cited by the Patent Office examiner as prior art to the WaveLynx ’830 patent. Under WaveLynx’s (albeit faulty) logic, if the ’862 Patent and the ’057 publication are so closely related that the art disclosed in one prosecution should be disclosed in the other, then WaveLynx should have disclosed the ’862 patent

to the Patent Office with respect to the '830 patent. They did not. Nor did they disclose any of the alleged prior art references they are now asserting against the '862 patent. In fact, they did not identify *any* prior art whatsoever during the prosecution of the '830 patent.

56. This omission by WaveLynx and the listed inventors is emblematic of the baseless nature of WaveLynx's allegations of inequitable conduct. WaveLynx knew about the HID '862 patent when it requested a license in 2016, i.e., several years before the WaveLynx '830 patent issued in 2019, yet did not disclose the HID '862 patent to the Patent Office during prosecution of the '830 patent. The fact that WaveLynx made no disclosure of the '862 patent in the '830 patent prosecution leads to the inference that it must not believe its own allegations that Ellsworth, Davis, and Hulusi should have disclosed the Davis Presentation, the '677 Application, the '167 Publication, and the Smart Card Alliance Report during prosecution of the '862 patent.

57. Furthermore, the '830 patent is directed to switching a reader between Wiegand and OSDP modes of communication with a control panel. As alleged in the First Amended Complaint, HID developed the OSDP specification. In fact, in the original name given to the new bidirectional communication protocol was "HID Advanced Device Protocol" or HADP. *See* Ex. 21 ("HID 13.56 MHz Physical Access Contactless Technology How to Order Guide" at p. 41, fn. 7 dated Sept. 2008, available https://www.accentalarms.com/specsheets/hid/1356mhz_htog_en.pdf); Ex. 22 ("HID 13.56 MHz Physical Access Contactless Technology How to Order Guide at p. 29, fn. 4 dated Nov. 2012, available at http://www.smartdistribution.com/userdata/files/downloads/hid/d00529_e5_13-56mhz_htog_january2014.pdf) HID assigned the rights in the HADP specification to the Security Industry Association (SIA), and it was later renamed OSDP. But HID reserved and maintained its patent rights related to the OSDP standard. Some of HID's OSDP-related patents were expressly disclosed in the past versions of SIA's OSDP specification (e.g., version 2.1.6). WaveLynx admits that it is a participant of SIA and contributor to the OSDP standard. Doc. No. 14 at 5. It then follows

that WaveLynx would have been aware of HID's significant patent rights around OSDP. Yet WaveLynx made no disclosure of any HID patents related to OSDP during its prosecution of the '830 patent, further undermining WaveLynx's insupportably broad theory of what constitutes material prior art.

58. In short, WaveLynx has an established pattern of citing *no prior art* to the Patent Office—including some of the very prior art it claims HID should have cited in the '862 patent—in any of its pending patent applications or its issued patents, including WaveLynx's '830 patent. This is especially troubling given how closely related WaveLynx's '830 patent is to HID's patented technology, particularly HID's '877 and '562 patents, which both predate the '830 patent and are now asserted in this case. In fact, the '877 patent and the '562 patent comprise the primary grounds in a concurrently filed IPR petition showing that all twenty of the claims in the '830 patent are unpatentable. *See HID Global Corp. v. WaveLynx Techs.*, IPR2023-00046, Paper 1 (PTAB Oct. 17, 2022).

59. Yet, here, WaveLynx has accused HID of inequitable conduct when HID cited numerous prior art references in the '862 prosecution history.

60. The products and references relied on by WaveLynx in its inequitable conduct allegations are not *prior* to the earliest priority date of the '862 patent, not material, and/or are cumulative to the art that was cited and considered by the Patent Office and no person associated its prosecution had the requisite intent to deceive.

61. The principals of WaveLynx, Wendling and Conlin, have a long history of misappropriating and misusing intellectual property to which they have no right. This case is just another example of their brazen disregard of intellectual property rights of HID and ASSA ABLOY. Their track record at XceedID showed no regard for IP rights, and they have continued this pattern

at WaveLynx. They have left HID and ASSA ABLOY with no choice but to protect their rights in this action once again.

PLAINTIFF'S COUNTERCLAIMS IN REPLY OF PATENT INFRINGEMENT

1. Pursuant to Federal Rule of Civil Procedure 13, HID and ASSA ABLOY assert the following counterclaims in reply against WaveLynx and allege the following:

NATURE OF THE ACTION

2. This is an action for patent infringement of U.S. Patent No. 10,452,877 (“the ’877 patent”) under 28 U.S.C §§ 1331 and 1338 and the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

PARTIES

3. Reply Counterclaimant HID is a Delaware corporation, with its principal place of business at 611 Center Ridge Drive, Austin, Texas 78753.

4. Reply Counterclaimant ASSA ABLOY is a company organized under the laws of Sweden with its principal place of business at Karabergsviadukten 90, Stockholm, 111 64, Sweden.

5. Upon information and belief, Reply Counterdefendant WaveLynx is a Delaware corporation, with its principal place of business at 100 Technology Drive Suite B130, Broomfield, CO, 80021. *See* Doc. No. 14 at 33.

JURISDICTION AND VENUE

6. This is an action for patent infringement arising under the patent laws of the United States 35 U.S.C. § 100 *et seq.* This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338.

7. This Court has personal jurisdiction over WaveLynx because it is incorporated in this judicial district and because WaveLynx has asserted counterclaims in this action.

8. Venue is proper in this judicial district under 28 U.S.C. § 1400(b) because WaveLynx is incorporated in this judicial district and because WaveLynx has asserted counterclaims in this action.

COUNTERCLAIM IN REPLY COUNT 1

(Infringement of the '877 patent)

9. Plaintiffs hereby incorporate by reference and reallege their allegations contained in all of the preceding paragraphs and paragraphs 18 through 26 in the First Amended Complaint as though fully set forth herein.

10. ASSA ABLOY is the assignee of the '877 patent entitled "Methods to Combine and Auto-Configure Wiegand and RS485," issued on October 22, 2019. *See* Ex. 23 ('877 patent). HID is the licensee of the '877 patent.

11. The '877 patent generally relates to an access control reader with credential and network interfaces that are coupled to a processor that executes instructions to determine whether there is a power source and to monitor activity at the credential interface after power has been connected. The instructions cause the access reader to enter a first or second mode of operation depending on whether activity is detected at the credential interface within a certain time after the reader has been connected to a power source.

12. Upon information and belief, WaveLynx has infringed and continues to infringe, either literally or under the doctrine of equivalents, at least claims 1–6 of the '877 patent pursuant to 35 U.S.C. §§ 271(a), (b), and (c) by making, using, offering to sell, or selling in the United States WaveLynx's Ethos Readers.

13. Claim 1 of the '877 patent is generally directed to a method whereby a personal security device gains access to a secure host device by securely releasing a credential. Claim 1 recites:

1. An access control reader, comprising:

a credential interface that facilitates communications between the access control reader and at least one credential;

a network interface that facilitates communications between the access control reader and at least one other network device;

a processor coupled to the credential interface and the network interface; and computer memory coupled with the processor and comprising instructions that are executable by the processor, the instructions comprising:

instructions to determine that the access control reader has been connected to a power source;

instructions to monitor activity at the credential interface after the access control reader has been connected to the power source; and

instructions that cause the access control reader to enter either a first mode of operation or a second mode of operation dependent upon whether or not activity is detected at the credential interface within a threshold amount of time after the access control reader has been connected to the power source;

wherein the first mode of operation corresponds to a first communications protocol used by the network interface to communicate with the at least one other network device and the second mode of operation corresponds to a second communications protocol used by the network interface to communicate with the at least one other network device.

14. WaveLynx’s Ethos Reader models number that end with “WS” suffix (collectively “OSDP Auto-Detect Readers”) indicates that it has the OSDP Auto-detect feature:

ET10 Mullion Reader	ET10-WS1	ET10-WS2	ET10-WS3	ET10-WS5	ET10-WS6	ET10-WS7
ET20 Single Gang Reader	ET20-WS1	ET20-WS2	ET20-WS3	ET20-WS5	ET20-WS6	ET20-WS7
ET25 Keypad Reader	ET25-WS1	ET25-WS2	ET25-WS3	ET25-WS5	ET25-WS6	ET25-WS7
Credential technologies	125 kHz	13.56 MHz	13.56 MHz, 125 KHz	Bluetooth®, 125 kHz	Bluetooth®, 13.56 MHz,	Bluetooth®, 13.56 MHz, 125 kHz
Reset Sequence A	Amber Flash	Green Flash	Green Flash Amber Flash	Red Flash Amber Flash	Red Flash Green Flash	Red Flash Green Flash Amber Flash
Reset Sequence B	2 beeps (with a green LED Flash) indicate OSDP communication mode, or 4 beeps beeps (with a green LED Flash) indicate Wiegand communication mode (with OSDP auto-detect)					

Doc. No. 12-9 at 4; *see also* Doc. No. 14 at 21 (“WS Field refers to Wiegand/Serial”).

15. Use of any OSDP Auto-Detect Readers infringe at least claims 1–6 of the '877 patent, as illustrated in an exemplary claim chart attached hereto as Ex. 24.

16. WaveLynx's OSDP Auto Detect Readers allows the reader to detect OSDP communications and supports multiple communication protocols, for example Wiegand and OSDP protocols. Doc. No. 12-10 at 2; Ex. 25 at 4, 12 (https://wavelynxtech.com/wp-content/uploads/2021/05/START-HERE_-Wavelynx-Overview-Presentation-Portal-Edition-External.pdf). Notably, WaveLynx promotes its OSDP Autodetect feature as allowing the use of existing wiring. Upon information and belief, WaveLynx's reference to "existing wiring" means Wiegand wiring, which facilitates unidirectional communication from the reader to the access control panel.

OSDP™ Autodetect®

We are excited to announce a breakthrough in wall mount reader design. We offer a unique patented feature known as OSDP™ Autodetect®. We have invented a way to significantly simplify the transition from Wiegand to OSDP™. We have designed an auto-detection feature into our readers, further enriching the concept of not having to touch the reader again once it is installed. WaveLynx believes that all Physical Access Control Systems (PACS) will be communicating via OSDP™ eventually, so we have designed an OSDP™ auto detect feature, facilitating the automatic conversion from Wiegand protocol to OSDP™ using the existing wiring when the access control panel hardware is communicating in OSDP.

Doc. No. 12-10 at 3.

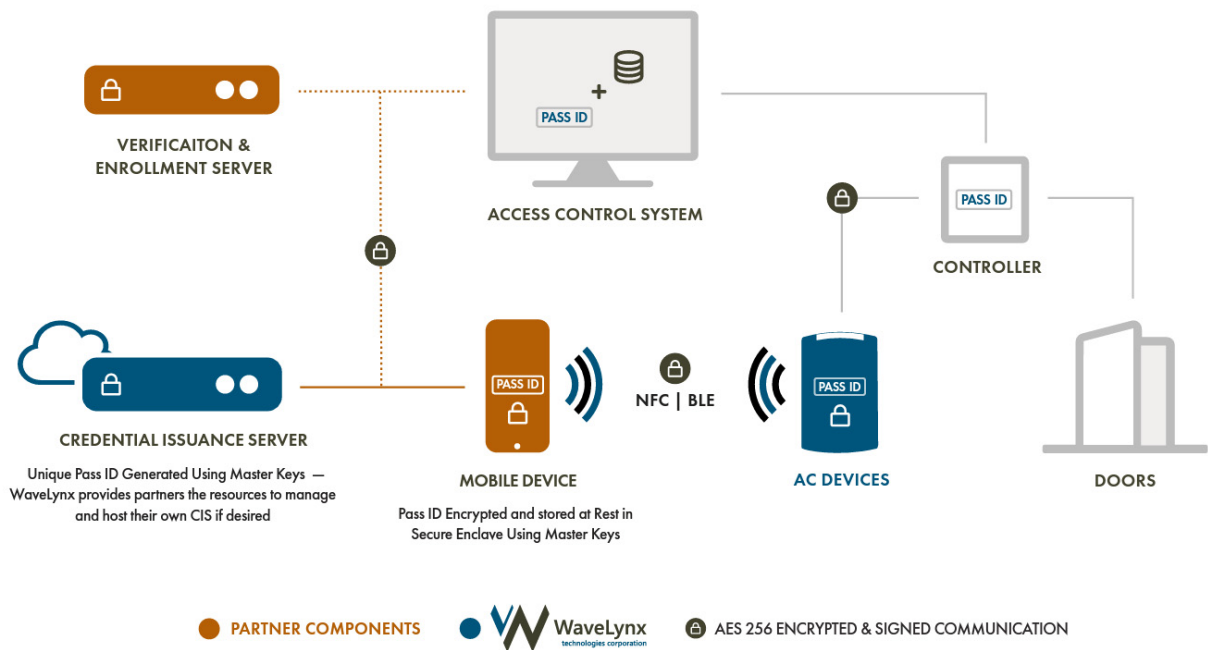
WaveLynx also touts its ability to transition to OSDP using a patented OSDP auto-detect feature.



Ex. 25 ([https://wavelynxtech.com/wp-content/uploads/2021/05/START-HERE -Wavelynx-Overview-Presentation-Portal-Edition-External.pdf](https://wavelynxtech.com/wp-content/uploads/2021/05/START-HERE-Wavelynx-Overview-Presentation-Portal-Edition-External.pdf))

17. As described in the '877 patent, “[s]cenarios that can be solved by utilizing auto-configuration include the scenario in which a new reader from the factory is mounted to a wall for the first time, a scenario in which the reader is reset on the wall, a scenario in which a factory configuration of the reader is adjusted in the field, a scenario in which the reader is re-purposed in the field from Wiegand to OSDP, a scenario in which the reader is re-purposed in the field from OSDP to Wiegand, a power-fail/recovery cycle, a tamper condition, and a scenario in which a reader is mounted but the control panel is not yet connected.” Ex. 23 ('877 patent) at 3:15–20.

18. The specification of the '877 patent discloses an exemplary credential interface as a component of the access control reader that communicates with a presented credential. Credential Interface 220 is depicted in Fig. 1, shown below.



See also Ex. 26 (Technical Overview: Mobile Credential Platform Integration Architectures & Data Specifications) at 1.

20. In more detail, WaveLynx states that its OSDP Auto-Detect Reader can be connected to a Wiegand control panel or an OSDP Control Panel.

2

Wire the Cable to the Control Panel

Common Cable Connections	
Red	Power In
Black	Ground
Shield	Shield Ground
Brown*	Tamper Out
Green	Wiegand Data 0 / RS 485A(+)
White	Wiegand Data 1 / RS 485B(-)
Yellow*	Beeper Control
Blue*	Green LED Control
Orange*	Red LED Control

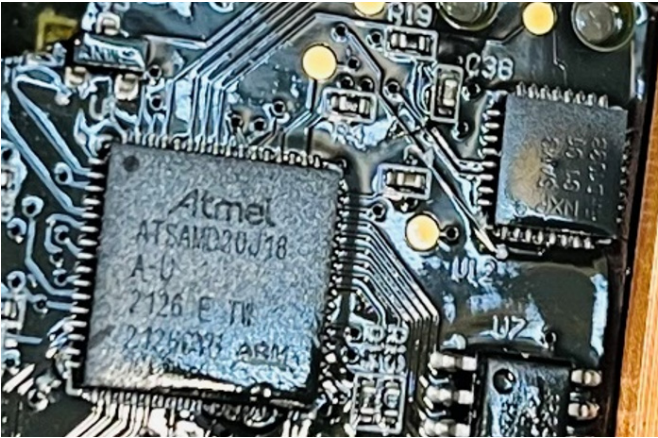
Max Length to Panel	
Wiegand	
Length	AWG
200' (60 m)	22
300'	20
500'	18
OSDP 9600 Baud	
Power 12 VDC	
1000'	22 AWG Twisted Pair
Current @ 12 V and 25 C	
Avg. mA	Max. mA
ET20: 118	ET20: 169
ET25: 143	ET25: 193

*these wires are only used in Wiegand readers.

All wiring methods used shall be in accordance with the National Electrical Code, ANSI/NFPA 70

Doc. No. 12-15 at 2; see also Doc. No. 12-16 at 2. Wiegand is a unidirectional communication protocol that transmits data from the reader to the control panel. OSDP is a bidirectional communication protocol.

21. WaveLynx’s OSDP Auto-Detect Readers use an ATMEL (Microchip) ATSAM20J18 as a processor coupled to the credential interface and the network interface.



Ex. 27 (Teardown Photo) at 5.

22. The Ethos Reader Specification states that the WaveLynx’s OSDP Auto-Detect Readers perform a designated “Startup Sequence” upon detecting a power source.

Wiegand/OSDP Tips:

- By default the reader will transmit credential and keypad data in Wiegand communication mode.
- Upon each power up, and before the reader reads a credential or a key is pressed, the reader will be listening for an incoming OSDP message. If a message is received during this period, the reader will automatically switch to OSDP-only communication mode.

Ex. 38.

23. WaveLynx’s OSDP Auto-Detect Readers, “[b]y default, ... transmit credential and keypad data in Wiegand communication mode,” and will “always be listening for an incoming OSDP message. If a message is received during this period, the reader will automatically switch to OSDP-only communication mode. Doc. No. 12-15 at 2; *see also* Doc. No. 12-16 at 2.

24. WaveLynx holds itself and its products out to the public as practicing the ’830 patent through its readers’ Auto-Detect feature, which provides further support that WaveLynx infringes the ’877 patent.

25. The ’830 patent states that it issued on November 5, 2019. Ex. 28 (’830 patent) at 1. The ’830 patent identifies JeanHugues Wendling and Daniel William Field as inventors. *Id.*

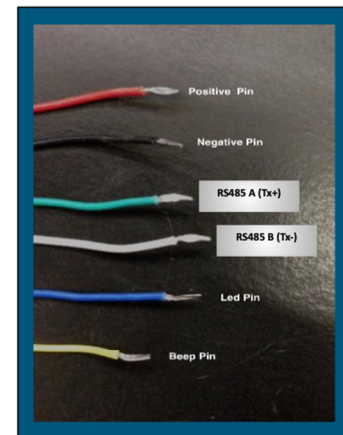
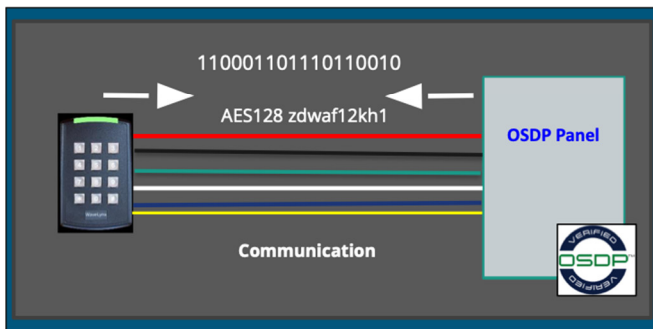
26. WaveLynx represents that it is the assignee to the ’830 patent. *See* Ex. 29, WaveLynx Technologies Corporation, Access Control Patents, <https://wavelynxtech.com/company/access-control-patents/> (last visited Aug. 19, 2022) (listing the ’830 patent).

27. WaveLynx marks its access control readers with the ’830 patent by listing the ’830 patent under “Access Control Patent” on its website and touting the patented feature as “OSDP Autodetect.” *Id.*; *See* Ex. 28 (’830 patent); *see also* Ex. 25 ([https://wavelynxtech.com/wp-content/uploads/2021/05/START-HERE -Wavelynx-Overview-Presentation-Portal-Edition-External.pdf](https://wavelynxtech.com/wp-content/uploads/2021/05/START-HERE-Wavelynx-Overview-Presentation-Portal-Edition-External.pdf)):

The Solution

Transition to Wavelynx Ethos Readers.

- Use existing Wiegand Wires for OSDP
- Patented **Autodetect** feature makes transition seamless
- No labor required at the reader to convert



Wiegand Wires / RS485 / OSDP

28. WaveLynx touts its Ethos Readers' practice of the '830 patent as easing the transition from Wiegand (unidirectional communication) to OSDP (bidirectional). *See* Ex. 25.

29. Indeed, WaveLynx's '830 patent describes a "hunt mode" that expands upon functionality described above in the OSDP Autodetect mode. In particular, the '830 patent notes that "[i]n yet another aspect, there is provided a computer-readable medium containing instructions, that when executed by a processor, perform a method for configuring an electronic credential reader, comprising: initializing the electronic credential reader in a hunt mode; transmitting received credential information via a unidirectional communication interface while in hunt mode; monitoring a bidirectional communication interface for input data; and setting the electronic credential reader to a bidirectional mode upon detecting input data on the bidirectional communication interface." Ex. 28 ('830 patent) at 2:5–15.

30. The '830 patent issued with 20 claims, of which claims 1, 3, and 11–15 are independent claims, and the remaining claims are dependent. By practicing elements of at least

certain claims of the '830 patent, WaveLynx necessarily infringes the '877 patent. Claims 13 and 15 are independent claims directed to the “hunt mode” and reproduced below:

- 13.** An electronic credential reader, comprising:
a credential receiver;
a unidirectional communication interface;
a bidirectional communication interface;
a plurality of external communication lines;
a switch coupled to the unidirectional communication interface, the bidirectional communication interface, and the plurality of external communication lines;
a processor coupled to the switch;
a computer readable medium coupled to the processor;
wherein the bidirectional communication interface and the unidirectional communication interface are configured to share the plurality of external communication lines, and;
wherein the computer readable medium comprises instructions, that when executed by the processor, perform the steps of:
changing a communication mode of the electronic credential reader from a unidirectional mode to a bidirectional mode;
monitoring the bidirectional communication interface for input data;
setting the electronic credential reader to a bidirectional mode upon detecting input data;
recording a status of the bidirectional mode in a non-volatile storage;
establishing a hysteresis timer;
resetting the hysteresis timer upon reception of a bidirectional message; and
reverting the electronic credential reader to a hunt mode upon expiry of the hysteresis timer.
- 15.** A computer-implemented method for configuring an electronic credential reader, comprising:
initializing the electronic credential reader in a hunt mode;
transmitting received credential information via a unidirectional communication interface while in hunt mode;
monitoring a bidirectional communication interface for input data;
and
setting the electronic credential reader to a bidirectional mode upon detecting input data on the bidirectional communication interface; and
recording a bidirectional mode status in a non-volatile storage.

31. Upon information and belief, including as described in both the Ethos Reader installation guide and WaveLynx's '830 patent, WaveLynx OSDP Auto-Detect Readers have firmware that include "instructions that cause the access control reader to enter either a first mode of operation or a second mode of operation dependent upon whether or not activity is detected at the credential interface within a threshold amount of time after the access control reader has been connected to the power source." Thus, WaveLynx directly infringes at least claims 1–6 of the '877 patent.

32. Upon information and belief, WaveLynx has actively induced and continues to actively induce others, including third party vendors who customize, use, and resell WaveLynx's Ethos Readers in the United States, to directly infringe claims of the '877 patent. On information and belief, use of WaveLynx's Ethos Readers directly infringes at least claims 1–6 of the '877 patent. WaveLynx has had actual knowledge of the '877 patent at least as of October 17, 2022, the date on which this counterclaim is filed. Further, on information and belief, in light of the above, WaveLynx has provided and continues to provide at least manuals, training materials, technical support, or other support, to encourage others, such as third party vendors, to perform acts that directly infringe at least claims 1–6 of the '877 patent either with specific intent that the third parties infringe the '877 patent or knowing that there was a high probability that the third parties would infringe the '877 patent while remaining willfully blind to the infringing nature of the third parties' actions. By way of example, WaveLynx provides online Portal Access to third parties to support its products, and sells its readers to be resold by its customers and offering customized versions with customer's own private labels or integrating into final products "with WaveLynx Inside." See Ex. 30 (WaveLynx Technologies Corporation, *Access Control Patents*, <https://wavelynxtech.com/business-partners/>) (last visited Oct. 7, 2022).

33. Upon information and belief, WaveLynx has contributed and continues to contribute to infringement of the claims of the '877 patent, including at least claims 1–6, by others, including third-party vendors, who customize, use, and resell WaveLynx's Ethos Readers, by providing WaveLynx's Ethos Readers, which are specially made or adapted for use in an infringement of claims 1–6 of the '877 patent and are not staple articles of commerce suitable for substantial noninfringing use. WaveLynx has had actual knowledge of the '877 patent at least as of October 17, 2022, the date on which this counterclaim is filed. In light of these allegations, WaveLynx had knowledge that WaveLynx's Ethos Readers were specially made or adapted for use in an infringement of the '877 patent and are not a staple article of commerce suitable for substantial noninfringing use.

34. As a result of WaveLynx's ongoing and continuous unlawful infringement of the '877 patent, Plaintiffs have suffered and will continue to suffer damages, including but not limited to lost profits for convoyed sales. That WaveLynx tried to patent such a similar concept with its 830 patent shows the significant value of the technology in the invention claimed by the '877 patent. Plaintiffs are entitled to recover from WaveLynx compensation and monetary relief to the fullest extent allowed by law, which has yet to be determined.

35. Any sales, offers for sale, or uses by WaveLynx of WaveLynx's Ethos Readers demonstrate a deliberate and conscious decision to infringe the '877 patent or, at the very least, a reckless disregard of Plaintiffs' patent rights.

36. WaveLynx will continue to infringe the '877 patent unless and until it is enjoined by this Court. WaveLynx's acts of infringement have caused and will continue to cause irreparable harm to Plaintiffs until enjoined by this Court.

PRAYER FOR RELIEF

WHEREFORE, in addition to the prayer for relief made by Plaintiffs in their original Complaint and First Amended Complaint, Plaintiffs respectfully seek the requested relief on these Counterclaims in Reply as set forth at the end of this pleading.

DEMAND FOR A JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs hereby request a trial by jury of all issues so triable on these Counterclaims in Reply.

ANSWER TO COUNTERCLAIMS

Plaintiffs deny each and every allegation and characterization in WaveLynx's Counterclaims unless expressly admitted in the following paragraphs. For any factual allegation admitted below, Plaintiffs admit only as to the specific admitted facts, and not as to any purported conclusions, characterizations, implications, or speculations that arguably follow from the admitted facts. Plaintiffs deny that WaveLynx is entitled to the relief requested or any other relief.

Specifically, Plaintiffs answer as follows:

I. Parties³

1. Counterclaimant WaveLynx is a corporation organized and existing under the laws of the State of Delaware with its principal place of business at 100 Technology Drive Suite B130, Broomfield, CO, 80021.

ANSWER: Based on current information and belief, and on allegations made by WaveLynx in its Answer and Counterclaims, Plaintiffs currently admit the allegations in Paragraph 1 of the

³ Plaintiffs repeat the headings set forth in the Counterclaims to simplify comparison of the Counterclaims and this response. In doing so, Plaintiffs make no admissions regarding the substance of the headings or any other allegations of the Counterclaims. Unless otherwise stated, to the extent that a particular heading can be construed as an allegation, Plaintiffs specifically deny all such allegations. Where necessary, Plaintiffs make amendments to WaveLynx's headings in brackets.

Counterclaims. Plaintiffs reserve the right to modify this response if they discover that any allegation in Paragraph 1 is incorrect or untruthful.

2. Upon information and belief based, Counterdefendant ASSA ABLOY AB is a corporation organized and existing under the laws of Sweden with its principal place of business at Klarabergsviadukten 90, Stockholm, 111 64, Sweden.

ANSWER: Plaintiffs admit that ASSA ABLOY is a corporation organized and existing under the laws of Sweden with its principal place of business at Klarabergsviadukten 90, Stockholm, 111 64, Sweden.

3. Upon information and belief, Counterdefendant HID Global Corporation is a corporation organized and existing under the laws of Delaware, with its principal place of business at 611 Center Ridge Drive, Austin, TX 78753.

ANSWER: Plaintiffs admit that HID is a corporation organized and existing under the laws of Delaware, with its principal place of business at 611 Center Ridge Drive, Austin, TX 78753.

II. Jurisdiction and Venue

4. Counterdefendants filed a lawsuit against WaveLynx alleging that WaveLynx infringes or has infringed U.S. Patent No. 7,439,862 (“the ’862 patent”).

ANSWER: Plaintiffs admit that they filed a lawsuit against WaveLynx alleging that WaveLynx infringes or has infringed U.S. Patent No. 7,439,862 (“the ’862 patent”).

5. WaveLynx denies that it infringes or has infringed any valid or enforceable claim of the ’862 patent and asserts that the ’862 patent is invalid and unenforceable.

ANSWER: To the extent that the allegations of Paragraph 5 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that WaveLynx states that it “denies that it infringes or has infringed any valid or enforceable claim of the ’862 patent and asserts that the ’862 patent is invalid and unenforceable.” *See* Doc. No. 14 at 33. Plaintiffs deny any remaining allegations and characterizations contained in Paragraph 5 of the Counterclaims.

6. Subsequently, Counterdefendants amended their complaint, asserting that WaveLynx also infringes U.S. Patent No. 8,943,562 (“the ’562 patent”). *See* D.I. 12.

ANSWER: Plaintiffs admit that they amended their complaint on June 12, 2022, asserting that WaveLynx also infringes U.S. Patent No. 8,943,562 (“the ’562 patent”).

7. WaveLynx denies that it infringes or has infringed any valid or enforceable claim of the ’562 patent and/or ’862 patent. Based on the foregoing, there is an actual, immediate, and justiciable controversy between Counterdefendants and WaveLynx as to the infringement, validity, and enforceability of the ’862 and ’562 patents.

ANSWER: To the extent that the allegations of Paragraph 7 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that WaveLynx states that it “denies that it infringes or has infringed any valid or enforceable claim of the ’562 patent and/or ’862 patent.” Doc. No. 14 at 34. Plaintiffs admit that they have asserted claims of infringement of the ’862 and ’562 patents and that a justiciable controversy exists between the parties as to these claims as well as the new claims added by Plaintiffs in this pleading. Plaintiffs deny any remaining allegations and characterizations contained in Paragraph 7 of the Counterclaims.

8. This is an action for declaratory relief pursuant to 28 U.S.C. §§ 2201 and 2202 of invalidity and unenforceability of the ’862 patent under the United States patent laws, Title 35 of the United States Code.

ANSWER: To the extent that the allegations of Paragraph 8 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that the Counterclaims purport to be actions that arise under “the United States patent laws, Title 35 of the United States Code” and “pursuant to 28 U.S.C. §§ 2201 and 2202.” Doc. No. 14 at 34.

9. Counts I through IV of these Counterclaims arise under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, and the Declaratory Judgment Act, 28 U.S.C. §§ 2201-2202. The Court has subject matter jurisdiction over these Counterclaims pursuant to 28 U.S.C. §§ 1331, 1338, and 2201-2202.

ANSWER: To the extent that the allegations of Paragraph 9 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Counts I through IV of the Counterclaims purport to be actions that arise under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, and the Declaratory Judgment Act, 28 U.S.C. §§ 1331,

1338, 2201–2202. Doc. No. 14 at 34. Plaintiffs further admit the United States District Court of Delaware has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

10. Counterdefendants have consented to personal jurisdiction and venue in this district by filing the Amended Complaint in this action in this Court. As such, Counterdefendants are subject to personal jurisdiction in this Court and venue is proper.

ANSWER: To the extent that the allegations of Paragraph 10 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that they do not contest personal jurisdiction and venue for the purpose of this action.

III. Overview

11. This lawsuit is Counterdefendants’ latest attempt in a decades-long series of unfounded and baseless attempts to harass competitors, including the founders of WaveLynx. WaveLynx is an established innovator that develops and sells products that are far superior to Counterdefendants’ products.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 11 of the Counterclaims.

12. In their Amended Complaint, Counterdefendants allege that certain WaveLynx technology—namely, dual- or multi-frequency RFID readers that operate at frequencies of 125 kHz or 13.56 MHz—infringe claims 1-4 of the ’862 patent.

ANSWER: Plaintiffs admit that their Amended Complaint alleges that “WaveLynx has infringed and continues to infringe, either literally or under the doctrine of equivalents, at least claims 1–4 of the ’862 patent pursuant to 35 U.S.C. §§ 271(a), (b), and (c) by making, using, offering to sell, or selling in the United States WaveLynx’s Ethos Readers.” Doc. No. 12 ¶ 28. Plaintiffs deny that WaveLynx has any proprietary rights over the technology embodied in such products. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 12 of the Counterclaims.

13. However, by alleging infringement by WaveLynx’s RFID readers, Counterdefendants are asserting that the ’862 patent reads on technology that was available in the public domain before the filing of the application for the ’862 patent. For example, the industry—*including the founders of WaveLynx*—developed dual- and multi-frequency RFID readers at the very same 125 kHz and 13.56 MHz frequencies before the filing of the application for the ’862 patent in 2004. In fact, such technology was invented and marketed by the founders of WaveLynx by 2003, while at their previous company—XceedID Corporation (“XceedID”).

ANSWER: Plaintiffs admit that they asserted in the First Amended Complaint (and continue to assert here) that WaveLynx's RFID readers infringe the '862 and '562 patents. In this pleading, Plaintiffs are further asserting that WaveLynx's RFID readers infringe the '877 patent. As to the allegation that "the '862 patent reads on technology that was available in the public domain before the filing of the application for the '862 patent," to the extent Plaintiffs understand this allegation, they deny it. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 13 of the Counterclaims and therefore deny them.

14. Worse, before filing this lawsuit, Counterdefendants knew that dual- and multi-frequency RFID readers were in the public domain before the filing date of the application for the '862 patent. Indeed, HID's former Global Director of Technology, Intellectual Property, Michael Davis, publicly presented the details and use of identical technology in a 2003 National Institute of Standards and Technology ("NIST") workshop. Counterdefendants also knew that XceedID conceived, developed, and filed for patent protection for the same invention before the filing of any application related to the '862 patent was filed.

ANSWER: To the extent that the allegations of Paragraph 14 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny that dual- and multi-frequency RFID readers having the configuration claimed in the '862 patent were in the public domain before the filing date of the application for the '862 patent. Plaintiffs admit that Masha Davis (f/k/a Michael Davis) was formerly HID's Director of Technology, Intellectual Property at HID Global and that Davis made a presentation at a 2003 NIST workshop before working at HID. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 14 of the Counterclaims concerning XceedID's alleged "patent protection for the same invention" and, on that basis, deny them. Plaintiffs deny the remaining allegations and characterizations of Paragraph 14 of the Counterclaims.

15. Even worse, Counterdefendants knowingly concealed this and other known prior art and prior invention from the U.S. Patent Office during prosecution of the applications related to the '862 patent. This information is material to patentability of the claims of the '862 patent, which would

not have issued but-for Counterdefendants' intentional concealment of the known prior art in order to gain allowance of claims covering this very prior art, including at least claims 1-4 of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 15 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 15 of the Counterclaims.

16. Accordingly, Counterdefendants filed this lawsuit knowing both that the '862 patent is invalid and that it was obtained by committing fraud on the U.S. Patent Office. Therefore, at least claims 1-4 of the '862 patent are invalid in view of the prior art, every claim of the '862 patent is unenforceable, and this case is exceptional under 35 U.S.C. § 285.

ANSWER: To the extent that the allegations of Paragraph 16 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 16 of the Counterclaims.

17. Unexpectedly, and without notice, Counterdefendants amended their complaint on Sunday June 12, 2022—the day before WaveLynx's answer was originally due—to assert the '562 patent.

ANSWER: Plaintiffs admit that they amended their complaint on Sunday June 12, 2022, and asserted the '562 patent. Plaintiffs were not required to and did not give advance notice of such amendment to WaveLynx.

18. As with the '862 patent, when Counterdefendants filed this lawsuit, they knew, or at least should have known, that WaveLynx does not infringe the '562 patent and that the '562 patent is invalid. Accordingly, this is another reason why this case is exceptional under 35 U.S.C. § 285.

ANSWER: To the extent that the allegations of Paragraph 18 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 18 of the Counterclaims.

IV. Background on WaveLynx and XceedID

19. Jean-Hugues (Hugo) Wendling ("Wendling") and Michael T. Conlin ("Conlin"), founded WaveLynx in 2011. By the time they founded WaveLynx, they had between them about 25 years of experience in the industry, including based on their prior experience working at HID and at the first company they founded, XceedID. Throughout their careers, Wendling and Conlin have taken a different business approach than HID. For example, Wendling and Conlin have worked, both at

XceedID and WaveLynx, to develop RFID readers that are based on an open format, unlike HID, which designs its readers and credentials to operate on allegedly proprietary data formats.

ANSWER: Based on information and belief, Wendling and Conlin have worked at both WaveLynx and XceedID Corporation (“XceedID”). Plaintiffs admit that HID designs readers and credentials including propriety information and technology. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 19 of the Counterclaims and therefore deny them.

20. As detailed further below, this lawsuit is not the first time that Counterdefendants have embroiled Conlin and Wendling—founders of WaveLynx—in unjustified litigation concerning the very same technology at issue in the present case. And as also detailed further below, some of the pleadings and case materials from those prior cases provide important context and establish vital facts detrimental to Counterdefendants’ present suit.

ANSWER: Plaintiffs admit that they have been involved in lawsuits involving Conlin and Wendling previously. Plaintiffs deny that this or prior litigation is “unjustified” or that the prior lawsuits concerned “the very same technology at issue in the present case.” Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 20 of the Counterclaims and therefore deny them.

21. As HID pled in an earlier lawsuit involving Conlin: “Beginning in 1998, Conlin was employed by HID and HID’s predecessor in interest to work on behalf of HID as an electrical engineer. From his employment in 1998, until his resignation on July 30, 2003, the same day that he gave notice of resignation, Conlin was heavily involved in the development, implementation, use and sale of HID’s 125 KHz and 13.56 MHz RFID security access products.” Ex. A, ¶¶ 23-25.

ANSWER: Plaintiffs admit that a complaint from an earlier lawsuit states the following:

“Beginning in 1998, Conlin was employed by HID and HID’s predecessor in interest to work on behalf of HID as an electrical engineer. Upon commencement of his employment, Conlin executed a document entitled ‘Employee Statements and Agreements’ in which Conlin acknowledged that the success of his employer and its subsidiaries, including HID, depended upon maintaining strict secrecy with respect to those companies’ trade secrets and proprietary information. In the Employee Statements and Agreements, Conlin also acknowledged that ‘any and all inventions, including developments and discoveries, whether or not patentable, which [Conlin] may conceive or first reduce to practice, either alone or with others during the period of [his] employment...shall be the sole and exclusive property of [his employer]. From his employment in 1998, until his resignation on July 30, 2003, the same day that he gave

notice of resignation, Conlin was heavily involved in the development implementation, use and sale of HID's 125 kHz and 13.56 MHz RFID security access products, including HID's products that are advertised and sold under the Marks that are the subject of this action. Conlin had access to all technical aspects of these products, including the customer coding formats and other codes and engineering documentation necessary to make HID's RFID products. Conlin also had had access to confidential information concerning HID's reliance on various patents and other forms of intellectual property protection relating to HID's products. Conlin was primarily involved in the development of the 125 kHz Prox products. When he resigned, Conlin held the title of Design Projects Manger [*sic*]."

Doc. No. 14-1 ¶¶ 23–25. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 21 of the Counterclaims.

22. As HID pled in an earlier lawsuit involving Wendling: "Beginning in 1999, Wendling was employed by HID and HID's predecessor in interest to work on behalf of HID as an engineer. From 1999 until his resignation on August 6, 2003, Wendling was heavily involved in the development, implementation, use and sale of HID's RFID security access products." *Id.*, ¶¶ 26-28.

ANSWER: Plaintiffs admit that a complaint from an earlier lawsuit states the following:

"Beginning in 1999, Wendling was employed by HID and HID's predecessor in interest to work on behalf of HID as an engineer. Upon commencement of his employment, Wendling executed a document entitled 'Employee Statements and Agreements' in which Wendling acknowledged that the success of his employer and its subsidiaries, including HID, depended upon maintaining strict secrecy with respect to those companies' trade secrets and proprietary information. In the Employee Statements and Agreements, Wendling also acknowledged that 'any and all inventions, including developments and discoveries, whether or not patentable, which [Wendling] may conceive or first reduce to practice, either alone or with other during the period of [his] employment... shall be the sole and exclusive property of [his employer]' From 1999 until his resignation on August 6, 2003, Wendling was heavily involved in the development, implementation, use and sale of HID's RFID security access products including HID's products that are advertised and sold under the marks that are the subject of this action. Wendling had access to all technical aspects of these products, including the customer coding formats and all other codes and engineering documentation necessary to make HID's RFID products work."

Doc. No. 14-1 ¶¶ 26–28. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 22 of the Counterclaims.

23. Upon departing HID in 2003, Wendling and Conlin formed XceedID, a start-up company in the contactless technology market.

ANSWER: Plaintiffs admit that XceedID was a company in the contactless technology market. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the

remaining allegations and characterizations in Paragraph 23 of the Counterclaims and therefore deny them.

A. Development of XceedID's Dual-Frequency RFID Reader and Related IP

24. XceedID independently designed and developed its own products and invested substantially in developing its pioneering multi-frequency RFID technology.

ANSWER: Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the allegations and characterizations in Paragraph 24 of the Counterclaims and therefore deny them.

25. By mid-August 2003, Conlin had conceived of a dual-frequency RFID reader with a 125 kHz antenna and a 13.56 MHz antenna on the same printed circuit board. Conlin and Wendling promptly developed a commercial embodiment of this dual-frequency RFID reader around the same time. RFID readers that used Conlin's design would be sold by both XceedID, as the XF1100, XF2100, and XF2110 readers (the "XF Series Readers"), and by and General Electric Security ("GES") in the GES Transition Series Readers, starting in 2004.

ANSWER: Plaintiffs currently lack sufficient knowledge or information to form a belief as to the truth of the allegations and characterizations in Paragraph 25 of the Counterclaims and therefore deny them.

26. Conlin's invention led to the filing of two provisional patent applications on March 15, 2004: U.S. Provisional Patent Application No. 60/553,677 (the "'677 application" or "Conlin's '677 application"), and U.S. Provisional Application No. 60/553,685 (the "'685 application"). The '677 application included images of multi-frequency readers designed by XceedID, including the GES Transition Series Readers.

ANSWER: Plaintiffs admit that U.S. Patent Application Nos. 60/533,677 ("'677 Application") and 60/553,685 ("'685 Application") state that they were filed on March 15, 2004. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 26 of the Counterclaims and therefore deny them.

27. Conlin assigned the provisional patent applications to XceedID.

ANSWER: Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the allegations and characterizations in Paragraph 27 of the Counterclaims and therefore deny them.

28. HID was aware by no later than April 2005 that XceedID had developed dual-frequency RFID readers and had filed patent applications on them. Ex. B, at 8; *see also* Ex. A, ¶¶ 42-47 (further establishing knowledge by March 2006).

ANSWER: Plaintiffs admit that by April 2005, at least one or more employee(s) of HID was aware that XceedID was developing some RFID readers and had filed some patent applications. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 28 of the Counterclaims and therefore deny them.

29. XceedID ultimately obtained several U.S. patents on its inventions relating to dual-frequency RFID readers, including U.S. Patent Nos. 7,676,839, 7,900,253, 8,407,775, 9,142,069, 9,361,740, 9,680,837, and 9,830,758.

ANSWER: Plaintiffs admit that the cover sheets of U.S. Patent Nos. 7,676,839, 7,900,253, 8,407,775, 9,142,069, 9,361,740, 9,680,837, and 9,830,758 indicate they are assigned to one of the following: XceedID, Xceed ID Corporation, or XceedID Corporation. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 29 of the Counterclaims and therefore deny them.

B. XceedID XF Series and GES Transition Series Reader

30. The XceedID XF Series Readers and the GES Transition Series Readers exemplify and embody XceedID and Conlin's inventions that are disclosed in the '677 and '685 applications.

ANSWER: To the extent that the allegations of Paragraph 30 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the allegations and characterizations in Paragraph 30 of the Counterclaims and therefore deny them.

31. In September 2004, XceedID launched a dual-frequency RFID reader for its customer GES, called the Transition Series. As stated in one of its exemplary data sheets, the GES Transition

Series Reader featured “simultaneous compatibility with multi-vendor credential technologies—GE and HID 125 kHz Proximity, HID Corporate 1000 Proximity, 13.56 MHz contactless smart card technologies for MIFARE® Card Serial Number (ISO 14443A), MIFARE/DESFire Card Serial Number, and Vicinity Card Serial Number (ISO 15693), including HID iCLASS® Card Serial Number—all in one reader.” Ex. C, at 1.

ANSWER: Plaintiffs admit that Ex. C to WaveLynx’s Counterclaims states “simultaneous compatibility with multi-vendor credential technologies—GE and HID 125 kHz Proximity, HID Corporate 1000 Proximity, 13.56 MHz contactless smart card technologies for MIFARE® Card Serial Number (ISO 1443A), MIFARE/DESFireCard Serial Number, and Vicinity Card Serial Number (ISO 15693), including HID iCLASS® Card Series Number—all in one reader.” On information and belief, the GES reader models T-500W/520W/525W shown in Ex. C to WaveLynx’s Counterclaims were not publicly available in September 2004, but sometime after receiving FCC authorization on October 19, 2004, and on that basis, Plaintiffs deny that such readers were “launched” or on the market in September 2004. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 31 of the Counterclaims and therefore deny them.

32. To avoid a lawsuit with HID over the compatibility of the Transition Series Readers with these HID formats, GES obtained a license from HID to “HID 125 kHz Proximity [and] HID Corporate 1000 Proximity” formats.

ANSWER: Plaintiffs admit that HID entered into a License Agreement with General Electric Security (“GES”) for “Prox Protocol, Prox Reader Firmware, and Prox Card Formats,” and HID utilized the “Prox Protocol” for 125 kHz communication between tis readers and its access cards and the “Prox Card Formats” included, without limitation, HID’s “Corporate 1000” Access Control Systems.” Ex. 4 (GES–HID License Agreement) at 2, 4. The License Agreement states that “GES desires to license the Prox Protocol, Prox Reader, and Prox Card Formats” from HID. *Id.* at 1. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining

allegations and characterizations in Paragraph 32 of the Counterclaims and, on that basis, deny all such allegations.

33. The GES Transition Series Readers developed by XceedID were received very favorably in the market. For example, on September 27, 2004, Security Infowatch.com hailed the GES Transition Series Readers as “revolutionary . . . multi-technology card readers.” Ex. D, at 1. Security Infowatch.com also described how the GES Transition Series Readers “are multivendor 125KHz proximity compatible with GE and HID Proximity cards as well as contactless smart cards that meet Mifare (ISO14443A) and Vicinity (ISO 15693) standards.” *Id.* at 2.

ANSWER: Plaintiffs admit that Doc. No. 14-4 appears to include the statements quoted in Paragraph 33 of the Counterclaims. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the claims that the GES Transition Readers are “revolutionary . . . multi-technology card readers” and “are multivendor 125KHz proximity compatible with GE and HID Proximity cards as well as contactless smart cards that meet Mifare (ISO14443A) and Vicinity (ISO 15693) standards,” and, on that basis, deny all such claims. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 33 of the Counterclaims and therefore deny them.

34. The GES Transition Series Readers also were awarded the 2004 Frost & Sullivan Award for Product Innovation.

ANSWER: Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the allegations and characterizations in Paragraph 34 of the Counterclaims and therefore deny them.

35. XceedID obtained FCC approval for its own branded dual frequency readers no later than October 2004. XceedID began selling its XF Series Readers in January 2005, including the following: the XF1100, XF2100, and XF2110 readers. The XF Series Readers were described in the '677 application and used the same design as the GES Transition Series.

ANSWER: Plaintiffs admit that the FCC records show a grant of equipment authorization to XF Series Readers dated October 19, 2004. Plaintiffs lack sufficient knowledge or information to

form a belief as to the truth of the remaining allegations and characterizations in Paragraph 35 of the Counterclaims and therefore deny them.

C. Sale of XceedID and Creation of WaveLynx

36. In 2008, XceedID was sold to Ingersoll Rand, which then became Allegion in 2013. Wendling and Conlin continued to work for Ingersoll Rand, including on RFID reader technology, until 2011.

ANSWER: Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the allegations and characterizations in Paragraph 36 of the Counterclaims and therefore deny them.

37. In 2011, after departing from Ingersoll Rand, Wendling and Conlin founded WaveLynx.

ANSWER: Plaintiffs admit that Wendling and Conlin were founders of WaveLynx. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 37 of the Counterclaims and therefore deny them.

38. WaveLynx prides itself on developing high quality physical access security systems that are open and interoperable. For example, through Leaf Cc, WaveLynx's customers are able to select data transfer formats, credential management services, or credential cards from any company that participates in Leaf Cc for use with WaveLynx RFID readers. WaveLynx sells several product lines of RFID tags and readers, and it also sells credential management services, including Key Management.

ANSWER: Plaintiff admits that "[a]ll WaveLynx Ethos Readers also offer LEAF credential support" and that "LEAF is an open standard for credentials, which allows for end user customization of cryptographic keys." Doc. No. 12 ¶ 23. Plaintiff further admits that "[t]hrough WaveLynx's Key Management service, WaveLynx allows its customers to manage their own LEAF Custom Cryptographic (LEAF Cc) keys," and that "WaveLynx's Key Management 'makes owning your keys and provisioning them to devices of your choices an easy process to deploy.'" *Id.* Plaintiff further admits that WaveLynx sells RFID readers and Key Management services. Plaintiffs lack sufficient

knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 38 of the Counterclaims and therefore deny them.

39. Continuing to advance the state of the art, WaveLynx has obtained patent protection on its inventions. For example, WaveLynx is the assignee of U.S. Patent Nos. 9,558,377, 9,747,738, 10,102,700, 10,467,830, and 10,553,054. WaveLynx also is the assignee of U.S. Application No. 16/365,946, which is published as U.S. Publication. No. 2020/0312065.

ANSWER: Plaintiffs admit that the cover sheet of U.S. Patent No. 9,558,377 lists WaveLynx Technologies Corp. as the assignee. On information and belief, Plaintiffs admit that WaveLynx states that it is the assignee of U.S. Patent Nos. 9,747,738, 10,102,700, 10,467,830, and 10,553,054, and U.S. Application No. 16/365,946, which is published as U.S. Publication. No. 2020/0312065 based on WaveLynx's public web site. *See* Ex. 29 (<https://wavelynxtech.com/company/access-control-patents/>). Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 39 of the Counterclaims and therefore deny them.

40. Since 2016, WaveLynx has seen substantial growth in sales, experiencing approximately 100% year over year growth.

ANSWER: Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the allegations and characterizations in Paragraph 40 of the Counterclaims and therefore deny them.

41. Counterdefendants are aware of WaveLynx's substantial success. In fact, because WaveLynx buys physical credentials from HID, Counterdefendants have direct visibility of WaveLynx's significant growth over the last few years.

ANSWER: Plaintiff admits that WaveLynx purchases physical credentials from Plaintiffs. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 41 of the Counterclaims and therefore deny them.

42. Counterdefendants, on the other hand, have not experienced the same success. In fact, it is known in the industry that Counterdefendants' sales have declined in recent years. For example, on information and belief, just in the last year, Counterdefendants have encountered supply issues

and have been unable to provide products to their customers, which have forced some of those customers to source products elsewhere.

ANSWER: Plaintiffs admit that they faced certain supply chain issues related to semiconductors during the COVID-19 pandemic as have many other technology sector companies. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the allegations and characterizations in Paragraph 42 of the Counterclaims and therefore deny them.

V. Counterdefendants’ [Alleged] Prior Efforts to Stifle Competition

43. Counterdefendants, from what they allege in their Amended Complaint, are dominant players in the industry. On information and belief, HID currently controls a significant portion of the market in which HID and WaveLynx compete.

ANSWER: Plaintiffs admit that they are “leader[s] in the PACS industry, and have developed a valuable ecosystem of products and acquired patents on this technology.” Doc. No. 12 ¶ 1. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 43 of the Counterclaims and therefore deny them.

44. However, rather than competing fairly in the market, Counterdefendants have shown a pattern and practice of filing lawsuits against their competitors in an apparent effort to stifle competition.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 44 of the Counterclaims.

45. For example, shortly after Wendling and Conlin founded XceedID in 2003, HID—viewing them as a competitive threat—initiated two lawsuits against XceedID, Wendling, and Conlin related to the same RFID reader technology at issue in this case.

ANSWER: Plaintiffs admit that they filed a lawsuit against XceedID in the Central District of California—*HID Global Corp. v. XceedID Corp.*, Civ. No. 8:06-cv-1245 (C.D. Cal.)—naming XceedID Corporation and Does 1 through 10 as defendants. Plaintiffs admit that HID and Identification Technology Group filed a lawsuit against XceedID, Conlin, and Wendling in the Jefferson County District Court of Colorado—*HID Global Corp. v. XceedID Corp.*, Civ. No. 4-cv-3124 (Colo. Dist. Ct. Jefferson Cnty.)—naming XceedID Corporation, Conlin, John Menzel, and

Wendling as defendants. Plaintiffs deny the remaining allegations and characterizations in Paragraph 45 of the Counterclaims.

46. On information and belief, HID's Michael Davis and Tam Hulusi were the driving force at HID in bringing those lawsuits against XceedID and its employees.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 46 of the Counterclaims.

47. On October 5, 2004, HID and Identification Technology Group ("ITG"), a subsidiary of HID, filed a lawsuit against XceedID, Conlin, and Wendling in Colorado state court (the "Colorado XceedID lawsuit") for alleged trade secret misappropriation.

ANSWER: Plaintiffs admit that Identification Technology Group ("ITG") and HID Corporation filed a lawsuit against XceedID Corporation, Conlin, Menzel, and Wendling on October 5, 2004, in Colorado state court (the "Colorado XceedID Lawsuit") for trade secret misappropriation. Plaintiffs deny that ITG is a subsidiary of HID Corporation.

A. HID's First Lawsuit Against XceedID

48. The complaint for the Colorado XceedID lawsuit was signed by Todd Blakely of Sheridan Ross P.C.

ANSWER: Plaintiffs admit that the complaint ITG and HID filed in the Colorado XceedID Lawsuit was signed by Todd P. Blakely of Sheridan Ross P.C.

49. HID alleged that "[i]n the late Fall of 2003" it had learned from customers that XceedID was designing "RFID security access readers for customers that would replicate or be compatible with HID's iClass RFID products and/or HID controllers used to control the operation of HID Prox products." Ex. E, ¶ 32.

ANSWER: Plaintiffs admit that the complaint filed in the Colorado XceedID Lawsuit states that "[i]n the late Fall of 2003, HID learned from customers that XceedID was allegedly offering to design RFID security access readers for customers that would replicate or be compatible with HID's iClass RFID products and/or HID controllers used to control the operation of HID Prox products." Doc. No. 14-5 ¶ 32.

50. iClass RFID products operate at 13.56 MHz and Prox products operate at 125 kHz.

ANSWER: Plaintiffs admit that iCLASS RFID products operate at 13.56 MHz and Prox products operate at 125 kHz.

51. On information and belief, HID initiated the Colorado XceedID lawsuit because it believed that XceedID's dual-frequency readers posed a competitive threat to the sale of HID's proximity cards and readers.

ANSWER: Plaintiffs admit that the Colorado XceedID complaint states, in part, "XceedID was allegedly offering to design RFID security access readers for customers that would replicate or be compatible with HID's iCLASS RFID products and/or HID controllers used to control the operation of HID Prox products." Doc. No. 14-5 ¶ 32. Plaintiffs also admit that the Colorado XceedID complaint alleged unfair and unscrupulous competitive conduct by XceedID and its founders, Wendling, Conlin, and John Menzel. *Id.* ¶¶ 29, 32–37, 47, 52, 55–56, 59, 65–66, 69. The remaining allegations and characterizations in Paragraph 51 of the Counterclaims are not clearly defined, and therefore Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of these remaining allegations and characterizations and therefore deny them.

52. In the complaint, HID alleged that "[o]n or about September 17, 2004, ITG discovered that XceedID had designed and engineered a universal card reader for General Electric Security, part of GE Infrastructure, that is capable of reading HID's RFID security access cards." *Id.* ¶ 33.

ANSWER: Plaintiffs admit that the complaint filed in the Colorado XceedID Lawsuit states that "[o]n or about September 17, 2004, ITG discovered that XceedID had designed and engineered a universal card reader for General Electric Security, part of GE Infrastructure, that is capable of reading HID's RFID security access cards." Doc. No. 14-5 ¶ 33.

53. Thus, before filing the application for the '862 patent on December 16, 2004, HID was fully aware of XceedID's dual-frequency readers with two antennas.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 46 of the Counterclaims.

54. Then, on October 22, 2004—less than three months after initiating the Colorado XceedID lawsuit—HID withdrew the complaint. On information and belief, HID withdrew their complaint because it learned that XceedID’s products were not compatible with HID credentials.

ANSWER: Plaintiffs admit that HID withdrew the complaint in the Colorado XceedID Lawsuit without prejudice on October 22, 2004, based on XceedID’s representation to HID that XceedID had in fact not done work on readers that were compatible with HID’s RFID security access cards after the Colorado XceedID Lawsuit was filed. Plaintiffs deny the remainder of the allegations and characterizations in Paragraph 54 of the Counterclaims.

55. After withdrawing their lawsuit, HID also continued to closely monitor XceedID’s products and business activities. For example, in August of 2005, representatives of HID met with representatives of XceedID to discuss XceedID’s XF Series Readers. HID representatives included Tam Hulusi (HID Global’s Senior Vice President of Strategy and Innovation), Michael Davis (HID Global’s Director of Technology, Intellectual Property), and attorney Todd Blakely of the law firm Sheridan Ross P.C. At this meeting, Hulusi, Davis, and attorney Blakely brought with them a datasheet for an XceedID XF Series Reader.

ANSWER: Plaintiffs admit that Hulusi and Davis, as well as Pete Lowe, of HID, and Blakely of Sheridan Ross P.C., attended a meeting in August 2005 with representatives of XceedID, including Wendling, Conlin, Menzel, and Celia Rankin, during which HID readers and XceedID XF series readers were discussed. Plaintiffs further admit that Davis was formerly held the title of Director of Technology, Intellectual Property at HID Global, and Hulusi was formerly held the title of Senior Vice President of Strategy and Innovation. Plaintiffs also admit that after the Colorado XceedID Lawsuit was withdrawn, HID continued to monitor XceedID’s misappropriation of trade secrets pertaining to HID proprietary RFID coding formats and false and misleading statements in the marketplace, in addition to other unfair business practices by XceedID, including acts by Conlin, Wendling, and Menzel. Doc. No. 14-1 ¶¶ 38–44. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 55 of the Counterclaims and, on that basis, deny all such allegations.

B. HID’s Second Lawsuit Against XceedID

56. HID, along with AAAB, then filed a second lawsuit against XceedID on December 21, 2006, this time in the United States District Court for the Central District of California, C.A. No. 06-1245 (the “CDCA XceedID lawsuit”). Counterdefendants initially alleged violations of the Lanham Act, and later amended their complaint to assert trade secret misappropriation on May 9, 2007. Ex. A.

ANSWER: Plaintiffs admit that HID Corporation and ASSA ABLOY filed a lawsuit against XceedID Corporation on December 21, 2006, in the United States District Court for the Central District of California, C.A. No. 06-1245 (“CDCA XceedID Lawsuit”) for violation of the Lanham Act. Plaintiffs admit that, on May 9, 2007, HID Corporation and ASSA ABLOY amended the complaint in the CDCA XceedID Lawsuit to assert trade secret misappropriation.

57. As part of this second lawsuit, HID pled that it knew of XceedID’s dual-frequency RFID reader. *Id.* ¶¶ 42-45. HID further pled that by March 2006, it knew of XceedID’s patent applications directed to multi-frequency RFID readers filed on March 15, 2004, including the ’677 application. *Id.* ¶¶ 44-45.

ANSWER: Plaintiffs admit that the complaint in the CDCA XceedID Lawsuit states that “XceedID has purported to design and engineer RFID products, including but not limited to a so-called XACTT product, that are compatible with, or which Defendants claim at various times to be compatible with, all or most HID Prox card formats.” Plaintiffs admit that the complaint in the CDCA XceedID Lawsuit also states that “[i]n or about March 2006, or shortly thereafter, HID discovered that Conlin and Wendling had applied for at least one patent with the USPTO”—U.S. Patent Application No. 11/076,090 (“the ’090 application”). Plaintiffs admit that the ’090 application states that it claims priority from the ’677 application. *See* Ex. 31 (The USPTO Patent Center, <https://patentcenter.uspto.gov/applications/11076090/continuity>) (last visited Oct. 7, 2022). To the extent a response is required, Plaintiffs deny the remaining allegations and characterizations in Paragraph 57 of the Counterclaims.

58. XceedID filed counterclaims against Counterdefendants on July 16, 2007, including claims that HID engaged in unfair competition and that HID had violated anti-trust laws. Ex. F. In this filing, XceedID also admitted to HID that “it had invented two products by March 15, 2004” and that “it filed two provisional patent applications on March 15, 2004.” *Id.* ¶¶ 44-45.

ANSWER: Plaintiffs admit that XceedID filed counterclaims on July 16, 2007, against HID and ASSA ABLOY, including unfair competition and antitrust claims against HID. Plaintiffs admit that XceedID alleged that “it had invented two products by March 15, 2004” and that “it filed two provisional patent applications on March 15, 2004.” Doc. No. 14-6 ¶¶ 44–45. However, March 15, 2004 is subsequent to the conception date for at least some claims of the ’862 patent, as specified above. Moreover, XceedID alleged, without support, that “it had invented two products by March 15, 2004.” *Id.* ¶ 44. In fact, allegations from its Answer and Counterclaims state that the XceedID/GES readers were not publicly available until September 2004, at the earliest. *See* Doc. No. 14 at 38. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the underlying allegations and characterizations in XceedID’s counterclaims in that lawsuit and therefore deny them.

59. XceedID and Counterdefendants settled their disputes and agreed to dismiss all claims with prejudice on January 29, 2008, including any allegations of purported trade secret misappropriation by Conlin and Wendling or other former HID employees.

ANSWER: Plaintiffs admit that Plaintiffs and XceedID settled the CDCA XceedID Lawsuit and Plaintiffs agreed to dismiss all claims in the First Amended Complaint in that lawsuit with prejudice on January 29, 2008, including all allegations of purported trade secret misappropriation by Conlin and Wendling. Plaintiffs deny the remaining allegations and characterizations in Paragraph 59 of the Counterclaims.

60. This second lawsuit was terminated on February 6, 2008.

ANSWER: Plaintiffs admit that the CDCA XceedID Lawsuit was dismissed on February 6, 2008.

C. Counterdefendants’ [Alleged] Attempts to Block Other Competitors

61. Counterdefendants also have engaged in improper attempts to block competition from other competitors in the industry. For example, HID asserted the ’862 patent, along with U.S. Patent No. 5,952,935 (the “’935 patent”), which has now expired, in at least three separate lawsuits against other competitors. *See, e.g., HID Global Corporation et al v. Isonas, Inc. et al*, C.A. No. 13-01301 (CDCA); *HID Global Corporation et al v. Applied Wireless Identifications Group, Inc. et al*, C.A.

No. 13-01272 (CDCA); *HID Global Corporation, et. al. v. Farpointe Data Inc., et. al.*, C.A. No. 10-01954 (CDCA). All of these cases were resolved before trial.

ANSWER: Plaintiffs admit that they, along with other parties, filed the following three lawsuits asserting infringement of U.S. Patent Nos. 7,439,862 and 5,952,935: *HID Global Corp. v. Isonas, Inc. et al.*, C.A. No. 8:13-cv-01301 (C.D. Cal.) (“*Isonas* Litigation”); *HID Global Corp. v. Applied Wireless Identifications Grps., Inc. et al.*, C.A. No. 8:13-cv-01272 (C.D. Cal.) (“*AWI* Litigation”); *HID Global Corp. v. Farpointe Data Inc. et al.*, C.A. No. 8:10-cv-01954 (C.D. Cal.) (“*Farpointe* Litigation”). Plaintiffs admit that each of the aforementioned lawsuits were resolved before trial. Plaintiffs admit that U.S. Patent No. 5,952,935 is expired. Plaintiffs deny the remaining allegations and characterizations in Paragraph 61 of the Counterclaims.

62. In the *Farpointe* case, it came to light that HID destroyed up to eight (8) boxes of documents from the purported inventor of the ’862 patent, Ralph W. Quan (“Quan”). *See id.*, Dkt. 290 at 2-3. These destroyed documents contained information relating to Quan’s alleged conception of the subject matter claimed in the ’862 patent, including his notebooks.

ANSWER: Plaintiffs admit that the Court in the *Farpointe* Litigation stated that “eight boxes of documents pertaining to Mr. [Ralph W.] Quan [] had been retrieved from a storage facility.” Ex. 19 (*Farpointe* Litigation, Doc. No. 290, Mar. 21, 2012) at 3. Plaintiffs admit that HID had previously destroyed certain documents of Quan’s found in those eight boxes that were irrelevant to the *Farpointe* Litigation and unrelated to any HID product development, research, invention, or patent. Plaintiffs admit that HID had previously reviewed the contents of those eight boxes and “found nothing in [those] boxes relating to the invention of the ’862 Patent or otherwise relevant to the issues in” the *Farpointe* Litigation. Ex. 14 (*Farpointe* Litigation, Doc. No. 294, Mar. 29, 2012) ¶ 2. The documents sent for destruction by David Andresky were “approximately three or four evaluation boards for evaluating integrated circuits, empty anti-static packaging, vendor part catalogs, and data sheets for integrated circuits,” none of which relate to the ’862 patent. Ex. 17 (*Farpointe* Litigation, Doc. No. 297, Apr. 5, 2012) ¶ 2. Documents sent for destruction by Mari Jo Crouse “were travel

related and other expense documents, none of which related to or concerned Ralph Quan.” Ex. 16 (*Farpointe* Litigation, Doc. No. 296, Apr. 6, 2012) ¶ 2. All other documents were made available for review by Farpointe’s counsel. Ex. 14 (*Farpointe* Litigation, Doc. No. 294, Mar. 29, 2012) ¶ 3. Plaintiffs deny that the documents destroyed relate to Quan’s conception of the subject matter claimed in the ’862 patent. Plaintiffs deny the remaining allegations and characterizations in Paragraph 62 of the Counterclaims.

63. On March 21, 2012, the court in the *Farpointe* case ordered HID to “disclose when the documents in the eight boxes of Quan’s belongings were shredded, who shredded the documents, which documents were shredded, and at whose direction were the documents shredded.” *See id.*, Dkt. 290 at 10.

ANSWER: Plaintiffs admit that, on March 21, 2012, the Court in the *Farpointe* Litigation “order[ed] HID Global to disclose when the documents in the eight boxes of Quan’s belonging were shredded, who shredded the documents, which documents were shredded, and at whose direction were the documents shredded.” Ex. 19 (*Farpointe* Litigation, Doc. No. 290, Mar. 21, 2012) at 10. Plaintiffs admit that HID promptly disclosed to the Court which documents were destroyed, when, and at whose direction by submitting declarations from HID’s counsel, Ronald Oines, a HID human resources representative, Mari Jo Crouse, and the then-Senior Director of Product Engineering and Development, David Andresky. Exs. 14–17 (*Farpointe* Litigation, Doc. Nos. 294–297). Plaintiffs admit that HID had previously reviewed the contents of those eight boxes and “found nothing in [those] boxes relating to the invention of the ’862 Patent or otherwise relevant to the issues in” the *Farpointe* Litigation. Ex. 14 (*Farpointe* Litigation, Doc. No. 294, Mar. 29, 2012) ¶ 2. The documents sent for destruction by David Andresky were “approximately three or four evaluation boards for evaluating integrated circuits, empty anti-static packaging, vendor part catalogs, and data sheets for integrated circuits,” none of which relate to the ’862 patent. Ex. 17 (*Farpointe* Litigation, Doc. No. 297, Apr. 5, 2012) ¶ 2. Documents sent for destruction by Mari Jo Crouse “were travel related and

other expense documents, none of which related to or concerned Ralph Quan.” Ex. 16 (*Farpointe* Litigation, Doc. No. 296, Apr. 6, 2012) ¶ 2. All other documents were made available for review by Farpointe’s counsel. Ex. 14 (*Farpointe* Litigation, Doc. No. 294, Mar. 29, 2012) ¶ 3. Plaintiffs deny the remaining allegations and characterizations in Paragraph 63 of the Counterclaims.

64. In response to the court’s order, HID filed multiple declarations on March 29, 2012, at least one of which revealed that Michael Davis was involved in the review and eventual shredding of at least some of the documents in the eight boxes.

ANSWER: Plaintiffs admit that on March 29, 2012, HID submitted declarations in response to the Court’s March 21, 2012 order in the *Farpointe* Litigation. Exs. 14–15 (*Farpointe* Litigation, Doc. Nos. 294 and 295). Plaintiffs admit that one of those declarations states that the declarant “reviewed the contents of [eight] boxes [of documents] with [Masha] Davis, another HID employee.” Ex. 14 (*Farpointe* Litigation, Doc. No. 294, Mar. 29, 2012) ¶¶ 2–3. Plaintiffs admit that the review of those eight boxes “found nothing . . . relating to the invention of the ’862 Patent or otherwise relevant to the issues in” the *Farpointe* Litigation. *Id.* ¶ 2. Plaintiffs admit that the documents destroyed, as stated before, were not “related to or concerned Ralph Quan.” Ex. 16 (*Farpointe* Litigation, Doc. No. 296, Apr. 6, 2012) ¶ 2. Plaintiffs deny the remaining allegations and characterizations in Paragraph 64 of the Counterclaims.

65. Counterdefendants, and particularly HID, have also used tactics other than lawsuits to try to influence customers and limit competition in the industry.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 65.

66. For example, Counterdefendants falsely mark technical documents, such as HID datasheets, with numbers of expired patent(s), such as U.S. Pat. No. 5,952,935. An example of such false marking on a 2019 document can be found at <https://www.hidglobal.com/sites/default/files/pacs-multiclass-se-readers-ds-en-r1.pdf> (last accessed June 1, 2022).

ANSWER: Plaintiffs admit that at the time of the WaveLynx’s filing of the Counterclaims, the document found at <https://www.hidglobal.com/sites/default/files/pacs-multiclass-se-readers-ds->

en-r1.pdf lists U.S. Patent No. 5,952,935. Plaintiffs admit that this document is for the iCLASS SE and multiCLASS SE line of readers, which has been announced as having reached the product end-of-life on or about April 7, 2021, and are no longer being sold. *See* Ex. 32 (https://www.hidglobal.com/doclib/files/resource_files/notice-end-of-sale-date-for-select-iclass_se-multiclass_se-readers.pdf (last accessed Oct. 7, 2022)). Plaintiffs deny that its inadvertent delay in removing outdated marketing materials for end-of-life products is a “tactic[] . . . to try to influence customers and limit competition in the industry” as WaveLynx alleges (*supra* ¶ 65). Plaintiffs have recently overhauled its entire website in the regular course of business (unrelated to WaveLynx’s Counterclaims) and website has been updated to remove all outdated marketing materials for products that are no longer being sold, including the document that was previously available at <https://www.hidglobal.com/sites/default/files/pacs-multiclass-se-readers-ds-en-r1.pdf>. Plaintiffs deny that they falsely mark technical documents, such as HID datasheets, as alleged in Paragraph 66. *See* 35 U.S.C. § 292(c) (“The marking of a product, in a manner described in subsection (a), with matter relating to a patent that covered that product but has expired is not a violation of this section.”).

67. Unfortunately, HID’s tactics appear to have forced some of HID’s competitors to license HID’s patents, including the ’862 patent, such as one or more of the defendants involved in HID’s prior lawsuits.

ANSWER: Plaintiffs admit that many of its business partners and its competitors recognize the value of HID’s innovation and intellectual property assets, and HID licenses certain patents, including the ’862 patent, as part of a licensing program. Plaintiffs deny WaveLynx’s allegations (*supra* ¶¶ 65–67) that HID uses “tactics” in connection with licensing its patents or that HID “forced” competitors to license HID’s patents. To the extent defendants from prior lawsuits have taken licenses to one or more HID patents, those license agreements were entered into voluntarily and in exchange for consideration from both sides. WaveLynx recognized the value of HID’s intellectual property, including the ’862 patent, and initiated contact with HID to discuss licensing opportunities. Doc. No.

12-1 at 4–5 (March 16, 2016 email from Mike Conlin to Daniel Bailin). Plaintiffs deny any remaining allegations and characterizations in Paragraph 67.

68. Further, on information and belief, HID is believed to have tried to stifle competition from WaveLynx by telling others in the industry, including WaveLynx customers, that WaveLynx will not prevail in the instant lawsuit.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 68.

VI. WaveLynx’s [Alleged] Good Faith Attempt to Avoid Disputes with HID

69. In view of HID’s litigious history, WaveLynx reached out to HID in 2015 to proactively avoid any potential disputes, including by discussing the possibility of licensing intellectual property from Counterdefendants. The only reason WaveLynx reached out to Counterdefendants was to avoid a future lawsuit—not because WaveLynx believed that HID held valid intellectual property applicable to WaveLynx’s RFID readers.

ANSWER: Plaintiffs admit that WaveLynx reached out to HID in 2016 to discuss “licensing the appropriate IP around LF & HF combined readers[.]” Doc. No. 12-1 at 4–5 (March 16, 2016 email from Mike Conlin to Daniel Bailin. Conlin asked: “[c]an you please put me in touch with the right person to discuss licensing the appropriate IP around LF & HF combined readers?” *Id.* Plaintiffs deny that the *only* reason WaveLynx contacted HID to discuss licensing its intellectual property was to avoid a future lawsuit as WaveLynx did not “believe[] that HID held valid intellectual [*sic*, property] applicable to WaveLynx’s RFID readers.” Indeed, Conlin wrote on March 24, 2016: “I am pleased with your offer to license the ’862 patent.” *Id.* at 2. Defendants also later inquired about also licensing HID’s U.S. Patent No. 5,952,935 patent and Corporate 1000 card format. Ex. 12 (Emails b/t Conlin and Bailin from Mar. 10, 2016 to Jul. 8, 2016) at 7. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 69 of the Counterclaims and, on that basis, deny all such allegations.

70. Despite knowing that WaveLynx contacted HID for the express purpose of avoiding future litigation through licensing, at no point during the negotiations from late 2015 to 2016 did HID raise the issue of licensing the ’562 patent to WaveLynx, even though the ’562 patent issued in January of 2015.

ANSWER: Plaintiffs admit that the '562 patent issued on January 27, 2015. Plaintiffs admit Mike Conlin's specific request was to "licens[e] the appropriate IP around LF & HF combined readers[.]" Doc. No. 12-1 at 5. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 70 of the Counterclaims and, on that basis, deny all such allegations.

71. The purported email exchange between WaveLynx and HID is attached as Exhibit 1 to the Amended Complaint, however, it does not contain a complete record of the discussions between HID and WaveLynx regarding the '862 patent.

ANSWER: Plaintiffs admit that Ex. 1 to the Amended Complaint is an email thread between Conlin and Wendling of WaveLynx, and Daniel Bailin and Steve Currie of HID that contains discussions relating to licensing of HID intellectual property, including the '862 patent. *See generally* Doc. No. 12-1. Plaintiffs admit that HID and WaveLynx had additional licensing discussions that included the '862 patent and other HID intellectual property.

72. These discussions began in November 2015 when Conlin informed Daniel Bailin ("Bailin") of HID that WaveLynx planned to enter the access control business, including selling multi-frequency readers using low frequencies (*e.g.*, 125 kHz) and high frequencies (*e.g.*, 13.56 MHz).

ANSWER: Plaintiffs admit that Ex. 1 to the Amended Complaint include an email dated March 16, 2016, from Conlin to Bailin, in which Conlin initiated discussions relating to licensing of HID intellectual property on "LF & HF combined readers." *See* Doc. No. 12-1. Plaintiffs deny the remaining allegations and characterizations in Paragraph 72 of the Counterclaims.

73. On March 22, 2016, HID, acting through Bailin, offered WaveLynx a license to the '862 patent and use of HID's "Corporate 1000" ("C1000") allegedly proprietary data format for a running royalty of \$6 per reader.

ANSWER: Plaintiffs admit that, on March 22, 2016, Bailin, on behalf of HID, "offer[ed] to WaveLynx to license the use of HID IP related to RFID readers" including "use of the 862 patent for multi-frequency readers" and "use of Corporate 1000 (C1000) format when reading cards with that

format” for a running royalty of \$6 per reader. Doc. No. 12-1 at 3. Plaintiffs deny the remaining allegations and characterizations in Paragraph 73 of the Counterclaims.

74. On March 24, 2016, Conlin responded by informing Bailin that WaveLynx was perplexed because, while the discussions had been ongoing for months, March 22 was the first time that HID raised the potential licensing of C1000. Conlin expressed concern that HID was not negotiating in good faith.

ANSWER: Plaintiffs admit that, on March 24, 2016, Conlin responded to Bailin’s March 22, 2016 email, stating “[w]ith respect to [HID’s] Corporate 1000 offer” he was “a bit confused” and thought WaveLynx would “need some further discussion on this point.” Doc. No. 12-1 at 3. Plaintiffs further admit that, in that response, Conlin further stated that “[t]hese licensing discussions ha[d] been ongoing for several months and this is the first time this topic ha[d] been broached by HID.” Plaintiffs admit that Conlin made a baseless and self-serving assertion that HID was “not negotiating in good faith[.]” *Id.* Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 74 of the Counterclaims and therefore deny them.

75. WaveLynx declined HID’s March 22, 2016 offer and countered with a proposal for a royalty-free license.

ANSWER: Plaintiffs deny that WaveLynx declined HID’s March 22, 2016 offer, as Conlin sent an email on March 24, 2016, stating: “I am pleased with your offer to license the ’862 patent.” Doc. No. 12-1 at 2. Plaintiffs admit in that March 24 email that Conlin made an outlandish and unreasonable offer that “WaveLynx would be willing to consider taking a license . . . for Corporate 1000 as well as any other of HID’s potential IP for 125 kHz or multi-frequency readers at a cost of \$0 per reader.” *Id.* at 3.

76. After continued back-and-forth, on April 29, 2016, Bailin again threw a wrench in the negotiations and raised for the first-time including licensing of unspecified trade secrets and unspecified existing and future patents in an attempt to justify HID’s proposed \$6 license fee.

ANSWER: Plaintiffs admit that the negotiations continued past March 24, 2016. Plaintiffs admit that on March 31, 2016, Bailin, on behalf of HID, declined Conlin’s outlandish and unreasonable offer to license the ’862 patent and Corporate 1000 format for \$0 per reader. Plaintiffs admit that also on March 31, Conlin offered to license the ’862 patent and Corporate 1000 format for \$6 per reader. Plaintiffs admit that on April 12, 2016, Bailin, on behalf of HID, agreed to a license price of \$6 per reader. Plaintiffs admit that on April 14, 2016, Conlin stated that WaveLynx “appreciated HID’s agreement to these terms” but attempted to introduce new terms to the agreement, seeking to parse the license into pieces that could be separately licensed and charged. Ex. 12 (Emails b/t Conlin and Bailin from Mar. 10, 2016 to Jul. 8, 2016) at 5; Plaintiffs admit that on April 29, 2016, Bailin replied to Conlin, declining to complicate the licensing negotiations by breaking the license into components. Instead, in an attempt to simplify both the licensing negotiations and future management of the potential license, HID offered to license an existing bundle of intellectual property, including “a license to practice the ’862 patent, use of the [Corporate] 1000 copyright for reading . . . cards, and other trade secrets around HID prox technology, including existing and future patents that provide the ability to read prox cards.” *Id.* at 4. Plaintiffs deny the remaining allegations and characterizations in Paragraph 76 of the Counterclaims.

77. On July 8, 2016, Conlin emailed Bailin, expressing frustration that HID, through Bailin, had not responded to repeated follow up inquiries. Conlin stated that because discussions “have been ongoing for 7 months and HID has changed its position several times your lack of response leaves me with no other conclusion then HID is not negotiating in good faith. WaveLynx remains interested in a license of legitimate HID IP but we cannot proceed unless you engage in the discussion. At this point, this email will be my last communication with you personally unless you respond.”

ANSWER: Plaintiffs admit that on July 8, 2016, Conlin emailed Bailin seeking a response and baselessly accusing HID of “not negotiating in good faith.” However, as reflected by Conlin’s outreach to Quan regarding the validity of his ’862 patent, it was Conlin who, in reality, was not

negotiating with HID in good faith. *See* Ex. 18. Plaintiffs deny the remaining allegations and characterizations in Paragraph 77 of the Counterclaims.

78. HID and WaveLynx did not subsequently agree to any license.

ANSWER: Plaintiffs admit that HID and WaveLynx have not subsequently agreed to any license.

79. During the licensing discussions, WaveLynx also attempted to discuss the invalidity of the '862 patent with HID, but Bailin refused to discuss any issues relating to whether the '862 patent was actually a valid patent.

ANSWER: Plaintiffs admit that Conlin's March 24, 2014 email alleged that HID would not win a claim for infringement of HID's "Corporate 1000" IP, but no such remarks were made with respect to the '862 patent or its validity. To the contrary, Conlin expressed appreciation for HID's offer to license the '862 patent. As reflected by Conlin's outreach to Quan regarding the validity of his '862 patent, rather than raising questions and discussing the validity of the '862 patent directly with HID, it was Conlin who, in reality, was not negotiating with HID in good faith and sought to circumvent legitimate channels of negotiation through subterfuge by simultaneously fishing for ways to attack the validity of the '862 patent with statements elicited from its inventor. *See* Ex. 18. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 79 of the Counterclaims and therefore deny them.

80. Further, when meeting in-person, Bailin on behalf of HID assured WaveLynx that HID will contact WaveLynx before taking any sort of potential legal action. HID, however, did not subsequently contact WaveLynx regarding the '862 patent (or any other patent) until Plaintiffs initiated this lawsuit against WaveLynx approximately six (6) years later.

ANSWER: Plaintiffs admit that they filed the original complaint asserting infringement of the '862 patent without providing additional notice to WaveLynx. Plaintiffs further admit that the original complaint was filed on March 21, 2022, and that the email correspondence in Doc. No. 12-1 occurred in 2016. Plaintiffs deny that Bailin had authority to speak on behalf of HID with respect

to assurances relating to potential legal action by HID. Plaintiffs lack sufficient knowledge or information to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 80 of the Counterclaims and therefore deny them.

VII. The '862 Patent

81. The '862 patent issued on October 21, 2008 from Application No. 11/016,576 (the "'576 application"), which is a continuation-in-part ("CIP") of Application No. 10/848,246 (the "'246 application"). The '576 application was filed on December 16, 2004, and the '246 application was filed on May 18, 2004.

ANSWER: Plaintiffs admit that U.S. Patent No. 7,439,862 issued on October 21, 2008, from U.S. Patent Application No. 11/016,576 ("'576 Application"), which is a continuation-in-part of U.S. Patent Application No. 10/848,246 ("'246 Application"). Doc. No. 12-2 at 2. Plaintiffs further admit that the '576 Application was filed on November 16, 2004, and the '246 Application was filed on May 18, 2004. *Id.*

82. On information and belief, the claims that eventually issued in the '862 patent were drafted in an attempt to capture known prior art, including XceedID's pre-existing devices, such as the XceedID XF Series Readers and the GES Transition Series Readers.

ANSWER: Plaintiffs deny the allegations in Paragraph 82 of the Counterclaims.

83. Counterdefendant AAAB is named as the assignee on the face of the '862 patent.

ANSWER: Plaintiffs admit that ASSA ABLOY is the assignee of the '862 patent.

84. The '862 patent states in the Background of the Invention that "[a]t present, use of RFID transponders operating at the low carrier frequency and RFID transponders operating at the high carrier frequency have proliferated throughout the world." D.I. 12, Ex. 2, col. 2, ll. 22-25.

ANSWER: Plaintiffs admit that the '862 patent specification states "[a]t present, use of RFID transponders operating at the low carrier frequency have proliferated throughout the world." Doc. No. 12-2 at 2:22–25.

85. The '862 patent further states that "the present invention recognizes a need for an RFID system having one or more RFID readers, each of which is capable of communicating with a plurality of RFID transponders, one or more of which are operating at a different carrier frequency than the remaining RFID transponders." *Id.* at col. 2, ll. 30-35.

ANSWER: Plaintiffs admit that the '862 patent specification states that “the present invention recognizes a need for an RFID system having one or more RFID readers, each of which is capable of communicating with a plurality of RFID transponders, one or more of which are operating at a different carrier frequency than the remaining RFID transponders.” Doc. No. 12-2 at 2:30–35.

86. The '862 patent further states that it is “an object of the present invention to provide an RFID system having one or more RFID readers with multiple carrier frequency communication capabilities.” *Id.* at col. 2, ll. 36-38.

ANSWER: Plaintiffs admit that the '862 patent specification states “[i]t is generally an object of the present invention to provide an RFID system having one or more RFID readers with multiple carrier frequency communication capabilities.” Doc. No. 12-2 at 2:36–38.

87. The '862 patent concedes that there are “[e]xemplary RFID systems,” and that there “are currently two standard carrier frequencies which have been generally accepted for use in RFID systems. RFID systems, which employ RFID transponders of the type conventionally termed proximity cards or proximity tags, typically communicate by means of data signals at a carrier frequency within a range of 100 to 150 kHz. . . . In contrast, RFID systems employing RFID transponders of the type conventionally termed smart cards typically communicate by means of data signals at a carrier frequency of 13.56 MHz, which is deemed high frequency. The frequency bandwidth available for use around the carrier frequency of 13.56 MHz is defined by industry- wide standards such as ISO standards 15693 and 14443.” *Id.* at col 1, ll. 29-30; col. 2, ll. 7-21.

ANSWER: Plaintiffs admit that the '862 patent specification states that “[e]xemplary RFID systems are disclosed in U.S. Pat. No. 4,730,188 to Milheiser (the '188 Patent), U.S. Pat. No. 5,541,574 to Lowe et al. (the '574 Patent), and U.S. Pat. No. 5,347,263 to Carroll et al. (the '263 Patent), all of which are incorporated [t]herein by reference.” Doc. No. 12-2 at 1:29–34. Plaintiffs further admit that the '862 patent specification states that “[t]here are currently two standard carrier frequencies which have been generally accepted for use in RFID systems. RFID systems, which employ RFID transponders of the type conventionally termed proximity cards or proximity tags, typically communicate by means of data signals at a carrier frequency within a range of 100 to 150 kHz. This carrier frequency range is nominally referred to herein as 125 kHz carrier frequency and is deemed low frequency. In contrast, RFID systems employing RFID transponders of the type

conventionally termed smart cards typically communicate by means of data signals at a carrier frequency of 13.56 MHz, which is deemed high frequency. The frequency bandwidth available for use around the carrier frequency of 13.56 MHz is defined by industry-wide standards such as ISO standards 15693 and 14443.” *Id.* at 2:6–21. Plaintiffs deny the remaining allegations and characterizations in Paragraph 86 of the Counterclaims.

88. The ’862 patent further admits that “[a]t present, use of RFID transponders operating at the low carrier frequency and RFID transponders operating at the high carrier frequency have proliferated throughout the world.” *Id.* at col 2, ll. 22-24.

ANSWER: Plaintiffs admit that the ’862 patent specification states “[a]t present, use of RFID transponders operating at the low carrier frequency and RFID transponders operating at the high carrier frequency have proliferated throughout the world.” Doc. No. 12-2 at 2:22–25.

89. As a continuation-in-part application, the ’576 application contains new matter not contained in the original ’246 application.

ANSWER: To the extent that the allegations of Paragraph 89 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that the ’576 application contains text and figures that are not contained in the original ’246 application.

90. New matter that first appears in the ’576 application is claimed in the claims of the ’862 patent, including claims 1-4.

ANSWER: To the extent that the allegations of Paragraph 90 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations of Paragraph 90 of the Counterclaims.

91. For example, the original ’246 application does not disclose at least that “the first and second antennas are oriented along axes that are substantially parallel to one another.”

ANSWER: To the extent that the allegations of Paragraph 91 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations of Paragraph 91 of the Counterclaims.

92. Further, the figures that appear in the '862 patent were first filed with the U.S. Patent Office on December 16, 2004, when the '576 application was filed.

ANSWER: Plaintiffs admit that the figures that appear in the '862 patent appear in the '576 application, of which the '862 patent is a continuation-in-part.

93. Thus, the earliest possible priority date for claim 1 of the '862 patent, and any claim that depends from claim 1, is December 16, 2004.

ANSWER: To the extent that the allegations of Paragraph 93 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations of Paragraph 93 of the Counterclaims.

94. The '862 patent will expire no later than March 10, 2025.

ANSWER: Plaintiff admits that the '862 patent will expire on March 10, 2025.

95. As set forth herein, Counterdefendants knew, or at least should have known, that the '862 patent was invalid and unenforceable before initiating this lawsuit against WaveLynx.

ANSWER: To the extent that the allegations of Paragraph 95 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 95 of the Counterclaims.

96. Counterdefendants' conduct in filing this lawsuit and asserting infringement of the '862 patent against WaveLynx has caused and is continuing to cause harm to WaveLynx.

ANSWER: To the extent that the allegations of Paragraph 96 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 96 of the Counterclaims.

VIII. The '562 Patent

97. The '562 patent issued on January 27, 2015, naming Michael Davis as one of its purported inventors.

ANSWER: Plaintiffs admit that U.S. Patent No. 8,943,562 ("'562 patent") issued on January 27, 2015. Plaintiffs further admit that Davis is an inventor of the '562 patent.

98. Counterdefendant AAAB is named as the assignee on the face of the '562 patent and has never asserted the '562 patent in a lawsuit prior to the filing of the Amended Complaint.

ANSWER: Plaintiffs admit that ASSA ABLOY is the assignee of the '562 patent. Plaintiffs further admit that ASSA ABLOY has not asserted the '562 patent in any lawsuit previously.

99. The '562 patent states in the Background that “[t]he Wiegand protocol is the predominant method by which physical access control card readers communicate with upstream devices such as local controllers, access control panels and host computer systems. Because of the popularity and almost universal support of the Wiegand protocol in access control panels, other devices besides access control readers are also available that support the Wiegand protocol.” D.I. 12, Ex. 3, col. 1, ll. 22-28. Indeed, the '562 patent explains that “[t]he widespread adoption of the Wiegand protocol is due to several advantages with the primary advantages of the Wiegand protocol being that its implementation in devices is very economical and that it allows very long cable runs which, depending on the gage of the wire used, can be as long as 500 feet.” *Id.* at col. 1, ll. 57-62.

ANSWER: Plaintiffs admit that the '562 patent specification states that “[t]he Wiegand protocol is the predominant method by which physical access control card readers communicate with upstream devices such as local controllers, access control panels and host computer systems. Because of the popularity and almost universal support of the Wiegand protocol in access control panels, other devices besides access control readers are also available that support the Wiegand protocol.” Doc. No. 12-3 at 1:22–29. Plaintiffs further admit that the '562 patent specification states that “[t]he widespread adoption of the Wiegand protocol is due to several advantages with the primary advantages of the Wiegand protocol being that its implementation in devices is very economical and that it allows very long cable runs which, depending on the gage of the wire used, can be as long as 500 feet.” *Id.* at 1:57–61. To the extent that a response is required, Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 99 of the Counterclaims.

100. The '562 patent further states that “[a]lthough other methods are utilized for carrying the informational aspects of the Wiegand protocol over communication bearers such as RS-485, F/2F, and various Internet protocols such as TCP/IP and UDP, none has achieved the widespread usage that Wiegand has in the security and access control market segments. This is primarily because each manufacturer utilizes their own proprietary protocols even when using standardized communication bearers such as TCP/IP.” *Id.* at col 1, ll. 48-56.

ANSWER: Plaintiffs admit that the '562 patent specification states that “[a]lthough other methods are utilized for carrying the informational aspects of the Wiegand protocol over communication bearers such as RS-485, F/2F, and various Internet protocols such as TCP/IP and UDP, none has achieved the widespread usage that Wiegand has in the security and access control market segments. This is primarily because each manufacturer utilizes their own proprietary protocols even when using standardized communication bearers such as TCP/IP.” Doc. No. 12-3 at 1:48–56. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 100 of the Counterclaims.

101. Counterdefendants’ conduct in filing this Amended Complaint and asserting the '562 patent against WaveLynx has caused and is continuing to cause harm to WaveLynx.

ANSWER: To the extent that the allegations of Paragraph 101 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 101 of the Counterclaims.

COUNTERCLAIM COUNT I

DECLARATORY JUDGMENT OF [ALLEGED] INVALIDITY OF THE '862 PATENT UNDER 35 U.S.C. § 102(g)(2) AND § 102(e)

102. WaveLynx incorporates the foregoing paragraphs and allegations as if set forth herein.

ANSWER: Plaintiffs incorporate by reference their responses to Paragraphs 1–101 of the Counterclaims above.

103. The '862 patent is invalid under 35 U.S.C. § 102(g)(2) (pre-AIA) because, before the alleged invention thereof, the invention was conceived and reduced to practice by Conlin, who did not abandon, suppress, or conceal it. Conlin, while working at XceedID, conceived and reduced to practice the subject matter claimed in claims 1-4 of the '862 patent prior to HID’s filing of any application related to the '862 patent. Conlin’s prior invention is described in the '677 application, which itself is invalidating prior art under 35 U.S.C. § 102(e) (pre-AIA).

ANSWER: To the extent that the allegations of Paragraph 103 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny

that the '862 patent is invalid under any subsection of 35 U.S.C. § 102, including subsections (g)(2) & (e). To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 103 of the Counterclaims and therefore deny them.

104. Specifically, on or about August 22, 2003, Michael Conlin conceived of an RFID reader that is able to read cards at 125 kHz and 13.56 MHz, in a housing that contains two separate antenna structures, one for each frequency.

ANSWER: Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 104 of the Counterclaims and therefore deny them.

105. An internal invention disclosure summary for Conlin's multi-frequency contactless reader and certification testing was completed by December 2003. In addition, a specification for Conlin's multi-frequency reader was completed by January 2004, and prototype circuit boards and antennas were ordered by March 2004.

ANSWER: Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 105 of the Counterclaims and therefore deny them.

106. XceedID filed the '677 provisional patent application on March 15, 2004, which described his dual frequency RFID reader and constituted constructive reduction to practice by this date. The '677 application discloses all limitations of at least claims 1-4 of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 106 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that the '677 application states that it was filed on March 15, 2004. Plaintiffs deny the allegation that the text of the '677 application discloses all limitations of at least claims 1–4 of the '862 patent. To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 106 of the Counterclaims and therefore deny them.

107. XceedID further developed working embodiments of Conlin's invention over the spring and summer of 2004, with GES's dual frequency reader ultimately coming to market in September 2004. Ex. F, ¶ 9.

ANSWER: Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 107 of the Counterclaims and therefore deny them.

108. The '677 application also is prior art to the '862 patent under 35 U.S.C. § 102(e) because it was filed on March 15, 2004, which is before any filing date for which the '862 patent may claim priority.

ANSWER: To the extent that the allegations of Paragraph 108 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that the '677 application states that it was filed on March 15, 2004. To the extent that a response is required, Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 108 of the Counterclaims.

109. The '677 application discloses, for example, that the "present invention relates generally to access control readers and more specifically to modular contactless smart card access control readers." Ex. G, at 2. The '677 application further discloses that "[t]his invention and the main components can operate collectively as a physical access control reader. In one embodiment, the system includes functionality at both 125 KHz and 13.56 MHz." *Id.* at 7. "[T]he attached figures illustrate a modular contactless smart card access control reader, which comprises A base assembly, a cover assembly and a communication adaptor." *Id.* at 6.

ANSWER: Plaintiffs admit that the '677 application states "[t]he present invention relates generally to access control readers and more specifically to modular contactless smart card access control readers." Doc. No. 14-7 at 3. Plaintiffs further admit that the '677 application states "[t]his invention and the main components can operate collectively as a physical access control reader. In one embodiment, the system includes functionality at both 125 KHz and 13.56 MHz." *Id.* at 8. Plaintiffs further admit that the '677 application states "the attached figures illustrate a modular contactless smart card access control reader, which comprises A [sic] base assembly, a cover

assembly and a communication adaptor.” *Id.* at 7. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 109 of the Counterclaims.

110. Figure 10 of the ’677 application also discloses that in one embodiment, “the base reader board contains the antenna for one frequency,” and “the snap-on cover contains the antenna for the other frequency.”

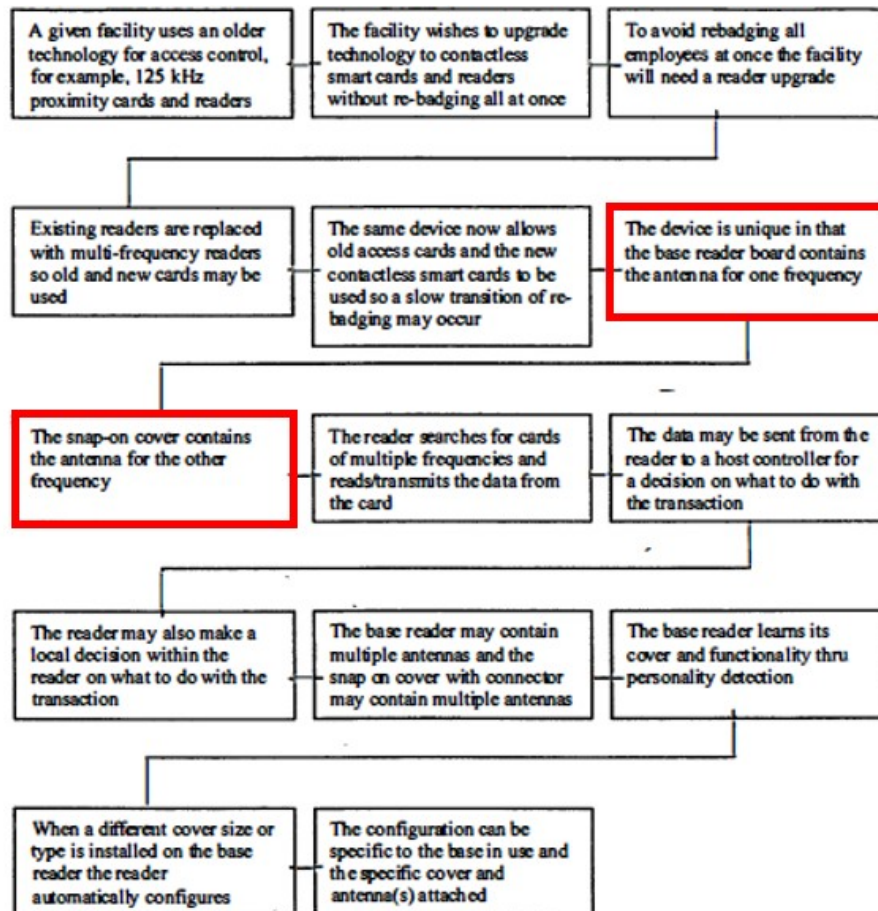


FIG. 10 illustrates yet another method in accordance with some embodiments of the present invention.

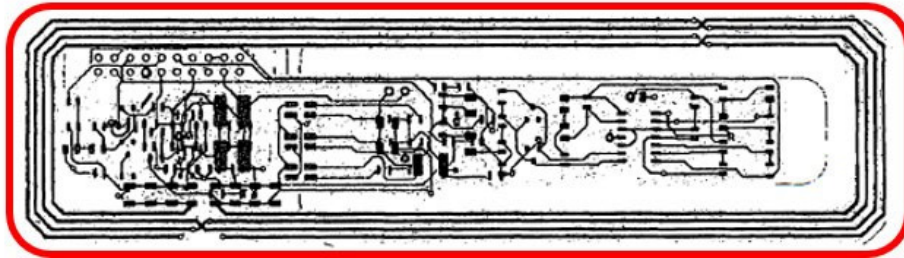
Id. at 14 (annotated).

ANSWER: To the extent that the allegations of Paragraph 110 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Figure 10 of the ’677 application states “[t]he base reader board contains the antenna for one frequency” and “[t]he snap-on cover contains the antenna for the other frequency[.]” Doc. No. 14-7

at 15. To the extent that a response is required, Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 110 of the Counterclaims.

111. One antenna is located along the external perimeter of a printed circuit board, as shown in the annotated image below.

Antenna Board Layout

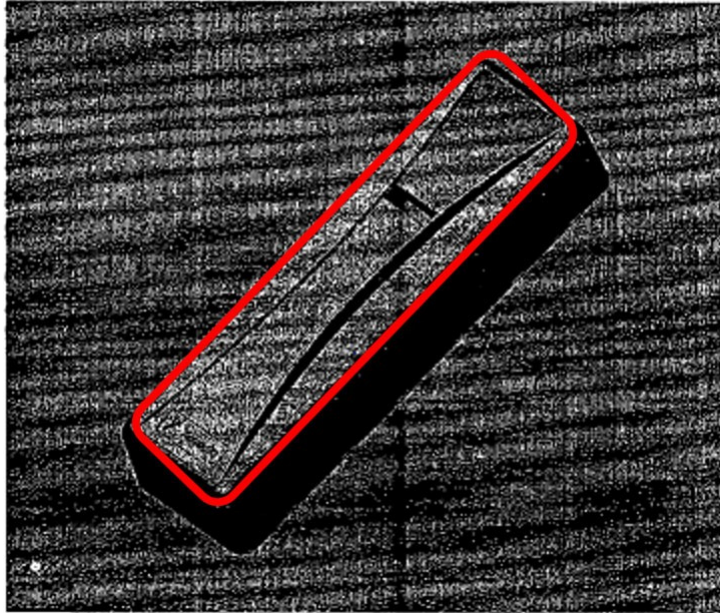


Id. at 36.

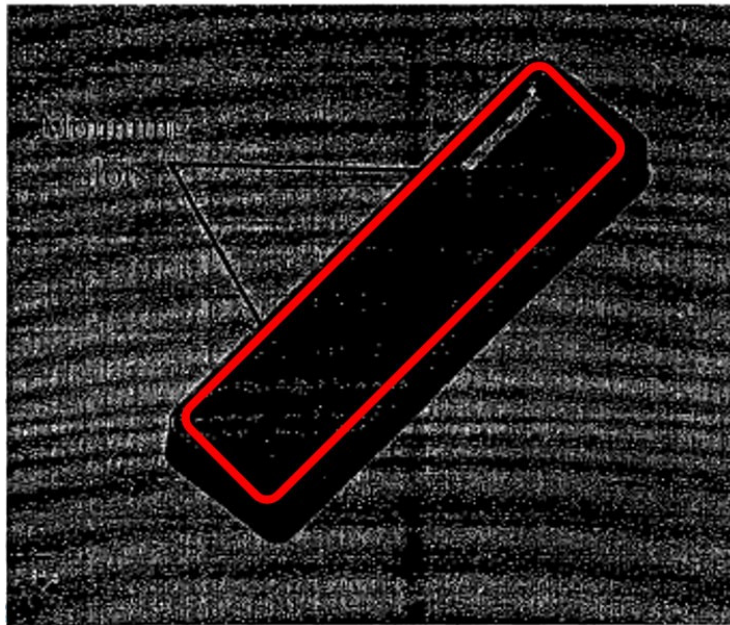
ANSWER: To the extent that the allegations of Paragraph 111 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, it is unclear what is being alleged by Defendants' addition of a red line that has been drawn around the outside of what appears to be a PCB with no other labeling or reference to what is shown on the original image, and on this basis and the remaining allegations in Paragraph 11, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 111 of the Counterclaims and therefore deny them.

112. The '677 application further discloses the use of a "Snap-on cover" and "Base Plastic." *Id.* at 37-38. As annotated below, the circuit boards fit along the sides of the snap-on cover and base plastic.

“Snap-on cover”



Base Plastic



Id. at 37-38.

ANSWER: To the extent that the allegations of Paragraph 112 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit

that the '677 application states “Snap-on cover” and “Base Plastic.” Doc. No. 14-7 at 38–39. Plaintiffs deny that the referenced images are properly annotated to reflect the allegations that they disclose that “the circuit boards fit along the sides of the snap-on cover and base plastic.” To the extent any further response is required, it is unclear what is being alleged by Defendants’ addition of red lines on the images and therefore Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 112 of the Counterclaims and therefore deny them.

113. Once fully assembled, the antennas of the snap-on cover and the base plastic are substantially parallel to each other.

ANSWER: To the extent that the allegations of Paragraph 113 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 113 of the Counterclaims.

114. A person of ordinary skill in the art would understand that combining the base plastic—with its antenna—and the snap-on cover—with its antenna—would necessarily result in an antenna configuration within a housing having two antennas substantially parallel to one another.

ANSWER: To the extent that the allegations of Paragraph 114 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 114 of the Counterclaims.

115. For example, the Overview for the GES Transition Series Readers displays how the base plastic and snap on cover are assembled to be parallel to each other.



Ex. C, at 1.

ANSWER: To the extent that the allegations of Paragraph 115 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 115 of the Counterclaims.

116. An application claiming priority to the '677 application subsequently published on September 15, 2005 as U.S. Publication No. 2005/0204167 (the "'167 publication"). Ex. H. By filing the '677 application and allowing at least the '677 application to become publicly available, the '677 application qualifies as prior art under 35 U.S.C. § 102(e), as does the '167 publication.

ANSWER: To the extent that the allegations of Paragraph 116 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that U.S. Patent Application No. 11/076,090 ("'090 application") states that it published as U.S. Patent Publication No. 2005/0204167 on September 15, 2005. Plaintiffs further admit that the '090 Application purports to claim priority to the '677 Application. To the extent a response is required, Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 116 of the Counterclaims.

117. XceedID did not abandon, suppress, or conceal the subject matter of Conlin's prior invention. Indeed, XceedID developed the invention into commercial products and also filed (and published) patent applications relating to the prior invention.

ANSWER: To the extent that the allegations of Paragraph 117 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 117 of the Counterclaims and therefore deny them.

118. Additionally, HID and its representatives previously conceded that Quan was not the first to invent an RFID reader that could operate at multiple frequencies using discrete antennas for each separate frequency. Indeed, in the CDCA XceedID lawsuit, HID took the position that Conlin, Wendling, and Menzel—not Quan—invented the subject matter now claimed in the '862 patent, including by stating "that the inventions, developments and discoveries disclosed in the Applications," which included the '677 application, "were conceived and/or first reduced to practice by Conlin, Wendling, and Menzel while they were employed by HID." Ex. A, ¶ 47.

ANSWER: To the extent that the allegations of Paragraph 118 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Doc. No. 14-1 states the quoted text in Paragraph 118. The quoted text in Paragraph 118, however, does not disclose that the Applications referenced therein refer to the following patent applications: U.S. Patent Application 11/076,541 ("541 application"), U.S. Patent Application 11/193,703 ("703 application"), and U.S. Patent Application No. 11/076,090 ("090 application"). Doc. No. 14-1 ¶ 46. Plaintiffs admit that the '090 application states that Conlin and Wendling are the named inventors with respect to that application, and that the '090 application claims priority from the '677 provisional and another provisional application; however, the '677 application is not "included" in the '090 application. Plaintiffs admit that the '703 application states that Conlin, Wendling, and Menzel are the named inventors with respect to that application. Plaintiffs admit that '541 application states that Wendling and Menzel are the named inventors with respect to that application. Plaintiffs have never contended that that Conlin, Wendling, and Menzel invented the

subject matter claimed in the '862 patent, and therefore deny that and the remaining allegations and characterizations in Paragraph 118 of the Counterclaims.

119. HID turned out to be wrong about Conlin's invention being made while employed by HID, but any purported invention by Quan, particularly with respect to claims 1-4 of the '862 patent, occurred after Conlin conceived of his invention on or about August 22, 2003.

ANSWER: To the extent that the allegations of Paragraph 119 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 119 of the Counterclaims.

120. By disclosing, *inter alia*, an "access control reader" with "functionality at both 125 KHz and 13.56 MHz" and two or more antennas on PCBs housed in the base plastic and the snap-on cover that, once assembled, orient the antennas in a substantially parallel arrangement to one another, the '677 application anticipates at least claims 1-4 of the '862 patent, or, in combination with other prior art and in light of the exemplary motivations to combine discussed below in WaveLynx's Counterclaim II, establishes that at least claims 1-4 of the '862 patent are obvious. Accordingly, the '862 patent is invalid under 35 U.S.C. § 102(g)(2) based on prior invention by Conlin, as well as under 35 U.S.C. § 102(e) based on the filing date of the '677 application.

ANSWER: To the extent that the allegations of Paragraph 120 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 120 of the Counterclaims.

121. Counterdefendants have nonetheless filed a lawsuit against WaveLynx alleging infringement of the '862 patent, even though they are aware of invalidating prior art and prior invention by others. Accordingly, an actual controversy exists with respect to the invalidity of the '862 patent. Thus, a judicial determination of the respective rights of the parties with respect to the invalidity of the '862 patent is now necessary and appropriate under 28 U.S.C. § 2201 for at least the preceding reasons.

ANSWER: To the extent that the allegations of Paragraph 121 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit they filed a lawsuit against WaveLynx alleging infringement of the '862 patent and that a controversy exists between the parties with respect to the '862 patent. To the extent that a response is required, Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 121 of the Counterclaims.

COUNTERCLAIM COUNT II

DECLARATORY JUDGMENT OF [ALLEGED] INVALIDITY OF THE '862 PATENT

122. WaveLynx incorporates the foregoing paragraphs and allegations as if set forth herein.

ANSWER: Plaintiffs incorporate by reference their responses to Paragraphs 1–121 above.

123. Each and every claim of the '862 patent is invalid because they fail to satisfy one or more conditions for patentability set forth in 35 U.S.C. § 101 *et seq.*, including but not limited to § 102 and § 103.

ANSWER: To the extent that the allegations of Paragraph 123 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 123 of the Counterclaims. Indeed, WaveLynx does not even attempt to demonstrate any alleged invalidity with respect to the majority of the '862 patent's claims, including claims 5, 6, 9, 11, 14, 16, 17, 19, 20, 22, or 23 of the '862 patent, each of which WaveLynx has infringed and continues to infringe. Ex. 1 ('862 patent infringement chart).

124. By way of example, each of the following prior art references and products establish that at least claims 1-4 of the '862 patent invalid under 35 U.S.C. § 102. Alternatively, each of the following prior art references and products individually, or in combination with other prior art and the knowledge of one of ordinary skill in the art at the time of the alleged invention of the '862 patent, establish that the asserted claims of the '862 patent are obvious and invalid under 35 U.S.C. § 103:

- The '677 application;
- The '167 publication;
- The Davis Presentation;
- The Smart Card Alliance Report;
- XceedID's XF Series Readers and the GES Transition Series Readers;
- The Cross Point XM3 MICROPROX reader; and
- HID's Material Prior Art Products, including the proximity reader used in the pcProx Proximity Activated System and the iCLASS series of RFID readers.

ANSWER: To the extent that the allegations of Paragraph 124 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 124 of the Counterclaims.

The '677 Application

125. As discussed, WaveLynx's Counterclaim I shows that the '677 application is anticipatory prior art to the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 125 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 125 of the Counterclaims.

The '167 Publication

126. The '167 publication discloses, for example, "methods for decentralized access control. Such methods include providing an access control module that is capable of operating at least two carrier frequencies." Ex. H, ¶ [0006]. The '167 publication teaches that "[i]n one particular embodiment of the present invention, a control reader in accordance with one or more embodiments of the present invention operates at two distinct carrier frequencies, 125 KHz and 13.56 MHz." *Id.* ¶ [0026].

ANSWER: Plaintiffs admit that the '167 publication states "methods for decentralized access control. Such methods include providing an access control module that is capable of operating at least two carrier frequencies." Doc. No. 14-8 ¶ [0006]. Plaintiffs further admit that the '167 publication states "[i]n one particular embodiment of the present invention, a control reader in accordance with one or more embodiments of the present invention operates at two distinct carrier frequencies, 125 KHz and 13.56 MHz." *Id.* ¶ [0026]. To the extent that a response is required, Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 126 of the Counterclaims.

127. In Figure 4 and the accompanying text, for example, the '167 publication discloses "credential 460 is capable of operation at multiple carrier frequencies, and can thus communicate with access control module 410 via one or both of a channel A 420 or a channel B 422. In operation, credential 460 transmits information to access control module 410 via one access frequency. This information is received at a receiver that determines the carrier frequency at which credential 460 is transmitting. Where access control module 410 is capable of receiving at that frequency information from credential 460 is received, otherwise access control module 410 fails to acknowledge and

credential 460 switches to another carrier frequency and the process is repeated until either no other carrier frequencies are supported by credential 460 or a mutually acceptable carrier frequency is identified.” *Id.* ¶ [0032].

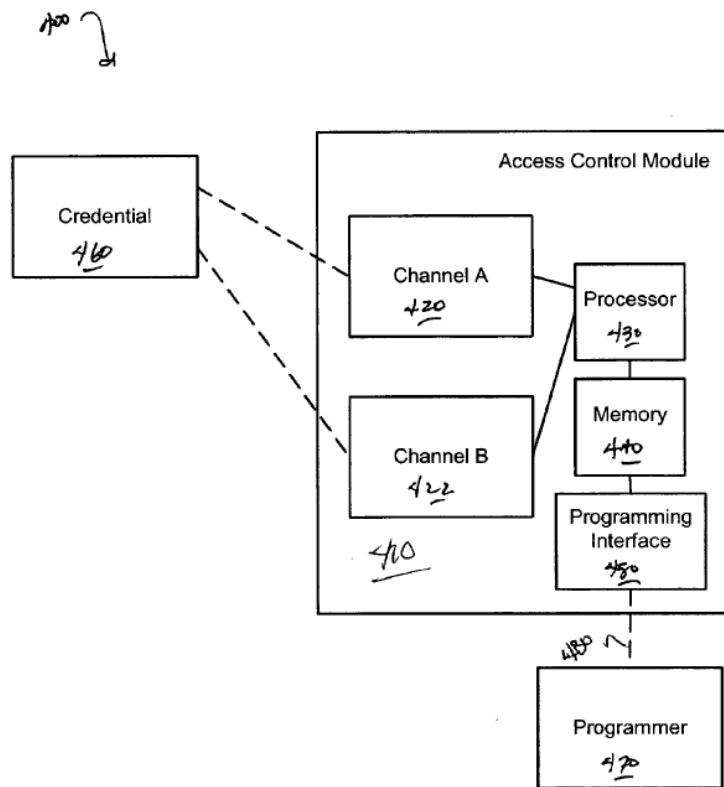


Fig. 4

ANSWER: Plaintiffs admit that the '167 publication states the following: “Turning to FIG. 4, an access control grouping 400 in accordance with various embodiments of the present invention is presented. Grouping 400 includes an access control module 410 capable of querying credentials 460 at different carrier frequencies. In this case, credential 460 is capable of operation at multiple carrier frequencies, and can thus communicate with access control module 410 via one or both of a channel A 420 or a channel B 422. In operation, credential 460 transmits information to access control module 410 via one access frequency. This information is received at a receiver that determines the carrier frequency at which credential 460 is transmitting. Where access control module 410 is capable of receiving at that frequency information from credential 460 is received, otherwise access control

module 410 fails to acknowledge and credential 460 switches to another carrier frequency and the process is repeated until either no other carrier frequencies are supported by credential 460 or a mutually acceptable carrier frequency is identified.” Doc. No. 14-8 ¶ [0032]. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 127 of the Counterclaims.

128. The “access control module” of the ’167 publication “is capable of operating at least two carrier frequencies. In addition, two or more access credentials are provided that operate at one or more of the carrier frequencies. As used herein, the term ‘credential’ refers to any portable device that includes information useful in completing a transaction. Thus, for example, a credential may be a smart card with information allowing a user of the credential to access an access point. Such credentials may be, but are not limited to, credit cards, debit cards, access control cards, smart cards, cellular telephones, personal digital assistants, and/or the like.” *Id.* ¶ [0023].

ANSWER: Plaintiffs admit that the ’167 publication states the following: “The aforementioned methods include providing an access control module that is capable of operating at least two carrier frequencies. In addition, two or more access credentials are provided that operate at one or more of the carrier frequencies. As used herein, the term ‘credential’ refers to any portable device that includes information useful in completing a transaction. Thus, for example, a credential may be a smart card with information allowing a user of the credential to access an access point. Such credentials may be, but are not limited to, credit cards, debit cards, access control cards, smart cards, cellular telephones, personal digital assistants, and/or the like.” Doc. No. 14-8 ¶ [0023]. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 128 of the Counterclaims.

129. The ’167 teaches that “[o]nce the mutually acceptable carrier frequency is identified, a channel 420, 422 associated with the identified carrier frequency is selected.” *Id.* ¶ [0033].

ANSWER: Plaintiffs admit that the ’167 publication states the following: “Once the mutually acceptable carrier frequency is identified, a channel 420, 422 associated with the identified carrier frequency is selected.” Doc. No. 14-8 ¶ [0033]. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 129 of the Counterclaims.

130. A person of skill in the art would understand that the channels 420 and 422 include separate antennas.

ANSWER: To the extent that the allegations of Paragraph 130 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 130 of the Counterclaims.

131. Figure 6 of the '167 publication includes a “[b]ase portion 610 includes mounting holes 640 and an electrical connector 630 that is matable to a corresponding electrical connector (not shown) an update portion 620. In operation, update portion 620 snaps onto base portion 610 that is mounted to a wall or other hardware.” *Id.* ¶ [0045]. “Among various advantages, the modularity of modular access control device 600 facilitates a simple method for updating the functionality by replacing an existing update module with another update module.” *Id.* ¶ [0046]. “In one particular case, update portion 620 and base portion 610 each include a printed circuit board (PCB). The access control can be designed such that the PCB in update portion 620 and the PCB in base portion 610 are electrically coupled via electrical connector 630. In such a situation, the PCB (including components mounted thereon) associated with base portion 610 provide for a baseline functionality, and the PCB (including components mounted thereon) associated with update portion 620 provide for additional functionality. As one particular example, an update portion with only an infrared interface may be replaced by an update portion with both an infrared interface and a keypad interface. Several possible structural and functional variations to the base portion will be recognized by one of ordinary skill in the art based on the disclosure provided herein. These variations include, but are not limited to, any feature currently partitioned into the cover assembly. In addition, but again not limited to, it is also possible to include antennas, tuning networks, and appropriate RF reader electronics for other frequency reader systems including but not limited to 125 KHZ, 433 MHz, 800 MHz, 900 MHz and/or 2400 MHz.” *Id.* ¶ [0046]. Further, “[t]he update portion includes a PCB potted into a piece of plastic which contains the following functionality: (1) one or more antennas and associated tuning circuits” *Id.* ¶ [0052].

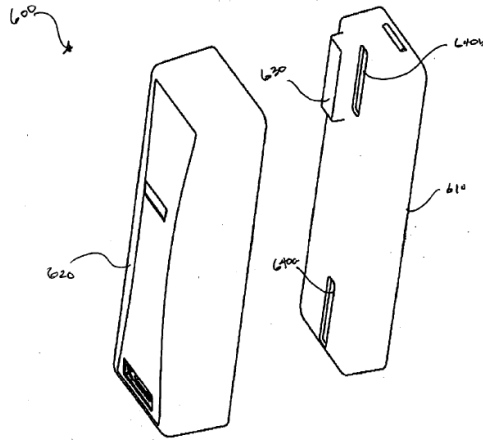


Fig. 6

ANSWER: Plaintiffs admit that the '167 publication states the following: "Base portion 610 includes mounting holes 640 and an electrical connector 630 that is matable to a corresponding electrical connector (not shown) an update portion 620. In operation, update portion 620 snaps onto base portion 610 that is mounted to a wall or other hardware." Doc. No. 14-8 ¶ [0045]. Plaintiffs further admit that the '167 publication states the following: "Among various advantages, the modularity of modular access control device 600 facilitates a simple method for updating the functionality by replacing an existing update module with another update module." *Id.* ¶ [0046]. Plaintiffs further admit that the '167 publication states the following:

In one particular case, update portion 620 and base portion 610 each include a printed circuit board (PCB). The access control can be designed such that the PCB in update portion 620 and the PCB in base portion 610 are electrically coupled via electrical connector 630. In such a situation, the PCB (including components mounted thereon) associated with base portion 610 provide for a baseline functionality, and the PCB (including components mounted thereon) associated with update portion 620 provide for additional functionality. As one particular example, an update portion with only an infrared interface may be replaced by an update portion with both an infrared interface and a keypad interface. Several possible Structural and functional variations to the base portion will be recognized by one of ordinary skill in the art based on the disclosure provided herein. These variations include, but are not limited to, any feature currently partitioned into the cover assembly.

...

In addition, but again not limited to, it is also possible to include antennas, tuning networks, and appropriate RF reader electronics for other frequency reader systems including but not limited to 125 KHZ, 433 MHz, 800 MHz, 900 MHz and/or 2400 MHz.

Id. Plaintiffs further admit that the '167 publication states “[t]he update portion includes a PCB potted into a piece of plastic which contains the following functionality: (1) one or more antennas and associated tuning circuits. . . .” *Id.* ¶ [0052]. Plaintiffs further admit that Figure 6 of the '167 publication appears as depicted above. *Id.* at Fig. 6. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 131 of the Counterclaims.

132. By disclosing, *inter alia*, “a control reader [that] operates at two distinct carrier frequencies, 125 KHz and 13.56 MHz” and “one or more antennas” housed within a base portion or an update portion, the '167 publication anticipates at least claims 1-4 of the '862 patent, or, in combination with other prior art and in light of the exemplary motivations to combine discussed below, establish that at least claims 1-4 of the '862 patent are obvious.

ANSWER: To the extent that the allegations of Paragraph 132 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 132 of the Counterclaims.

The Davis Presentation

133. On July 8, 2003, Honeywell hosted a Workshop on Storage & Processor Card- Based Technologies. At this workshop, Michael L. Davis, who became HID Global’s Director of Innovation, Intellectual Property the following year, publicly presented and shared a presentation entitled: Migration Strategies (With an Emphasis On Moving from 125 kHz Pro to 13.56 MHz Contactless Smart Card Technology) (the “Davis Presentation”). Ex. I, at 1.

ANSWER: Plaintiffs admit that Davis formerly held the title of Director of Technology, Intellectual Property at HID Global. Plaintiffs further admit that Ex. I to the Counterclaims appears to be a document titled “Migration Strategies (With an Emphasis on Moving from 125 kHz Prox to 13.56 MHz Contactless Smart Card Technology)” (“Davis Presentation”) and authored by Masha Davis. Doc. No. 14-9 at 1. Plaintiffs admit that Davis presented this presentation and the Workshop on Storage & Processor Card-Based Technologies. Plaintiffs lack knowledge or information

sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 133 of the Counterclaims and therefore deny them.

134. The Davis Presentation discloses that “‘Prox’ is a term used predominately in the United States to describe an RFID technology used in the Access Control Market . . . [that] Operates at 125 kHz.” *Id.* at 4; *compare id.*, with Ex. 2, col. 2, ll. 8-14.

ANSWER: Plaintiff admits that the Davis Presentation states that “‘Prox’ is a term used predominately in the United States to describe an RFID technology used in the Access Control Market” and “operates at 125 kHz[.]” Doc. No. 14-9 at 4. Plaintiffs deny the allegations and characterizations contained in Paragraph 134 of the Counterclaims.

135. The Davis Presentation discloses that “Contactless Smart Cards . . . Operate[] at 13.56 MHz.” Ex. I, at 5; *compare id.*, with Ex. 2, col. 2, ll. 14-21.

ANSWER: Plaintiff admits that the Davis Presentation states, “Contactless Smart Cards” and “operates at 13.56 MHz[.]” Doc. No. 14-9 at 5. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 135 of the Counterclaims.

136. The Davis Presentation recognizes that it is beneficial to migrate from proximity cards to smart cards and that a known migration strategy is the use of “multi-technology readers.” Ex. I, at 2, 12.

ANSWER: Plaintiff admits that the Davis Presentation states, “Migration Strategies,” “use multi-technology readers,” and “[i]ntstall multi-technology readers.” Doc. No. 14-9 at 12. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 136 of the Counterclaims and therefore deny them.

137. The Davis Presentation discloses that “Multi-technology readers are capable of reading two different technologies,” including “Prox and Contactless Smart Card.”

Migration Strategies: Use Multi-Technology Readers

- Multi-technology readers are capable of reading two different technologies
 - Prox and Contactless Smart Card
 - Contact and Contactless Smart Card
 - Prox and Magnetic Stripe
- Multi-technology readers may have multiple output protocols and interfaces
 - Wiegand
 - Clock & Data
 - RS232
 - Etc.

Workshop on Storage & Processor Card-Based Technologies
July 8th, 2003

Honeywell
Contactless Smart Card Integration, page 21

Id. at 21.

ANSWER: Plaintiffs admit that the Davis Presentation states, “Multi-technology readers are capable of reading two different technologies” and lists a bullet point under that text stating “Prox and Contactless Smart Card.” Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 137 of the Counterclaims.

138. At the time of the presentation, multi-technology readers were available on the market. In fact, Davis recognized that they were available from “a few vendors”:

Migration Strategies: Use Multi-Technology Readers

- Advantages
 - No changes to cards
 - No card re-badging
- Disadvantages
 - Typically most expensive migration strategy
 - Cost of readers are higher
 - Readers available from only a few vendors
 - Not all technology choices available
 - Reader obsolescence occurs faster

Workshop on Storage & Processor Card-Based Technologies
July 8th, 2003

Honeywell
Contactless Smart Card Integration, page 22

Id. at 22.

ANSWER: Plaintiff admits that the Davis Presentation states, “Readers available from only a few vendors.” Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 138 of the Counterclaims.

139. By disclosing, *inter alia*, “[m]ulti-technology readers [that] are capable of reading two different technologies,” including “Prox and Contactless Smart Card,” the Davis Presentation anticipates at least claims 1-4 of the ’862 patent, or, in combination with other prior art and in light of the exemplary motivations to combine discussed below, establish that at least claims 1-4 of the ’862 patent are obvious.

ANSWER: To the extent that the allegations of Paragraph 139 of the Counterclaims set forth legal conclusions, no response is required. Plaintiffs admit that the Davis Presentation includes the text quoted in Paragraph 139. To the extent that a response is required, Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 139 of the Counterclaims.

The Smart Card Alliance Report

140. Similarly, in July 2003, the Smart Card Alliance published a report (the “Smart Card Alliance Report”) that was developed “to provide a primer on smart card-based physical access ID systems. [The] report provides answers to commonly asked questions about the use of smart cards for physical access.” Ex. J, at 6. The Smart Card Alliance Report discloses that the “use of a *multi-technology reader* is another approach to migration” and that such readers “can read more than one technology at the same time.” *Id.* at 34. “A multi-technology reader can [] be as simple as two separate readers in one box, each with its own output data stream; or it can be a more sophisticated reader that can read more than one technology and transmit the card data using a single interface and wires.” *Id.* “[T]here are migration scenarios in which readers supporting a variety of technologies are practical.” *Id.*

ANSWER: Plaintiffs admit that Exhibit J appears to be a document titled “Using Smart Cards for Secure Physical Access: A Smart Card Alliance Report” (“Smart Card Alliance Report”) provided by Smart Card Alliance. Doc. No. 14-10 at 2. Plaintiffs admit that the Smart Card Alliance Report appears to state the publication date of the report as July 2003. Plaintiffs admit that the Smart Card Alliance Report contains the quoted text in Paragraph 140 of the Counterclaims. Plaintiffs further admit that the Smart Card Alliance Report states that “[g]enerally, multi-technology readers that

combine technologies using different RF frequencies are not ideal solutions because of the cost of the readers and their limited availability.” *Id.* at 35. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 143 of the Counterclaims.

141. The Smart Card Alliance Report discloses that the “use of a *multi-technology reader* is another approach to migration” and that such readers “can read more than one technology at the same time.” *Id.* at 34. “A multi-technology reader can [] be as simple as two separate readers in one box, each with its own output data stream; or it can be a more sophisticated reader that can read more than one technology and transmit the card data using a single interface and wires.” *Id.* “[T]here are migration scenarios in which readers supporting a variety of technologies are practical.” *Id.*

ANSWER: Plaintiffs admit that the Smart Card Alliance Report states “[t]he use of a *multi-technology reader* is another approach to migration. Multi-technology readers can read more than one technology at a time.” Doc. No. 14-10 at 34. Plaintiffs further admit that the Smart Card Alliance Report states “[a] multi-technology reader can therefore be as simple as two separate readers in one box, each with its own output data stream; or it can be a more sophisticated reader that can read more than on technology and transmit the card data using a single interface and wires.” *Id.* Plaintiffs further admit that the Smart Card Alliance Report states “there are migration scenarios in which readers supporting a variety of technologies are practical.” *Id.* Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 141 of the Counterclaims.

142. The Smart Card Alliance Report further discloses that, in the RFID industry, a “Multi-technology reader” is a “card reader/writer that can accommodate more than one card technology in the same reader (e.g., both ISO/IEC 14443 and ISO/IEC 15693 contactless smart card technologies or both 13.56 MHz and 125 kHz contactless technologies).” *Id.* at 53.

ANSWER: Plaintiffs admit that the Smart Card Alliance Report states “Multi-technology reader” and “[a] card reader/writer that can accommodate more than one card technology in the same reader (e.g., both ISO/IEC 14443 and ISO/IEC 15693 contactless smart card technologies or both 13.56 MHz and 125 kHz contactless technologies).” Doc. No. 14-10 at 53. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 142 of the Counterclaims.

143. By disclosing, *inter alia*, “multi-technology readers” that read at both “13.56 MHz and 125 kHz,” the Smart Card Alliance anticipates at least claims 1-4 of the ’862 patent, or, in combination with other prior art and in light of the exemplary motivations to combine discussed below, establish that at least claims 1-4 of the ’862 patent are obvious.

ANSWER: To the extent that the allegations of Paragraph 143 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 143 of the Counterclaims.

The XceedID XF Series and GES Transition Series Readers

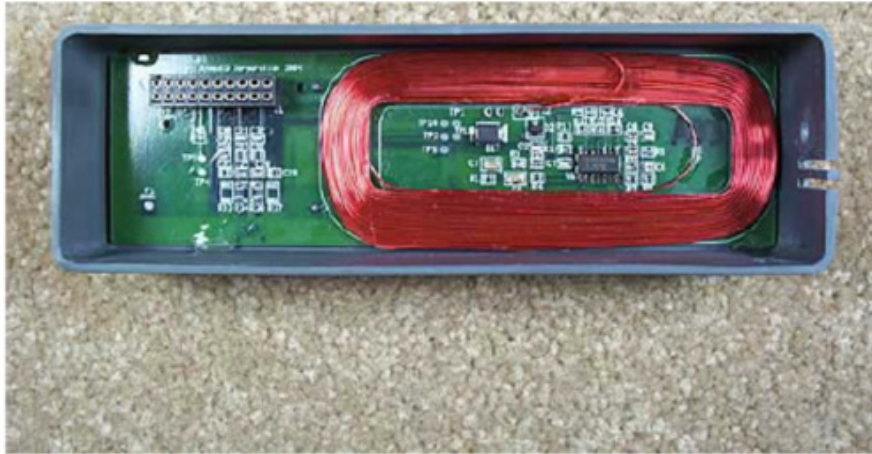
144. As discussed, XceedID and GES sold materially identical multi-frequency readers beginning in 2004.

ANSWER: Plaintiffs deny the allegations and characterizations contained in Paragraph 144 of the Counterclaims.

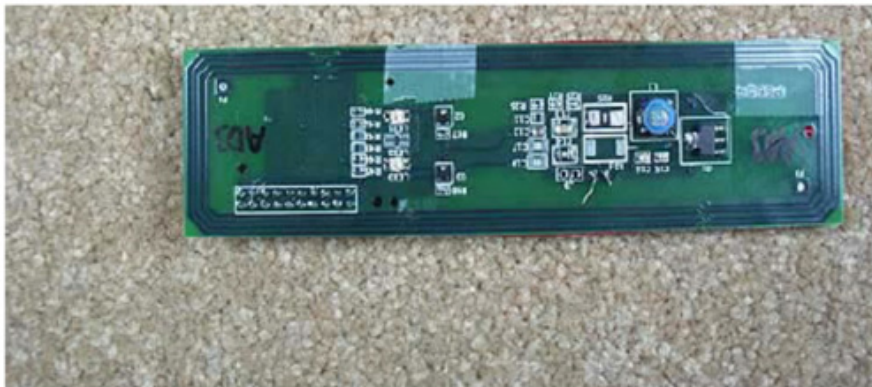
145. These readers are able to read cards at both 125 kHz and 13.56 MHz and they have two antennas arranged in a substantially parallel orientation. Ex. K; Ex. L.

ANSWER: To the extent that the allegations of Paragraph 145 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that multi-frequency readers sold by XceedID or GES were able to read cards at 125 kHz and at 13.56 MHz. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 148 of the Counterclaims and therefore deny them.

146. Information describing this antenna arrangement became publicly available from the FCC at least by October 19, 2004. For example, the sides of the printed circuit board in the XF1100 Reader contain an antenna on either side of the circuit board:



Antenna PCB Top



Antenna PCB Bottom

Ex. L, at 11-12.

ANSWER: Plaintiffs admit that XF1100 grant of equipment authorization from the FCC is dated October 19, 2004. On information and belief, the certain details of the XF1100 reader were not available immediately upon grant date because of XceedID's confidentiality request to the FCC. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 146 of the Counterclaims and therefore deny them.

147. The XceedID XF Series Readers contain the antennas and printed circuit board in a housing. For example, the XF1100 Reader antennas are encased in a housing:

SUBMITTAL PHOTOGRAPH



Front

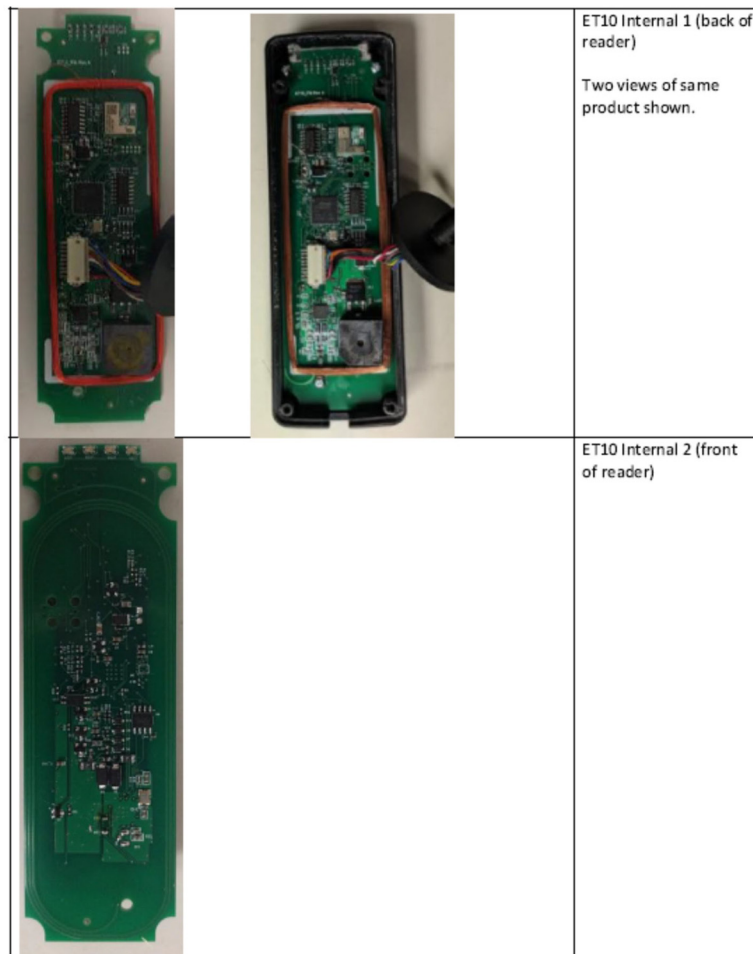
Ex. M, at 7.

ANSWER: Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 147 of the Counterclaims and therefore deny them.

148. Like the Ethos Readers accused of infringement in this case, the XF1100 series has the same antennas that are oriented on either side of the printed circuit board.

ANSWER: Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 148 of the Counterclaims and therefore deny them.

149. There is no material difference in the layout between the currently sold Ethos Readers and the prior art XceedID/GES readers (that Conlin invented before HID/Quan), as can be seen by comparing the above internal photos to the WaveLynx internal photos included under paragraphs 33-34 of the Amended Complaint in this case:



See also D.I., 12, Ex. 12 (WaveLynx internal photos submitted to FCC).

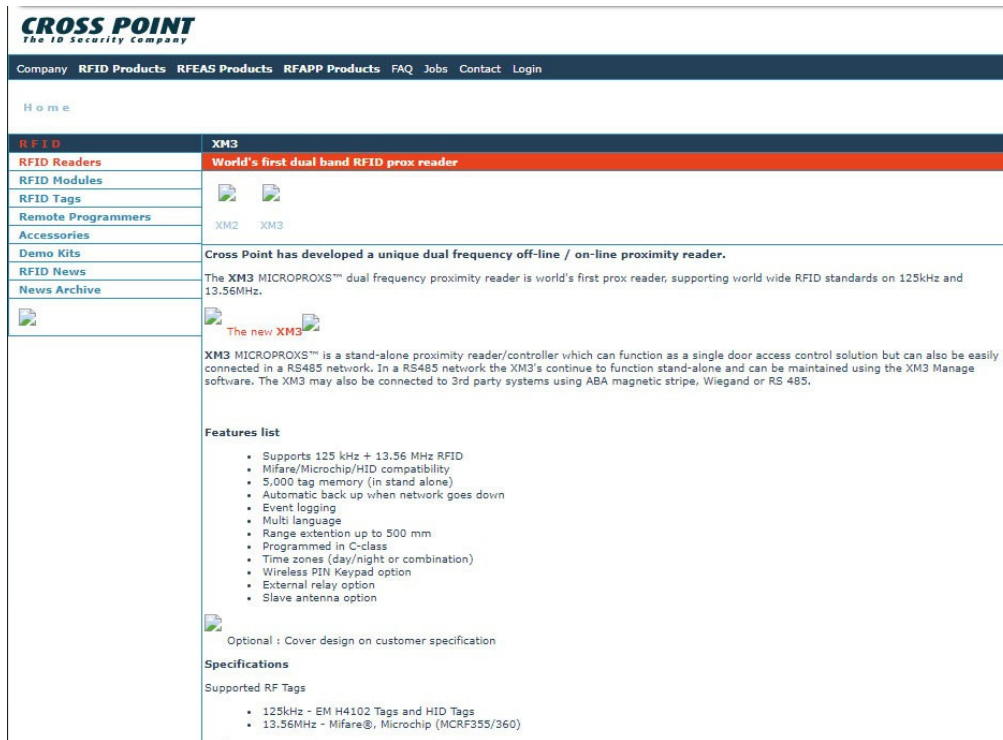
ANSWER: To the extent that the allegations of Paragraph 149 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 149 of the Counterclaims.

150. By disclosing, *inter alia*, multi-frequency card readers that are able to operate at both 125 kHz and 13.56 MHz with an antenna for each frequency located on opposite sides of a printed circuit board contained in a housing, the XceedID XF Series and GES Transition Series Readers anticipate at least claims 1-4 of the '862 patent, or, in combination with other prior art and in light of the exemplary motivations to combine discussed below, establish that at least claims 1- 4 of the '862 patent are obvious.

ANSWER: To the extent that the allegations of Paragraph 150 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 150 of the Counterclaims.

The Cross Point XM3 MICROPROX Reader

151. Third party Cross Point marketed the prior art XM3 MICROPROX reader by 2002. This reader is capable of reading cards at 125 kHz and 13.56 MHz, as reflected in the below screenshot:



Ex. N.

ANSWER: To the extent that the allegations of Paragraph 151 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 151 of the Counterclaims and therefore deny them. The source of the image in paragraph 151 is not specified and appears to differ from the Cross Point website. *See* Ex. 33 (<https://crosspoint.nl/>). On information and belief, the purported XM3 MICROPROX dual-frequency reader as referenced in the above image was not actually sold or publicly available at the time alleged.

152. On information and belief, HID was aware of the XM3 MICROPROX reader because it is compatible with HID products and HID is aware of other products that interface with its own, including Cross Point's XM3 MICROPROX reader. *Id.*

ANSWER: Plaintiffs admit that HID has been aware of some Cross Point products that are compatible or interface with HID products, but not the purported XM3 MICROPROX dual-frequency reader referenced in Paragraph 152 because, for example, on information and belief, the purported XM3 MICROPROX reader was not actually sold or publicly available at the time alleged. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 152 of the Counterclaims.

153. By disclosing, *inter alia*, a reader that is capable of reading cards at 125 kHz and 13.56 MHz, the Cross Point XM3 MICROPROX reader anticipates at least claims 1-4 of the '862 patent, or, in combination with other prior art and in light of the exemplary motivations to combine discussed below, establish that at least claims 1-4 of the '862 patent are obvious.

ANSWER: To the extent that the allegations of Paragraph 153 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 153 of the Counterclaims.

HID's Material Prior Art Products

154. HID's own prior art products also establish that at least claims 1-4 of the '862 patent are invalid.

ANSWER: To the extent that the allegations of Paragraph 154 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 154 of the Counterclaims.

155. Prior to the earliest possible priority date of the '862 patent, HID sold the pcProx Proximity Activated System and the iCLASS series of RFID readers (collectively referred to as the "HID Material Prior Art Products") in the United States.

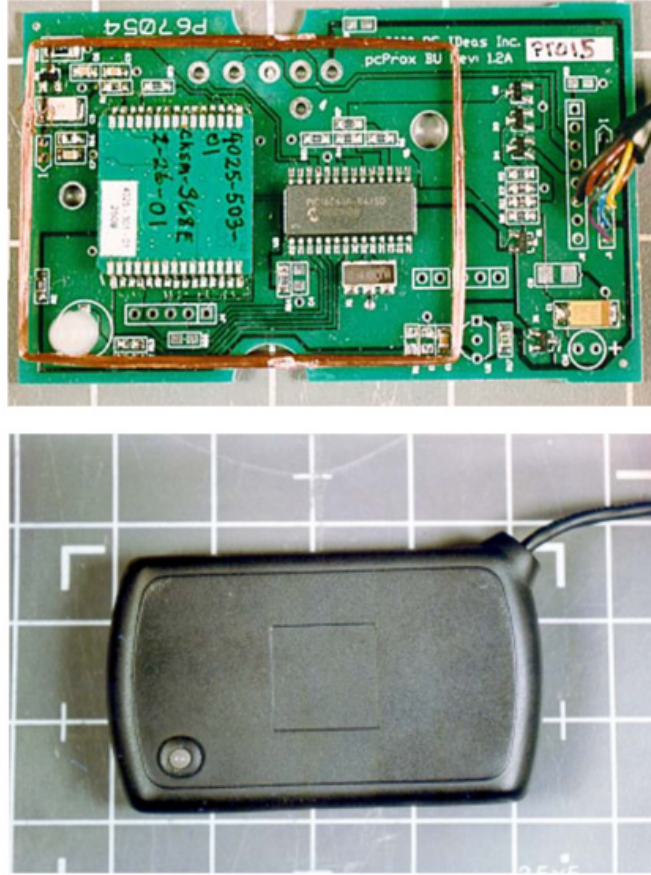
ANSWER: Plaintiffs admit that the FCC granted equipment authorization to pcProx, 6070B to operate at 125 kHz on July 16, 2001. *See* Ex. 34 (<https://fccid.io/JQ66070BA>). Plaintiffs admit that HID offered the pcProx RFID reader for sale by September 11, 2000. Plaintiffs admit that the

iCLASS series of RFID readers were offered for sale by August 2002. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 155 of the Counterclaims and therefore deny them.

156. Specifically, HID sold multiple 125 kHz RFID readers. For example, HID sold a 125 kHz reader for use with the pcProx Proximity Activated Identification system (the “pcProx Reader”). Ex. O. The FCC documentation for the pcProx Reader became available by July 16, 2001. *Id.*

ANSWER: Plaintiffs admit that some of FCC documentation for the pcProx, 6070B (FCCID JQ66070BA) became available on July 16, 2001. *See* Ex. 35 (https://apps.fcc.gov/oetcf/eas/reports/ViewExhibitReport.cfm?mode=Exhibits&RequestTimeout=500&calledFromFrame=N&application_id=ViFT95T0trOdIkBjBobANQ%3D%3D&fcc_id=JQ66070BA). Certain details of the pcProx, 6070B were not available immediately upon grant date because of HID’s confidentiality request to the FCC. *Id.* Plaintiff admits that the pcProx, 6070B operated at 125 kHz, and that HID sold the pcProx, 6070B after July 16, 2001. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 156 and therefore deny them.

157. The pcProx Reader utilizes an antenna that is contained in a housing. The following figures illustrate such a prior art RFID reader with a wire coil antenna mounted on a printed circuit board and a housing:



Ex. P, at 3, Ex. Q, at 1.

ANSWER: To the extent that the allegations of Paragraph 157 of the Counterclaims set forth legal conclusions, no response is required. Plaintiffs admit that the pcProx 6070B is an RFID reader that includes a wire coil antenna that is contained in a housing. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 157 of the Counterclaims and therefore deny them.

158. HID also sold other prior art RFID readers that operate at 125 kHz prior to the earliest possible priority date of the '862 patent.

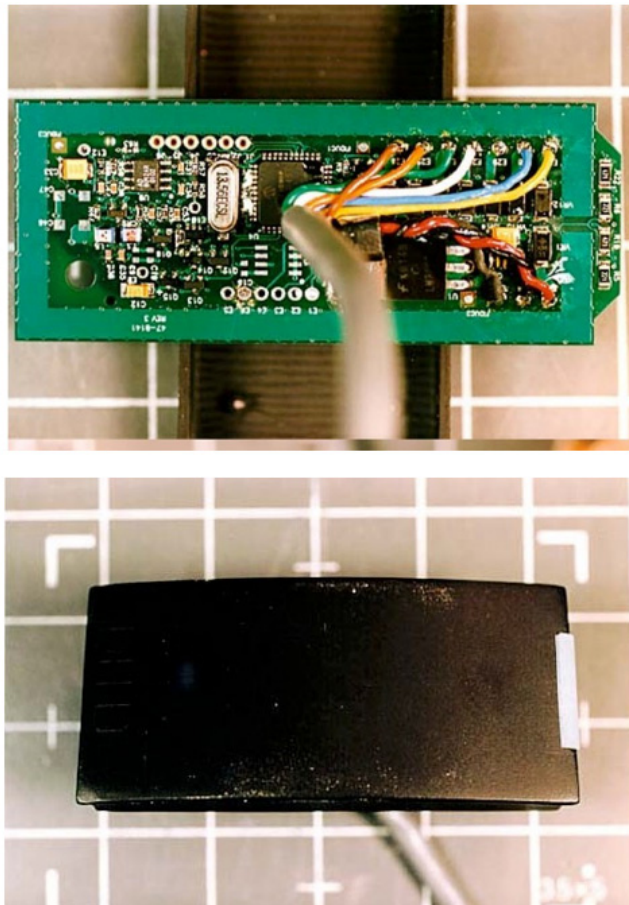
ANSWER: To the extent that the allegations of Paragraph 154 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that HID sold other RFID readers that operated at 125 kHz prior to May 18, 2004. To the extent that

a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 158 of the Counterclaims.

159. Likewise, prior to the earliest possible priority date of the '862 patent, HID sold and had FCC-certified 13.56 MHz RFID readers. For example, HID's prior art iCLASS series of RFID readers (the "iCLASS Reader") is able to read data cards at a frequency of 13.56 MHz. Ex. R.

ANSWER: Plaintiffs admit that the FCC granted equipment authorization on and that HID sold the iCLASS R10, 6100A; iCLASS RW300, 6111A and iCLASS RW400, 6121A after July 29, 2002. *See* Ex. 36 (<https://fcc.report/FCC-ID/JQ6609XA>). Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 159 of the Counterclaims and therefore deny them.

160. The iCLASS Reader contains an antenna that is contained in a housing. The following figures illustrate a prior art RFID reader with antenna on the perimeter of a printed circuit board and a housing:



Ex. S, at 1; Ex. T, at 1

ANSWER: Plaintiffs admit that the above photos show the iCLASS R10, 6100A, which is an RFID reader that includes an antenna that is contained in a housing. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 160 of the Counterclaims and therefore deny them.

161. HID submitted iCLASS Readers to the FCC for approval on July 11, 2002, which became publicly available by July 29, 2002. On information and belief, the iCLASS Readers were offered for sale later that year.

ANSWER: Plaintiffs admit that the iCLASS R10, 6100A; iCLASS RW300, 6111A and iCLASS RW400, 6121A were submitted for FCC authorization on July 11, 2002, and portions of the submission become publicly available when the FCC granted equipment authorization on July 29, 2002. Plaintiffs further admit that HID offered to sell the iCLASS R10, 6100A, iCLASS RW300, 6111A, and iCLASS RW400, 6121A after July 29, 2002.

162. Because the pcProx Reader includes, *inter alia*, a reader that operates at 125 kHz with an antenna on a printed circuit board contained in a housing, and because the iCLASS Reader includes, *inter alia*, a reader that operates 13.56 MHz with an antenna on a printed circuit board contained in a housing, it would have been obvious to combine these separate readers in the same housing, establishing that at least claims 1-4 of the '862 patent are invalid, in light of the exemplary motivations to combine described below.

ANSWER: To the extent that the allegations of Paragraph 162 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 162 of the Counterclaims.

Motivations to Combine

163. A person of ordinary skill in the art would be motivated to combine one or more of the preceding references (among others) for any of the following exemplary reasons:

ANSWER: To the extent that the allegations of Paragraph 163 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 163 of the Counterclaims.

164. It would have been obvious to combine the prior art to arrive at the invention claimed in at least claims 1-4 of the '862 patent because 125 kHz and 13.56 MHz readers were well established in the prior art. The “*multi-technology reader* . . . approach to migration” was well known in the prior art because “there are migration scenarios in which readers supporting a variety of technologies are practical.” Ex. J, at 34 (emphasis original).

ANSWER: To the extent that the allegations of Paragraph 164 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny that the allegation that it “would have been obvious to combine prior art to arrive at the invention claimed in at least claims 1–4 of the '862 patent.” Plaintiffs admit that the quoted text in Paragraph 164 appears in Doc. No. 14-10. Plaintiffs further admit that Doc. No. 14-10 also states that “multi-technology readers that combine technologies using different RF frequencies are not ideal solution because of the readers and their limited availability” and that “it is generally simpler to install the new technology reader and either issue new cards or use multi-technology cards that can interface with both readers.” Doc. No. 14-10 at 35. To the extent that any further response is required, Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 164 of the Counterclaims.

165. Indeed, HID themselves sold individual 125 kHz and 13.56 MHz readers. It would have been obvious to integrate these individual devices into a single unit, as a matter of obvious and common-sense engineering choices.

ANSWER: Plaintiffs incorporate by reference their response to Paragraph 141. To the extent that the allegations of Paragraph 165 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any further response is required, Plaintiffs admit that HID sold individual 125 kHz and 13.56 MHz readers. Plaintiffs deny the remaining allegations and characterizations in Paragraph 165 of the Counterclaims.

166. As a result of well understood transformer coupling physics, it was well known in the prior art at the time of the invention of the '862 patent to orient antennas in RFID readers parallel to the reader housing wall to facilitate tag reading.

ANSWER: To the extent that the allegations of Paragraph 166 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 166 of the Counterclaims and therefore deny them.

167. A person of ordinary skill in the art also would have been motivated by market forces and common sense to combine individual RFID readers that operate at different frequencies into a single reader.

ANSWER: To the extent that the allegations of Paragraph 167 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 167 of the Counterclaims and therefore deny them.

168. By 2003, with the standardization of 13.56 MHz (smart) readers, there was a market force to move to this standard or integrate it with 125 kHz (proximity) readers.

ANSWER: Plaintiffs admit that, at the time of filing of the '862 patent, "RFID systems, which employ RFID transponders of the type conventionally termed proximity cards or proximity tags, typically communicate by means of data signals at a carrier frequency within a range of 100 to 150 kHz. This carrier frequency range is nominally referred to . . . as 125 kHz carrier frequency and is deemed low frequency." Doc. No. 12-2 at 2:8–14. Plaintiffs admit that, at that time, "[t]he frequency bandwidth available for use around the carrier frequency of 13.56 MHz [was] defined by industry-wide standards such as ISO standards 15693 and 14443." *Id.* at 2:18–21. Plaintiffs further admit that, at that time, "it [was] both highly desirable and a significant challenge to develop an RFID reader which is compatible with RFID transponders operating at either accepted carrier frequency." *Id.* at 2:25–28. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 168 of the Counterclaims and therefore deny them.

169. Proximity cards were unstandardized and limited in their ability to store information and provide security. For example, proximity cards are only able to provide the card's identification number to the reader. The card's identification number is then evaluated to determine whether the holder of a card with that number is allowed into a secured area. Proximity cards also lack internal storage, that could be used to determine whether the holder of that card is the person authorized to enter into the secured area.

ANSWER: Plaintiffs admit that, at the time of filing the '862 Patent, "[t]he RFID reader contain[ed] its own circuitry as well as its own reader programming, which [were] cooperatively designed to 'read' the data contained in the transponder data signals received from the RFID transponder," and subsequently allow the holder of the transponder into a secured area. Doc. No. 12-2 at 1:60–63. Plaintiffs admit that, at that time, "the reader circuitry and programming [we]re typically significantly larger and more complex than the RFID transponder due to the expanded functional requirements of the RFID reader in comparison to the RFID transponder." *Id.* at 1:64–67. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 169 of the Counterclaims and therefore deny them.

170. Smart cards are able to store more information useful for security purposes, such as biometric information and other card and user authentication information. Smart cards are able to do this because smart cards have greater memory storage capacity—they are able to store several hundred bytes of biometric information.

ANSWER: Plaintiffs admit that at the time of filing the '862 Patent, smart cards had "significantly expanded functional capabilities relative to . . . [a] proximity card." Doc. No. 12-2 at 5:40–42. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 170 of the Counterclaims and therefore deny them.

171. Proximity cards therefore lack the additional security provided by smart cards to ensure that the holder of the card is allowed into that secured area.

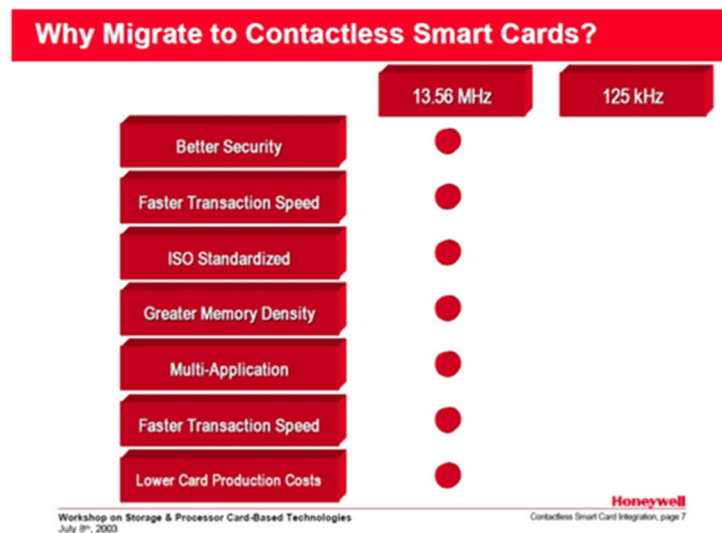
ANSWER: Plaintiffs admit that at the time of filing the '862 Patent, smart cards had "significantly expanded functional capabilities relative to . . . [a] proximity card." Doc. No. 12-2 at

5:40–42. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 171 of the Counterclaims and therefore deny them.

172. The 2003 prior art Smart Card Alliance Report discloses that various technical upgrades to data transfer and credentialing technology is leading “to the migration from 125 kHz to contactless smartcards like ISO/IEC 15693.” Ex. J, at 22. “ISOIEC 15693 is a 13.56 MHz passive RF technology designed to operate at ranges of up to 3 feet (1 meter) while still meeting FCC power output limits in the United States.” *Id.* at 21–22.

ANSWER: To the extent that the allegations of Paragraph 172 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the Smart Card Alliance Report states, “to the migration from 125 kHz to contactless smartcards like ISO/IEC 15693” and “ISO/IEC 15693 is a 13.56 MHz passive RF technology designed to operate at ranges of up to 3 feet (1 meter) while still meeting FCC power output limits in the United States.” Doc. No. 14-10 at 22–23. To the extent a response is required, Plaintiffs deny the remaining allegations and characterizations in Paragraph 172 of the Counterclaims.

173. The 2003 prior art Davis Presentation also notes various advantages of smart readers over proximity readers. For example, the Davis Presentation discloses several advantages of moving to smart cards over 125 kHz cards:



Why Migrate? (cont.)

- Added Benefits With No Increase in Price
- Increased Security
- Ability to use same card for additional applications:
 - Biometrics: Carry multiple templates on card
 - Logical Access
 - ID: Carry Tamperproof Digital Photographs
 - Portable Database: Encrypted Information for authentication or emergencies
- Interoperability
- Future Growth

Workshop on Storage & Processor Card-Based Technologies
July 8th, 2003

Honeywell
Contactless Smart Card Integration, page 8

Why Migrate (cont.)

- International Standardization
 - Current 125 KHz Prox Technology
 - ♦ No ISO existing or planned standardization
 - ♦ Proprietary
 - HID, Motorola, AWID, Casi-Rusco, etc.
 - New 13.56 MHz Contactless Smart Cards
 - ♦ Standards DO exist
 - ISO 14443A, 14443B, 15693
 - ♦ Open standards with interoperability encourages broad supplier support and customer acceptance
 - ♦ Open standards can increase market size driving prices down
 - ♦ Facilitates interoperability between vendors and applications
 - ♦ Helps to drive costs down
 - ♦ Helps to eliminate obsolescence

Workshop on Storage & Processor Card-Based Technologies
July 8th, 2003

Honeywell
Contactless Smart Card Integration, page 11

Ex. I, 7-11.

ANSWER: To the extent that the allegations of Paragraph 173 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the Davis Presentation appears to include the slides depicted above. To the extent a response is required, Plaintiffs deny the remaining allegations and characterizations in Paragraph 173 of the Counterclaims.

174. Thus, because of the known advantages that smart cards offer over proximity cards, there was a market force to move from proximity cards to smart cards at (and before) the time of the invention.

ANSWER: Plaintiffs admit that, at the time of filing the '862 Patent, "it [was] both highly desirable and a significant challenge to develop an RFID reader which is compatible with RFID transponders operating at either accepted carrier frequency [*i.e.*, high frequency and low frequency] and which achieves a level of performance comparable with an RFID reader optimized to operate at a single carrier frequency." Doc. No. 12-2 at 2:25–30. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 174 of the Counterclaims and therefore deny them.

175. However, at the time of the invention it was a substantial cost to replace issued proximity cards in a proximity-card based security system in order to migrate to a smart-card based security system. Therefore, there existed a recognized incentive to maintain operating the issued-proximity cards as long as possible, while simultaneously issuing smart cards when new credentials are needed. Therefore, various companies in the RFID reader industry began producing combined proximity card and smart card-based readers, to facilitate migration between the two established frequencies. *E.g.*, Ex. J, at 22.

ANSWER: Plaintiffs admit that Doc. No. 14-10 states that "[g]enerally, multi-technology readers that combine technologies using different RF frequencies are not ideal solutions because of the cost of the readers and their limited availability" and that "it is generally simpler to install the new technology reader and either issue new cards or use multi-technology cards that can interface with both readers." Doc. No. 14-10 at 35. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 175 of the Counterclaims and therefore deny them.

176. Indeed, Conlin's prior art '677 application recognizes that "[w]hen the electronics become obsolete, the entire reader is discarded and replaced. Such an approach can be costly in terms of expenditures and wasted time." Ex. G, at 2.

ANSWER: To the extent that the allegations of Paragraph 176 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that

the '677 Application states “[w]hen the electronics become obsolete, the entire reader is discarded and replaced. Such an approach can be costly in terms of expenditures and wasted time.” Doc. No. 14-7 at 2. To the extent a response is required, Plaintiffs deny the remaining allegations and characterizations in Paragraph 176 of the Counterclaims.

177. The '677 application teaches that “[i]n some cases, the present invention provides for modular contactless smart card access control readers that operate at multiple RF frequencies. For example, two or more frequencies can be supported including 125 KHz and 13.56MHz. This multiple frequency approach provides for transitioning systems from one generation of control to another. Thus, where access control is initially provided at 125 KHz, new processes of access control can be supported at 13.56MHz until the new processes of access control are fully implemented and the 125KHz processes can then be ended.” *Id.* at 5.

ANSWER: To the extent that the allegations of Paragraph 177 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the '677 Application states “[i]n some cases, the present invention provides for modular contactless smart card access control readers that operate at multiple RF frequencies. For example, two or more frequencies can be supported including 125 KHz and 13.56MHz. This multiple frequency approach provides for transitioning systems from one generation of control to another. Thus, where access control is initially provided at 125 KHz, new processes of access control can be supported at 13.56MHz until the new processes of access control are fully implemented and the 125KHz processes can then be ended.” Doc. No. 14-7 at 6. To the extent a response is required, Plaintiffs deny the remaining allegations and characterizations in Paragraph 177 of the Counterclaims.

178. Likewise, Conlin’s '167 publication teaches that a “multiple frequency approach may, among other things, provide for transitioning systems from one generation of control to another. Thus, as an example, where access control is initially provided at 125 KHz, new processes of access control can be supported at 13.56 MHz until the new processes of access control are fully implemented and the 125 KHz processes can then be ended.” Ex. H, ¶ [0026].

ANSWER: To the extent that the allegations of Paragraph 178 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the '167 Application states “multiple frequency approach may, among other things, provide for

transitioning systems from one generation of control to another. Thus, as an example, where access control is initially provided at 125 KHz, new processes of access control can be supported at 13.56 MHz until the new processes of access control are fully implemented and the 125 KHz processes can then be ended.” Doc. No. 14-8 ¶ [0026]. To the extent a response is required, Plaintiffs deny the remaining allegations and characterizations in Paragraph 178 of the Counterclaims.

179. Likewise, the Davis Presentation explains that one way to achieve migration is to use multi-technology readers for “Prox and Contactless Smart Card.” Ex. I, at 21-22.

ANSWER: To the extent that the allegations of Paragraph 179 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the Davis Presentation states “Prox and Contactless Smart Card.” Doc. No. 14-9 at 21. To the extent a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 179 of the Counterclaims and therefore deny them.

180. And the Smart Card Alliance Report states that “125 kHz proximity technology is widely used and will typically be the legacy system that is being upgraded.” Ex. J, at 25. “It may (for example) be necessary to plan for the implementation of multiple contactless technologies until the migration of the enterprise infrastructure to the newer contactless smart card technology is complete.” *Id.* at 25. The Smart Card Alliance Report further discloses that “[t]he use of a *multi-technology reader* is another approach to migration” and that “[m]ulti-technology readers can read more than one technology at the same time” and “can [] be as simple as two separate readers in one box.” *Id.* at 34.

ANSWER: To the extent that the allegations of Paragraph 180 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the Smart Card Alliance Report states “125 kHz proximity technology is widely used and will typically be the legacy system that is being upgraded.” Doc. No. 14-10 at 25. Plaintiffs further admit that the Smart Card Alliance Report states “[i]t may (for example) be necessary to plan for the implementation of multiple contactless technologies until the migration of the enterprise infrastructure to the newer contactless smart card technology is complete.” *Id.* Plaintiffs further admit

that the Smart Card Alliance Report states “[t]he use of a multi-technology reader is another approach to migration” and “[m]ulti-technology readers can read more than one technology at the same time” and “can [] be as simple as two separate readers in one box.” *Id.* at 35. To the extent a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 180 of the Counterclaims and therefore deny them.

181. Thus, the Smart Card Alliance Report explicitly discloses that “[p]hysical access control systems that use multiple RF technologies operating at the same frequency can be combined cost-effectively in a single reader.” Ex. J, at 34.

ANSWER: To the extent that the allegations of Paragraph 181 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the Smart Card Alliance Report states “[p]hysical access control systems that use multiple RF technologies operating at the same frequency can be combined cost-effectively in a single reader.” Doc. No. 14-10 at 35. To the extent a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 181 of the Counterclaims and therefore deny them.

182. The prior art teachings, suggestions, and motivations of combining RFID readers is abundant and express. Thus, combining known elements of prior art RFID readers that operate at different frequencies (specifically 125 kHz and 13.56 MHz) using different antennas in the same housing would yield predictable results in the combined reader and would not operate in any unexpected manner.

ANSWER: To the extent that the allegations of Paragraph 182 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 182 of the Counterclaims and therefore deny them. Indeed, the ’862 patent teaches that positioning multiple reader antennas in a single housing is much more difficult than simply combining known elements from single frequency RFID readers operating at different frequencies to yield predictable results and that the effects of resonance and parasitic or stray capacitances must be carefully accounted for in antenna design when closely positioning two antennas operating at different frequencies. *See, e.g.*, Doc. No. 12-2 at 10:59–11:41; *see also id.* at

11:41–45 (“It is extremely difficult to control capacitances at this level and correspondingly to prevent the self resonance of the reader low frequency antenna at or near 13.56 MHz from interfering with operation of the reader high frequency antenna.”).

183. The antenna arrangements of a combined reader arranged in the claimed parallel orientation also would perform as expected. A person of ordinary skill in the art would have been motivated to combine the antennas of individual RFID readers in the claimed parallel orientation in order to contain the reader antennas within “a reader housing [] having an acceptable compact size.” Ex. 2, at col. 10, ll. 57-58. Further, there are limited known and acceptable methods of arranging RFID reader antennas within the reader housing.

ANSWER: To the extent that the allegations of Paragraph 183 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 183 of the Counterclaims.

184. Further, a person of ordinary skill in the art would have been motivated to encase the antennas in a housing, as claimed, to protect the antennas and electronics from exposure to ambient air, moisture, and potential wear to and vandalism of the antennas.

ANSWER: To the extent that the allegations of Paragraph 184 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 184 of the Counterclaims and therefore deny them.

185. Indeed, in another RFID-related patent for which Quan is a named inventor, it is admitted in the Background of the Invention that “RFID readers for access control applications are also generally housed in a secure shell or other secure enclosure to render the internal circuitry physically inaccessible to the user or unauthorized individual and prevent tampering.” U.S. Patent No. 7,124,943, col. 3, ll. 31-35 (filed on September 24, 2004 and issued on October 24, 2006). Quan thus did not invent using a housing for RFID readers.

ANSWER: To the extent that the allegations of Paragraph 184 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that Ralph Quan is a named inventor for U.S. Patent No. 7,124,943 (“’943 patent”). Plaintiffs further admit that the ’943 patent issued on October 24, 2006, and the underlying application was filed on September 24, 2004. Plaintiffs further admit that the ’942 patent specification contains the quoted

text in Paragraph 185. To the extent a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 185 of the Counterclaims and therefore deny them.

[Alleged] Invalidity Under 35 U.S.C. § 102(f) (pre-AIA)

186. Quan did not invent the subject matter claimed in the '862 patent. As discussed above, the '677 application is anticipatory to at least claims 1-4 of the '862 patent, and HID has previously conceded that WaveLynx's founders invented the subject matter later claimed in at least claims 1-4 of the '862 patent. Ex. A, ¶ 47.

ANSWER: To the extent that the allegations of Paragraph 186 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 186.

187. Additionally, on information and belief, HID derived the subject matter claimed in the '862 patent from XceedID after learning in late Fall 2003 that "XceedID was allegedly offering to design RFID security access readers for customers that would replicate or be compatible with HID's iClass RFID products and/or HID controllers used to control the operation of HID Prox products" (Ex. E, ¶ 32.), further establishing the '862 patent invalid under 35 U.S.C. § 102(f) and/or for improper of inventorship.

ANSWER: To the extent that the allegations of Paragraph 187 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the Complaint from the Colorado XceedID Lawsuit states "[i]n the late Fall of 2003, HID learned from customers that XceedID was allegedly offering to design RFID security access readers for customers that would replicate or be compatible with HID's iClass RFID products and/or HID controllers used to control the operation of HID Prox products." Doc. No. 14-5 ¶ 32. To the extent a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 187.

188. For all these reasons, the '862 patent is invalid under at least 35 U.S.C. §§ 102(a), (b), (e), (f) including based on the '677 application, the '127 publication, the Davis Presentation, the Smart Card Alliance Report, XceedID's XF Series Readers and the GES Transition Series Readers, The Cross Point XM3 MICROPROX Reader, and HID's Material Prior Art Products, including the pcProx Reader and the iClass Reader, as well as under 35 U.S.C. § 103, including based on the foregoing references and products.

ANSWER: To the extent that the allegations of Paragraph 188 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 188.

189. Counterdefendants have nonetheless filed a lawsuit against WaveLynx alleging infringement of the '862 patent, even though the '862 patent is invalid. Accordingly, an actual controversy exists with respect to the invalidity of the '862 patent. Thus, a judicial determination of the respective rights of the parties with respect to the invalidity of the '862 patent is now necessary and appropriate under 28 U.S.C. § 2201 for at least the preceding reasons.

ANSWER: To the extent that the allegations of Paragraph 189 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 189.

COUNTERCLAIM COUNT III

DECLARATORY JUDGMENT OF [ALLEGED] UNENFORCEABILITY OF THE '862 PATENT

190. WaveLynx incorporates the foregoing paragraphs and allegations as if set forth herein.

ANSWER: Plaintiffs incorporate by reference their responses to Paragraphs 1–189 above.

191. Through the actions of Counterdefendants' employees and representatives, including the named inventor, the '862 patent was obtained through fraud committed during prosecution before the U.S. Patent Office and, therefore, all claims of the '862 patent are unenforceable.

ANSWER: To the extent that the allegations of Paragraph 191 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 191.

192. Specifically, the '862 patent is unenforceable due to inequitable conduct committed by at least one or more of the applicant and assignee, their representatives, and others who were substantively involved in patent prosecution, including representatives from Sheridan Ross P.C., Ralph W. Quan, Michael Davis, Tam Hulusi, and/or other HID representatives involved in the prosecution of the '862 patent and its related applications before the U.S. Patent Office. By violating their duty of good faith and candor they owed to the U.S. Patent Office, these individuals committed fraud during prosecution, which led to the issuance of the claims of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 192 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 192.

193. In particular, and as discussed in more detail below, the '862 patent is unenforceable because the following known material prior art references were intentionally not disclosed to the U.S. Patent office in order to gain allowance of the claims:

- The HID Material Prior Art Products;
- The Davis Presentation and the multi-frequency RFID readers referenced therein;
- Conlin's '677 application;
- The '167 publication;
- The Smart Card Alliance Report; and
- The XceedID XF Series Reader and the GES Transition Series Reader.

ANSWER: To the extent that the allegations of Paragraph 193 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 193.

A. The Duty of Disclosure Owed to the U.S. Patent Office

194. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the U.S. Patent Office, which includes a duty to disclose to the U.S. Patent Office all information known to that individual to be material to patentability.

ANSWER: To the extent that the allegations of Paragraph 194 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that 37 C.F.R. § 1.56 provides that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” However, information is only “material to patentability” “when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability

of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.”

Id. To the extent that any further response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 194 of the Counterclaims and therefore deny them.

195. Such individuals include every inventor, attorney, or agent who prepares or prosecutes the application, and every other person who is substantively involved and who is associated with the inventor, the applicant, an assignee, or anyone to whom there is a duty to assign the application. Those individuals are encouraged to make sure they disclose to the U.S. Patent Office what they believe to be the closest information to any pending claim.

ANSWER: To the extent that the allegations of Paragraph 195 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that 37 C.F.R. § 1.56 provides that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” However, information is only “material to patentability” “when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a *prima facie* case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.”

Id. To the extent that any further response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 195 of the Counterclaims and therefore deny them.

196. Information is material to patentability when it establishes by itself or in combination with other information, a *prima facie* case of unpatentability of a claim or it refutes or is inconsistent with a position the applicant takes in opposing an argument of unpatentability relied on by the U.S. Patent Office or asserting an argument of patentability. A *prima facie* case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the

preponderance of evidence standard, giving each term in the claim its broadest reasonable construction.

ANSWER: To the extent that the allegations of Paragraph 196 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that 37 C.F.R. § 1.56 provides that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” However, information is only “material to patentability” “when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.” *Id.* To the extent that any further response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 196 of the Counterclaims and therefore deny them.

B. Individuals With a Duty to Disclose Known Material Prior Art

197. At least the following identified individuals were associated with the drafting, filing, and/or prosecution—including whether to seek patent protection in the first instance—of relevant HID patent applications, including the applications related to the ’862 patent. Discovery is expected to reveal more.

ANSWER: To the extent that the allegations of Paragraph 197 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 197 of the Counterclaims and therefore deny them.

198. Ralph W. Quan, an engineer and the named inventor of the ’862 patent, had a duty to disclose material known prior art references to the U.S. Patent Office while prosecution was active. Quan left HID on October 17, 2008, four days before the ’862 patent issued.

ANSWER: To the extent that the allegations of Paragraph 198 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Ralph W. Quan is the named inventor of the '862 patent. Plaintiffs admit that Quan worked as an engineer at HID and left employment on October 17, 2008. Plaintiffs admit that the '862 patent issued on October 21, 2008. Plaintiffs admit that 37 C.F.R. § 1.56 provides that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” However, information is only “material to patentability” “when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.” *Id.* To the extent that any further response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 198 of the Counterclaims and therefore deny them.

199. Matthew R. Ellsworth, a patent agent at Sheridan Ross P.C., had a duty to disclose known material prior art references because he was one of the agents who prosecuted the '576 application, which led to the issuance of the '862 patent. Ellsworth had a duty to disclose known material prior art references while prosecution of was active. Ellsworth was a patent agent during the prosecution of the '576 application and subsequently registered as a patent attorney at the U.S. Patent Office in 2010. Due to his registration status during the prosecution of the '576 application, he is referred to hereinafter as “patent agent Ellsworth.”

ANSWER: To the extent that the allegations of Paragraph 199 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs state on information and belief that Matthew R. Ellsworth was a patent agent at Sheridan Ross P.C. who was associated with the prosecution of the '576 application, which led to the issuance of the '862 patent. On information and belief, Plaintiffs state that Ellsworth was a patent agent during the

prosecution of the '576 application and was subsequently registered as a patent attorney at the Patent Office in 2010. Plaintiffs admit that the Counterclaims refer to Ellsworth as “patent agent Ellsworth.” Plaintiffs admit that 37 C.F.R. § 1.56 provides that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” However, information is only “material to patentability” “when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.” *Id.* To the extent that any further response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 199 of the Counterclaims and therefore deny them.

200. Attorney Todd Blakely of Sheridan Ross P.C. had a duty to disclose known material prior art references to the U.S. Patent Office while prosecution was active. For example, Blakely was HID’s long-standing attorney substantively and interacted with Davis and Hulusi and, on information and belief, Blakely assisted in prosecuting the '576 application. As a point of contact for HID, Blakely worked on multiple HID matters, including the CDCA and Colorado XceedID lawsuits, which also involved multi- or dual-frequency prior art RFID readers. It is believed that Blakely relayed and discussed HID matters with Sheridan Ross P.C. attorneys and patent agents, including patent agent Ellsworth. Therefore, Blakely had a duty to disclose known material prior art to the U.S. Patent Office because he was substantively associated with the filing and prosecution of HID’s patent application.

ANSWER: To the extent that the allegations of Paragraph 200 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs state, on information and belief, that Todd Blakely was and is an attorney at Sheridan Ross P.C. Plaintiffs admit that Blakely represented HID and worked on the CDCA and Colorado XceedID lawsuits. Plaintiffs admit that Blakely was generally involved in prosecution of HID’s patents, however, Blakely’s involvement in prosecution was limited to supervising and reviewing work of other patent

attorneys and agents. Plaintiffs admit that Blakely primarily focused on litigation and Ellsworth interacted directly with HID personnel on prosecution matters without Blakely. Plaintiffs admit that 37 C.F.R. § 1.56 provides that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” However, information is only “material to patentability” “when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.” *Id.* To the extent that any further response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 200 of the Counterclaims and therefore deny them.

201. Michael Davis had a duty to disclose known material prior art references to the U.S. Patent Office while prosecution was active. As HID’s Director of Technology, Intellectual Property, Davis was intimately involved with obtaining patent protection for HID, including being associated with the patent prosecution leading to the ’862 patent. On information and belief, Davis was a point of contact on patent prosecution matters between HID and Sheridan Ross attorneys and patent agents, including attorney Blakely and patent agent Ellsworth. Davis was therefore involved in the prosecution of the ’576 application and had a duty to disclose known material prior art to the U.S. Patent Office.

ANSWER: To the extent that the allegations of Paragraph 201 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that Davis was formerly HID’s Director of Technology, Intellectual Property at HID Global. Davis, however, was not a patent agent or patent attorney and did not assume responsibilities related to prosecution of HID patents until around late 2007 or early 2008 when Pete Lowe was terminated from HID. On information and belief, prior to his departure in 2007, Pete Lowe was in charge of

patent prosecution at HID and, after his departure, he continued to consult exclusively with HID on evaluation of intellectual property and patents through 2008. Plaintiffs admit that 37 C.F.R. § 1.56 provides that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” However, information is only “material to patentability” “when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.” *Id.* Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 201 of the Counterclaims and therefore deny them.

202. For example, Davis submitted a declaration in the CDCA XceedID lawsuit on October 30, 2007, reflecting certain of Davis’s patent-related activities. Davis provided testimony concerning strategy discussions about a patent application filed by XceedID, as well as discussions with HID’s Patent Assistant, Kim Harrington, HID’s Manager of Patent Administration, Betsy Willoughby, and Tam Hulusi. Indeed, Harrington sent an email on December 14, 2006, informing Davis that “[t]he copy of an application that Mike Conlin was a co-inventor is in your mailbox in a sealed envelope.” Ex. U, at 2.

ANSWER: Plaintiffs admit that a declaration signed by Davis was filed in Case No. 06-CV-1245 (C.D. Cal.) on October 30, 2007. Ex. 37. Plaintiffs admit that the October 30, 2007 declaration states that an attachment to the declaration was an email string reflecting communications commencing on December 14, 2006 and ending on December 15, 2006 between Davis, Hulusi, and Kim Harrington, “HID’s Patent Assistant.” *Id.* at 7. Plaintiffs admit that the October 30, 2007 declaration states that another attachment to the declaration was an email string reflecting communications on March 7, 2007 between Betsy Willoughby, “HID’s Manager of Patent Administration” and Davis. *Id.* at 8. Plaintiffs admit Doc. No. 14-21 includes the statement quoted in

Paragraph 202 of the Counterclaims. Plaintiffs deny the remaining allegations and characterizations in Paragraph 202 of the Counterclaims.

203. Tam Hulusi had a duty to disclose known material prior art references to the U.S. Patent Office while prosecution was active. As HID's Senior Vice President of Strategy and Innovation between 2004 and 2014, Hulusi was substantively involved in matters relating to HID's intellectual property, including being associated with the patent prosecution leading to the '862 patent. Hulusi, among others at HID, knew of XceedID's dual reader and was involved in discussions with XceedID relating to their alleged use of HID intellectual property on RFID readers. In addition to litigation, on information and belief, Hulusi was substantively involved in the prosecution of HID's patents relating to RFID readers, including being substantively involved with the filing and prosecution of the '576 application.

ANSWER: To the extent that the allegations of Paragraph 203 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that Tam Hulusi held the title of Senior Vice President of Strategy and Innovation between 2004 and 2014, that Hulusi was involved in determining whether HID's competitors were improperly using its intellectual property, and that Hulusi was involved in discussions with XceedID about its misappropriation of proprietary HID information and intellectual property, including on RFID readers. Hulusi, however, was not a patent agent, patent attorney, or an engineer, and was not substantively involved in matters related to prosecution of HID patents. On information and belief, prior to his departure in 2007, Pete Lowe was in charge of patent prosecution at HID and, after his departure, he continued to consult exclusively with HID on evaluation of intellectual property and patents through 2008. Plaintiffs further admit that 37 C.F.R. § 1.56 provides that "[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." However, information is only "material to patentability" "when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the

applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.” *Id.* Plaintiffs deny the remaining allegations and characterizations in Paragraph 203 of the Counterclaims.

C. The [Alleged] Non-Disclosed Prior Art Is [Allegedly] Material and Not Cumulative to the Prior Art the Examiner Considered

204. The HID Material Prior Art Products, the Davis Presentation and multi-frequency RFID readers referenced therein, Conlin’s ’677 application, the ’167 publication, the Smart Card Alliance Report, and the XceedID XF Series and GES Transition Series Readers are material and not cumulative over the prior art available to or used by the patent examiner during prosecution.

ANSWER: To the extent that the allegations of Paragraph 204 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 204 of the Counterclaims. There is no indication that the references were material prior art and not cumulative. In the *Farpointe* litigation, the priority date for the ’862 patent was established to be February 2004. Beyond that, the prior record in the *Farpointe* litigation shows that Ralph Quan built prototypes, which move this priority date even earlier. On information and belief, the Patent Office also considered prior art products that operated at multiple frequencies at once, such as U.S. Pat. No. 7,119,738, Japanese Pat. Publication No. H07-230560, Japanese Pat. Publication No. 2002076983, Japanese Pat. Publication No. 2004078834, and WO-03/061060 A2. On information and belief, Japanese Pat. Publication No. 2002076983 described a dual-frequency reader, operating at 125 kHz and 13.56 MHz, with two physically separated antennas inside of the same unit.

205. For example, claim 1 of the ’862 patent, as originally drafted in the ’246 application, claimed the following:

An antenna array for an RFID reader comprising:

a first reader antenna tuned to operate at a first frequency; and
a second reader antenna tuned to operate at a second frequency different from said first frequency.

ANSWER: Plaintiffs admit that claim 1 in the '576 application, which was a continuation-in-part of application No. 10/848,246, as filed on December 16, 2004, recited “[a]n antenna array for an RFID reader comprising: a first reader antenna tuned to operate at a first frequency; and a second reader antenna tuned to operate at a second frequency different from said first frequency.”

206. This claim was rejected in a non-final rejection under 35 U.S.C. § 102(e) by the examiner on January 12, 2007 for being anticipated by U.S. Pat. No. 6,750,771 (“Brand”).

ANSWER: Plaintiffs admit that claim 1 in the '576 application was rejected under 35 U.S.C. 102(e) as being anticipated by Brand (U.S. Pat. No. 6,750,771) in a non-final office action issued on January 12, 2007.

207. In response, on April 17, 2007, Applicant amended claim 1 as follows: An antenna array for an RFID reader comprising:

a first reader antenna tuned to operate at a first carrier frequency enabling data communication with a first transponder transmitting data signals at said first carrier frequency; and

a second reader antenna tuned to operate at a second carrier frequency different from said first carrier frequency enabling data communication with a second transponder transmitting data signals at said second carrier frequency.

Ex. V, at 2.

ANSWER: Plaintiffs admit that an office action response dated April 12, 2007, includes an amended claim 1, stating “[c]laim 1 (currently amended): An antenna array for an RFID reader comprising a first reader antenna tuned to operate at a first carrier frequency enabling data communication with a first transponder transmitting data signals at said first carrier frequency; and a second reader antenna tuned to operate at a second carrier frequency different from said first carrier frequency enabling data communication with a second transponder transmitting data signals at said second carrier frequency.” Doc. No. 14-22 at 3. Plaintiffs lack knowledge or information sufficient

to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 207 of the Counterclaims and therefore deny them.

208. In the same response, Applicant argued that “the reader of Brand can only communicate with passive transponders which are tuned to the same single frequency as the antennas in the array.” *Id.* at 8. Applicant further argued that “prior art passive transponders and readers are limited to operation at only one or the other of these two frequencies [namely, 125 kHz and 13.6 MHz] due to technical, operational and physical size constraints” and that “[t]ransponders operating at 125 kHz are conventionally termed proximity cards and transponders operating at 13.5 MHz are conventionally termed smart cards.” *Id.* (emphasis added).

ANSWER: Plaintiffs admit that an office action response dated April 12, 2007, includes applicant remarks stating, “[t]hus, the reader of Brand can only communicate with passive transponders which are tuned to the same single carrier frequency as the antennas in the array. Applicant’s specification states at page 2, lines 16-30, that those skilled in the RFID art commonly recognize two different standard carrier frequencies at which prior art readers and passive transponders communicate, namely, 125 kHz and 13.5 MHz. However, these prior art passive transponders and readers are limited to operation at only one or the other of these two frequencies due to technical, operational and physical size constraints. Transponders operating at 125 kHz are conventionally termed proximity cards and transponders operating at 13.5 MHz are conventionally termed smart cards.” Doc. No. 14-22 at 9. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 208 of the Counterclaims and therefore deny them.

209. Applicant further argued that “Brand recognizes the desirability of a reader which is capable of simultaneously reading (i.e., communicating with) multiple passive transponders operating at a single carrier frequency of 125 kHz which are within communication range of the reader” and “discloses means for achieving this objective.” *Id.* However, Applicant contends, “nowhere does Brand disclose or suggest the desirability of providing a reader having an antenna array which can read multiple transponders, two or more of which operate at two different carrier frequencies, such as 125 kHz and 13.5 MHz.” *Id.*

ANSWER: Plaintiffs admit that an office action response dated April 12, 2007, includes applicant remarks stating, “As noted above, Brand recognizes the desirability of a reader which is

capable of simultaneously reading (i.e., communicating with) multiple passive transponders operating at a single carrier frequency of 125 kHz which are within the communication range of the reader. Brand further discloses means for achieving this objective. Yet, nowhere does Brand disclose or suggest the desirability of providing a reader having an antenna array which can read multiple transponders, two or more of which operate at two different carrier frequencies, such as 125 kHz and 13.5 MHz.” Doc. No. 14-22 at 9. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 209 of the Counterclaims and therefore deny them.

210. Unlike Brand, Applicant argued, “applicant recognizes the desirability of a reader which is capable reading two different transponders, one of which operates at a different carrier frequency than the other.” *Id.* And “[n]or is the antenna array of claim 1 which requires two differently tuned antennas an obvious design modification of Brand because Brand lacks any motivation for such a modification.” *Id.* at 9.

ANSWER: Plaintiffs admit that an office action response dated April 12, 2007, includes applicant remarks stating, “applicant recognizes the desirability of a reader which is capable reading two different transponders, one of which operates at a different carrier frequency than the other. Applicant’s invention, as recited in claim 1, is the achievement of this objective by providing an antenna array for a reader which has two differently tuned antennas. One antenna is tuned to the same carrier frequency as the carrier frequency at which one of the transponders transmits data signals. The other antenna is tuned to the same carrier frequency as the carrier frequency at which the other transponder transmits data signals. As such applicant’s antenna array of claim 1 is neither disclosed nor suggested by Brand, thereby traversing the instant ground of rejection. Nor is the antenna array of claim 1 which requires two differently tuned antennas an obvious design modification of Brand because Brand lacks any motivation for such a modification.” Doc. No. 14-22 at 9–10. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 210 of the Counterclaims and therefore deny them.

211. In view of Applicant's response, the examiner next made a final rejection of the pending claims under 35 U.S.C. § 102(e) on July 12, 2007 for being anticipated by U.S. Pat. No. 7,119,738 ("Bridgelall").

ANSWER: Plaintiffs admit that in response to a paper filed by the applicant on April 17, 2007, an office action was issued on July 12, 2007, that was made final, and that in the office action the examiner rejected claims 1–26 that were pending in the application. Plaintiffs further admit that in the office action claims 1, 4–14, 17, and 19–26 were rejected under 35 U.S.C. § 102(e) as purportedly anticipated by U.S. Patent No. 7,119,738 to Bridgelall. Plaintiffs deny that claims 2–3, 15–16, and 18 were rejected under 35 U.S.C. § 102(e) as purportedly anticipated by U.S. Patent No. 7,119,738 to Bridgelall. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 211 of the Counterclaims and therefore deny them.

212. In their next response on October 5, 2007, Applicant amended claim 1 to specify "low" and "high" carrier frequencies and argued, *inter alia*, that "Bridgelall does not teache [*sic*] any embodiment where two antennas are located in close proximity to one another" and "teaches away from the inventions in the present application." Ex. W, at 2, 11.

ANSWER: Plaintiffs admit that an office action response dated October 5, 2007, includes an amended claim 1, stating "1. (Currently Amended) An antenna array for an RFID reader comprising: a first reader antenna tuned to operate at a first low carrier frequency enabling data communication with a first transponder transmitting data signals at said first low carrier frequency; and a second reader antenna tuned to operate at a second high carrier frequency different from said first low carrier frequency enabling data communication with a second transponder transmitting data signals at said second high carrier frequency." Doc. No. 14-23 at 3. Plaintiffs further admit that the response includes applicant remarks stating, "Bridgelall does not teache [*sic*] any embodiment where two antennas are located in close proximity to one another. Such embodiments would render the invention of Bridgelall inoperable as it would be difficult, if not impossible, to determine location information for an object

with antennas that have practically the same location. Thus, Bridgelall actually teaches away from the inventions of the present application.” *Id.* at 12. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 212 of the Counterclaims and therefore deny them.

213. In view of Applicant’s response, the examiner next made a non-final rejection of the pending claims under 35 U.S.C. § 103(a) on December 28, 2007 for being unpatentable over U.S. Pat. No. 7,268,687 (“Egbert”).

ANSWER: Plaintiffs admit that in response to a paper filed by the applicant on October 5, 2007, an office action was issued on December 28, 2007, that was made non-final, and that in the office action the examiner rejected claims 1–15, 17–18 and 20–26 under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent No. 7,268,687 to Egbert. Plaintiffs deny that claims 16 and 19 were rejected under 35 U.S.C. § 102(e) as being purportedly unpatentable over U.S. Patent No. 7,268,687 to Egbert. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 213 of the Counterclaims and therefore deny them.

214. In their next response, filed on March 11, 2008, Applicant amended claim 1 as follows:

An antenna array for an RFID reader comprising:

a first reader antenna tuned to operate at a first low carrier frequency enabling data communication with a first transponder transmitting data signals at said first low carrier frequency; and

a second reader antenna tuned to operate at a second high carrier frequency different from said first low carrier frequency enabling data communication with a second transponder transmitting data signals at said second high carrier frequency, wherein the first and second antennas are oriented along axes that are substantially parallel to one another.

Ex. X, at 2.

ANSWER: Plaintiffs admit that an office action response dated March 11, 2008, includes an amended claim 1, stating, “1. (Currently Amended) An antenna array for an RFID reader comprising: a first reader antenna tuned to operate at a first low carrier frequency enabling data communication with a first transponder transmitting data signals at said first low carrier frequency; and a second reader antenna tuned to operate at a second high carrier frequency different from said first low carrier frequency enabling data communication with a second transponder transmitting data signals at said second high carrier frequency, wherein the first and second antennas are oriented along axes that are substantially parallel to one another.” Doc. No. 14-24 at 3.

215. In the same response, Applicant argued that with regard to “the antennas of the present invention,” Egbert merely taught that “lattices (19A and 19B)” are “to be at opposite ends of a corridor and such lattices are to operate at the same frequency.” *Id.* at 12. “That is, the lattices operate at the operating frequency of the RFID system to detect when objects having an RFID tag pass between the lattices.” *Id.* Further, Applicant argued that “[t]here is no mention in Egbert as to how the lattices should be oriented and/or overlapped.” *Id.* at 13.

ANSWER: Plaintiffs admit that an office action response dated March 11, 2008, includes applicant remarks, stating “The Examiner asserts that the lattices (19A and 19B) of Egbert make obvious the antennas of the present invention. Applicants respectfully disagree with the Examiner's interpretation of Egbert. More specifically, Applicant's understanding of Egbert is that the lattices (19A and 19B) are taught to be at opposite ends of a corridor and such lattices are to operate at the same frequency. That is, the lattices operate at the operating frequency of the RFID system to detect when objects having an RFID tag pass between the lattices.” Doc. No. 14-24 at 13. Plaintiffs further admit that the response includes applicant remarks stating, “[t]here is no mention in Egbert as to how the lattices should be oriented and/or overlapped.” *Id.* at 14.

216. The claims were thereafter allowed and the application issued as the '862 patent on October 21, 2008.

ANSWER: Plaintiffs admit that the '862 patent issued on October 21, 2008, after the claims were allowed.

217. The U.S. Patent Office, however, would not have allowed at least claims 1-4 to issue had the examiner known of any of the following prior art that was intentionally withheld to secure issuance of the patent: the HID Material Prior Art Products, the Davis Presentation, Conlin's '677 application, the '167 publication, the Smart Card Alliance Report, and the XceedID XF Series and the GES Transition Series Readers. This, as explained above, is because each of the references disclose and teach the limitations recited in claims 1-4 of the '862 patent, including a dual frequency reader in which a first and second antenna are oriented along axes that are substantially parallel to one another.

ANSWER: Plaintiffs deny the allegations in Paragraph 217 of the Counterclaims.

218. The content of this prior art also refutes and/or is inconsistent with the positions taken by the Applicant for the '862 patent during prosecution before the U.S. Patent Office. The Applicant would not have been able to make the arguments it did had the above-identified prior art been disclosed to, and considered by, the U.S. Patent Office. For example, the Applicant would not have been able to make the arguments/amendments it made in response to the office actions set forth above to obtain the patent.

ANSWER: Plaintiffs deny the allegations in Paragraph 218 of the Counterclaims.

219. Accordingly, each of the above identified prior art is material and non-cumulative to the prior art that was cited to the examiner during prosecution that led to the issuance of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 218 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 219 of the Counterclaims.

220. As shown herein, all of this prior art was known to one or more of the above- identified individuals, who were substantively involved in prosecution of the '862 patent and/or had a duty to disclose it to the U.S. Patent Office.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 220 of the Counterclaims.

D. Specific Instances of [Alleged] Inequitable Conduct

1. [Alleged] Failure to Disclose the [Alleged] HID Material Prior Art Products

221. One or more individuals associated with the filing and prosecution of the '862 patent committed inequitable conduct by failing to disclose the HID Material Prior Art Products.

ANSWER: To the extent that the allegations of Paragraph 221 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 221 of the Counterclaims.

222. For example, at least patent agent Ellsworth, named inventor Quan, and HID employees Davis and Hulusi committed inequitable conduct during prosecution of the '862 patent by failing to disclose the HID Material Prior Art Products including those referenced in the patent itself (Ex. 2, col. 2, ll. 7-21), thereby violating the duty of good faith and candor they owed to the U.S. Patent Office, and making the '862 patent unenforceable.

ANSWER: To the extent that the allegations of Paragraph 222 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 222 of the Counterclaims.

223. On information and belief, during Quan's role as an engineer at HID from 1998- 2008, Quan developed, and was aware of, the RFID reader products HID developed during that time, including the HID Material Prior Art Products. Quan also was aware of other RFID reader products sold by HID and other companies, including those generally referred to in the Background of the specification of the '862 patent, which admits to existence of prior art RFID reader products, but provides no structural details, such as antenna arrangement. Quan thus had knowledge of HID's Material Prior Art Products and other prior art products that were material to the issuance of the claims of the '862 patent but did not disclose them.

ANSWER: Plaintiffs admit that Quan started working at HID as a contractor in 1998 and left HID in October 2008. On information and belief, during his time as an engineer at HID, Quan was aware of some RFID reader products that HID developed during that time and of RFID reader products sold by HID and had worked on single frequency readers, including readers that operated at 125 kHz. Plaintiffs admit that Quan was generally aware of RFID readers, including those described in the Background of the specification of the '862 patent. Plaintiffs deny the characterization that the Background of the specification of the '862 patent "admits to the existence of prior art RFID reader products, but provides no structural details, such as an antenna arrangement" or that "Quan thus had knowledge of HID's Material Prior Art Products and other prior art products that were material to the issuance of the claims of the '862 patent but did not disclose them." Plaintiffs deny that "HID's

Material Prior Art Products” were material to the issuance of the claims of the ’862 patent, which are cumulative to the systems that Quan described the specification of the ’862 patent. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 223 of the Counterclaims and therefore deny them.

224. On information and belief, patent agent Ellsworth knew of the HID Material Prior Art Products because he discussed the alleged invention contained in the ’862 patent during prosecution with at least Quan and/or others at HID. As a patent agent, Ellsworth was aware that the prior art products of HID and those referenced in the specification were material to the examination of the claims of the ’862 patent.

ANSWER: Plaintiffs admit that Ellsworth was a patent agent, and that Ellsworth discussed the inventions of the ’862 patent with Quan. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegation that Ellsworth discussed the inventions of the ’862 patent with “others at HID,” and therefore deny that allegation. Plaintiffs deny the remaining allegations and characterizations in Paragraph 224 of the Counterclaims.

225. Davis and Hulusi also knew of the HID Material Art Products. Davis would have known of the HID Material Prior Art Products because of his role as the Director of Technology, Intellectual Property, and Hulusi would have known of the HID Material Prior Art Products based on his role as Senior Vice President of Strategy and Innovation, and his substantial discussions with Davis regarding HID’s products. *See* Ex. B.

ANSWER: Plaintiffs admit that Davis was formerly Director of Technology, Intellectual Property at HID Global, that Hulusi held the role of Senior Vice President of Strategy and Innovations, and that Hulusi and Davis discussed HID’s products. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 225 of the Counterclaims and therefore deny them.

226. By failing to disclose their material knowledge of the HID Material Prior Art Products to the U.S. Patent Office during prosecution of the ’862 patent, Davis, Hulusi, Quan and patent agent Ellsworth committed inequitable conduct.

ANSWER: To the extent that the allegations of Paragraph 226 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 226 of the Counterclaims.

227. Indeed, as described above, the HID Material Prior Art Products were material prior art to the patentability of the subject matter claimed in the '862 patent. For example, the HID Material Prior Art Products, when combined, would be able to read credentials at two frequencies and would utilize the same antenna arrangement as the '862 patent claims. Indeed, Davis himself stated in an email to Hulusi on October 14, 2005 that “[i]t is easy to show that it is an obvious extension to make it [dual-frequency readers] a single unit.” Ex. B, 13. The examiner did not have any such art or motivations before him during prosecution.

ANSWER: Plaintiffs admit that Doc. No. 14-2 includes an email chain with the statement(s) quoted above that appear to have been written by Davis, who was and is not an attorney or patent agent and was not responsible for HID’s patent prosecution when the email was written. Plaintiffs deny the remaining allegations and characterizations in Paragraph 227 of the Counterclaims. Indeed, the Patent Office considered three prior art readers that operated at 125 kHz—U.S. Pat. No. 6,750,771, U.S. Pat. No. 5,541,574, and U.S. Pat. App. No. 2003/0090367—and two prior art readers that operated at 13.56 MHz—U.S. Pat. No. 7,268,687 and U.S. Pat. No. 7,119,664. Further, the Patent Office considered prior art products that operated at multiple frequencies at once, such as U.S. Pat. No. 7,119,738, Japanese Pat. Publication No. H07-230560, Japanese Pat. Publication No. 2002076983, Japanese Pat. Publication No. 2004078834, and WO-03/061060 A2. On information and belief, Japanese Pat. Publication No. 2002076983 described a dual-frequency reader, operating at 125 kHz and 13.56 MHz. The Patent Office also considered at least eleven additional references. In the face of this prior art, the Patent Office found that the application should still be granted and issued the '862 patent.

228. In addition, during prosecution of the '862 patent, Applicant argued that prior art readers were limited to operation at only one frequency and that the prior art of record provided no motivation to modify readers to have two antennas tuned to operate at different carrier frequencies in close proximity to one another.

ANSWER: Plaintiffs admit that during prosecution of the '862 patent, the following statement was made: "Accordingly, Bridgelall does not teach *[sic]* any embodiment where two antennas are located in close proximity to one another. Such embodiments would render the invention of Bridgelall inoperable as it would be difficult, if not impossible, to determine location information for an object with antennas that have practically the same location. Thus, Bridgelall actually teaches away from the inventions of the present application." Doc. No. 14-23 at 12. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 228 of the Counterclaims, and therefore deny them.

229. Further, Applicant argued that "since Egbert does not even describe how the lattices are actually oriented and since Fig. 1 is a 3-dimensional depiction of the control system, Applicant respectfully submits that Egbert does not render the claimed invention obvious, especially in relation to the claimed orientation of the antennas. Egbert's lack of description related to the orientation of the lattices should not be substituted and/or expanded upon by the examiner's guess as to what is depicted in Fig. 1." Ex. X, at 13. Prior art antennas were therefore central to examination of the pending claims during prosecution. But when the HID Material Prior Art Products are logically and simply combined, they would be combined in a substantially parallel orientation within a housing. The HID Material Prior Art Products refute and/or are inconsistent with the positions taken by the Applicant for the '862 patent during prosecution before the U.S. Patent Office. The Applicant, moreover, would not have been able to make the arguments it did had the HID Material Art been disclosed to, and considered by, the U.S. Patent Office.

ANSWER: Plaintiffs admit that the following remark was made during prosecution of the '862 patent: "since Egbert does not even describe how the lattices are actually oriented and since Fig. 1 is a 3-dimensional depiction of the control system, Applicant respectfully submits that Egbert does not render the claimed invention obvious, especially in relation to the claimed orientation of the antennas. Egbert's lack of description related to the orientation of the lattices should not be substituted and/or expanded upon by the Examiner's guess as to what is depicted in Fig. 1." Doc. No. 14-24 at 14. Plaintiffs deny the remaining allegations and characterizations in Paragraph 229 of the Counterclaims.

230. Similarly, as described above, the HID Material Prior Art Products are non-cumulative to the art that was disclosed during prosecution of the '862 patent, including because the

features of the HID Material Prior Art Products are closer the claims than the disclosures of the prior art that the examiner applied during prosecution.

ANSWER: To the extent that the allegations of Paragraph 234 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 230 of the Counterclaims.

231. But-for Davis, Hulusi, Quan, and/or patent agent Ellsworth's failures to disclose the known and material, non-cumulative prior art to the U.S. Patent Office, the claims of the '862 patent would not have issued.

ANSWER: To the extent that the allegations of Paragraph 231 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 231 of the Counterclaims.

232. Withholding these HID Material Prior Art Products further constituted egregious misconduct.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 232 of the Counterclaims.

233. On information and belief, Davis, Hulusi, Quan, and/or patent agent Ellsworth knowingly withheld this material information with the specific intent to deceive the U.S. Patent Office and gain allowance. Davis, Hulusi, Quan and patent agent Ellsworth were aware that HID produced RFID readers, including those referenced in the patent itself (Ex. 2, col. 2, ll. 7-21), and yet no such readers were disclosed to the U.S. Patent Office, thereby violating their duty of good faith and condor.

ANSWER: To the extent that the allegations of Paragraph 233 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Davis, Hulusi, Quan and Ellsworth were aware that HID produced RFID readers, and that Quan and Ellsworth were aware of the RFID readers referenced in the '862 patent at col. 2, lines 7-21. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegation that Davis and Hulusi knew of RFID readers referenced in the '862 patent at col. 2, lines 7-21. Plaintiffs deny the remaining allegations and characterizations in Paragraph 233 of the Counterclaims.

234. Accordingly, at least one or more of the individuals identified herein committed inequitable conduct and the '862 patent is unenforceable.

ANSWER: To the extent that the allegations of Paragraph 234 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 234 of the Counterclaims.

2. [Alleged] Failure to Disclose the Davis Presentation and Multi-Frequency RFID Readers Referenced Therein

235. One or more individuals associated with the filing and prosecution of the '862 patent committed inequitable conduct by failing to disclose the Davis Presentation and/or multi-frequency RFID readers referenced therein.

ANSWER: To the extent that the allegations of Paragraph 235 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 235 of the Counterclaims.

236. For example, the '862 patent is unenforceable due to inequitable conduct committed by at least HID employees Davis and Hulusi and patent agent Ellsworth in the prosecution of the '862 patent before the U.S. Patent Office because they deliberately failed to disclose the known and material Davis Presentation to the U.S. Patent Office, thereby violating their duty of good faith and candor.

ANSWER: To the extent that the allegations of Paragraph 236 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 236 of the Counterclaims.

237. Before working at HID, both of Michael Davis and Tam Hulusi worked for Honeywell and were involved with access control technology. After leaving Honeywell, Davis became HID's "Director of Technology, Intellectual Property" and Hulusi became HID's Global's Senior Vice President of Strategy and Innovation.

ANSWER: Plaintiffs admit that Davis and Hulusi worked at Honeywell in subject matter areas related to access control technology prior to joining HID. Plaintiffs also admit that Davis was formerly Director of Technology, Intellectual Property at HID Global, and Hulusi was Senior Vice President of Strategy and Innovation.

238. Davis and Hulusi were aware of the Davis Presentation. Indeed, Davis is the author of the Davis Presentation and he presented the Davis Presentation on July 8, 2003. Davis knew of its materiality as prior art to dual- or multi- frequency RFID readers. For example, when referring to his Presentation in an email on April 29, 2005, Davis “[d]idn’t want to send this to the group here”—which included Hulusi—and sent them “a link to a presentation I made at NIST regarding card migration scenarios.” Ex. B, at 8. In the same email, Davis recognized that “[o]bviously this is in the public domain being posted on a public web site” and suggested using his Presentation in “a ‘prior art’ defense” in reference to “XceedID’s patent filing [] on their migration device.” *Id.* Davis thus recognized that his presentation was material prior art.

ANSWER: Plaintiffs admit that Doc. No. 14-2 appears to include an April 29, 2005 email from Davis, who was and is not an attorney or patent agent and was not responsible for HID’s patent prosecution when the email was written, that includes the statement(s) quoted in Paragraph 238 of the Counterclaims. Plaintiffs also admit that Davis wrote the quoted statement in an April 29, 2005 email to Hulusi, who was and is not an attorney or patent agent and was not responsible for HID’s patent prosecution. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 238 of the Counterclaims and therefore deny them.

239. Similarly, Davis stated in an email dated October 14, 2005 to Hulusi that, in the context of the GES Transition Series Reader developed by XceedID: “If GE is so interested in [such a] product, then *we can build them one*. The idea for how to do so has been in the public domain since July 8th of 2003 when it was presented (by me) at NIST with Ray Freeman as a witness since he was also there. (*See* <http://csrc.nist.gov/card-technology/integration.html>.) So XceedID couldn’t have filed a patent to do this before my presentation in 2003 because I believe they were still HID employees then. Even if they had left HID early in 2003, I had been showing that presentation publicly for some time before. **So this must be prior art. It is easy to show that it is an obvious extension to make it a single unit.** Pete will have to comment on the validity of this point. (Interestingly enough, their implementation . . . actually does use two different readers interconnected by that connector – just like the presentation).” *Id.* at 13 (italicized emphases original, bold emphasis added).

ANSWER: To the extent that the allegations of Paragraph 236 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Doc. No. 14-2 appears to include an October 14, 2005 email from Davis to Hulusi that includes the quoted statement(s). WaveLynx’s allegations, however, omit that the statement refers to GE being

“interested in an *XACTT* type product” from XceedID, (*id.* at 14), which HID suspected used HID propriety information, leading to HID having to file the CDCA XceedID Lawsuit. Plaintiffs also admit that Davis, who was and is not an attorney or patent agent and was not responsible for HID’s patent prosecution when the email was written, wrote the quoted statement to Hulusi, who was and is not an attorney or patent agent, in an October 14, 2005 email and was not responsible for HID’s patent prosecution. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 239 of the Counterclaims and therefore deny them.

240. Davis was discussing how to assist HID’s defense should XceedID assert a patent resulting from Conlin’s ’677 application against HID, by using Davis’s Presentation as prior art to the ’677 application.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 240 of the Counterclaims.

241. Davis presented the Davis Presentation on July 8, 2003, and indeed Davis knew of his own Presentation during the entirety of his employment at HID, which on information and belief began on or around March 31, 2005, and lasted beyond the issuance of the ’862 patent, on October 21, 2008.

ANSWER: Plaintiffs admit that Davis presented the Davis Presentation on or around July 8, 2003, and had some awareness of her presentation afterward, including during her employment at HID. Davis, however, was and is not a patent agent or attorney and was not responsible for prosecution of HID patents until sometime after the termination of Pete Lowe. Plaintiffs admit that Davis was employed at HID after the issuance of the ’862 patent on October 21, 2008. Plaintiffs deny the remaining allegations and characterizations in Paragraph 241 of the Counterclaims.

242. Based on the foregoing, Hulusi also knew of the Davis Presentation on or before October 14, 2005 and while he worked at HID before the ’862 patent issued on October 21, 2008.

ANSWER: Plaintiffs admit that Hulusi was included on emails referencing the Davis Presentation. Hulusi, however, was and is not a patent agent or attorney and was not responsible for

prosecution of HID patents. Plaintiffs admit that the '862 patent issued on October 21, 2008. Plaintiffs deny the remaining allegations and characterizations in Paragraph 242 of the Counterclaims.

243. Patent agent Ellsworth also knew of the Davis Presentation. In addition to being one of the individuals involved in the prosecution that led to the issuance of the '862 patent, patent agent Ellsworth also prosecuted U.S. Application No. 11/470,660 (the "'660 application") on behalf of Counterdefendants.

ANSWER: Plaintiffs admit that the Davis Presentation was disclosed in an Invention Disclosure Statement filed for the '660 application signed by Matthew Ellsworth on September 7, 2006. Plaintiffs admit that Ellsworth was also involved in the prosecution of the '862 patent. The '660 application is directed to subject matter that is distinct from '862 patent. Indeed, in WaveLynx's prosecution of their '830 patent—in which the examiner cited the '660 application but not the '862 patent or any of the other prior art references that WaveLynx alleges were material and should have been cited in the prosecution of the '862 patent—*WaveLynx did not disclose any prior art references* whatsoever in the prosecution of the '830 patent. Additionally, the '862 patent and '660 application were in different families. On further information and belief, at the time of the prosecution of the '862 patent, Ellsworth and Sheridan Ross had been involved in prosecution of hundreds, if not thousands of patents. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 243 of the Counterclaims.

244. Due to this, patent agent Ellsworth was aware of the Davis Presentation on or before September 7, 2006, when he included the Davis Presentation in an Invention Disclosure Statement (IDS) filed for the '660 application that patent agent Ellsworth signed while the application for the '862 patent was pending. Ex. Y, at 2, 3. By submitting the Davis Presentation in the co-pending '660 application, which is entitled "Synchronization Techniques in Multi-Technology/Multi-Frequency RFID Reader Arrays," patent agent Ellsworth knew that the Davis Presentation was material prior art to the pending claims of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 244 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs admit that the Davis Presentation was disclosed in an Invention Disclosure Statement filed for the '660

application signed by Matthew Ellsworth on September 7, 2006. Plaintiffs admit that the '862 patent issued on October 21, 2008. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 244 of the Counterclaims.

245. By not disclosing the Davis Presentation during prosecution of the '862 patent, at least patent agent Ellsworth, Davis and Hulusi committed inequitable conduct.

ANSWER: To the extent that the allegations of Paragraph 245 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 245 of the Counterclaims.

246. Indeed, as described above, the information contained in the Davis Presentation is material prior art to the patentability of the subject matter claimed in the '862 patent. For example, the Davis Presentation discloses multi-frequency RFID readers and several substantial motivations to combine RFID readers to arrive at the claimed antenna orientation. The examiner did not have any such art before him during prosecution.

ANSWER: To the extent that the allegations of Paragraph 246 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs admit that the Davis Presentation included the concept of “multi-technology readers” at a high level as one of various migration strategies. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 246 of the Counterclaims.

247. In addition, Applicant argued during prosecution that (1) prior art readers were limited to operation at only one frequency and that the prior art of record provided no motivation to modify readers to have two antennas tuned to operate at different carrier frequencies in close proximity to one another; and (2) the prior art of record did not render the antenna orientation obvious. The Davis Presentation refutes and/or is inconsistent with these positions taken by the Applicant for the '862 patent during prosecution before the U.S. Patent Office. The Applicant, moreover, would not have been able to make the arguments it did had the Davis Presentation been disclosed to, and considered by, the U.S. Patent Office.

ANSWER: To the extent that the allegations of Paragraph 247 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that an office action response dated April 12, 2007, includes applicant remarks stating, “[t]hus, the reader of Brand can only communicate with passive transponders which are tuned to the same single

carrier frequency as the antennas in the array. Applicant's specification states at page 2, lines 16-30, that those skilled in the RFID art commonly recognize two different standard carrier frequencies at which prior art readers and passive transponders communicate, namely, 125 kHz and 13.5 MHz. However, these prior art passive transponders and readers are limited to operation at only one or the other of these two frequencies due to technical, operational and physical size constraints. Transponders operating at 125 kHz are conventionally termed proximity cards and transponders operating at 13.5 MHz are conventionally termed smart cards." Doc. No. 14-22 at 9. Plaintiffs admit that the office action response also includes applicant remarks stating, "As noted above, Brand recognizes the desirability of a reader which is capable of simultaneously reading (i.e., communicating with) multiple passive transponders operating at a single carrier frequency of 125 kHz which are within the communication range of the reader. Brand further discloses means for achieving this objective. Yet, nowhere does Brand disclose or suggest the desirability of providing a reader having an antenna array which can read multiple transponders, two or more of which operate at two different carrier frequencies, such as 125 kHz and 13.5 MHz." *Id.* Plaintiffs admit that an office action response dated March 11, 2008, after the applicant made amendments to the claims includes applicant remarks, stating "The Examiner asserts that the lattices (19A and 19B) of Egbert make obvious the antennas of the present invention. Applicants respectfully disagree with the Examiner's interpretation of Egbert. More specifically, Applicant's understanding of Egbert is that the lattices (19A and 19B) are taught to be at opposite ends of a corridor and such lattices are to operate at the same frequency. That is, the lattices operate at the operating frequency of the RFID system to detect when objects having an RFID tag pass between the lattices." Doc. No. 14-24 at 13. Plaintiffs further admit that the response includes applicant remarks stating, "[t]here is no mention in Egbert as to how the lattices should be oriented and/or overlapped." *Id.* at 14. Plaintiffs deny the remaining allegations and characterizations of Paragraph 247 of the Counterclaims.

248. As described above, the Davis Presentation is also non-cumulative to the prior art that was disclosed during prosecution of the '862 patent, including because the disclosures of the Davis Presentation are closer the claims than the disclosures of the prior art that the examiner applied during prosecution.

ANSWER: Plaintiffs deny the allegations and characterizations contained in Paragraph 248 of the Counterclaims.

249. As set forth above, it is also beyond dispute that Davis and Hulusi knew that the Davis presentation was material prior art. Indeed, Davis stated to Hulusi that his presentation “must be *prior art*. **It is easy to show that it is an obvious extension to make it a single unit**” and otherwise suggested using his presentation as prior art to XceedID’s inventions and patent applications, which were conceived and filed before any filing date for the '862 patent. And as explained above, patent agent Ellsworth disclosed the Davis Presentation in connection with other HID patent filings on related technology, yet failed to disclose the Davis Presentation in prosecuting the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 249 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs admit that Davis was aware of the Davis Presentation and referenced it in an email to Hulusi. Plaintiffs also admit the Davis Presentation was disclosed in an Invention Disclosure Statement filed for the '660 application signed by Matthew Ellsworth on September 7, 2006. Plaintiffs admit that the Davis Presentation was not disclosed in the prosecution of the '862 patent. Plaintiffs admit that Davis, who is not an attorney or patent agent and was not responsible for HID’s patent prosecution when the email was written, wrote the statement quoted in Paragraph 249 of the Counterclaims to Hulusi, who is not an attorney or patent agent and was not responsible for HID’s patent prosecution, in an October 14, 2005 email. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 249 of the Counterclaims.

250. Additionally, at least Davis knew of materially relevant prior art products to the '862 patent, because in his 2003 Presentation, he references that “Multi-Technology Readers” are available from “a few vendors.” Ex. I, at 22. By Davis sharing his Presentation with Hulusi, and by patent agent Ellsworth filing the Davis Presentation in the '660 application, Hulusi and patent agent Ellsworth also were aware that there were prior art multi-frequency products available by 2003. However, neither patent agent Ellsworth, Davis, nor Hulusi disclosed any known material prior art products to the U.S. Patent Office during prosecution of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 250 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs admit that no prior art products were disclosed to the Patent Office during prosecution of the '862 patent. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 250 of the Counterclaims.

251. These prior art products would have been material and non-cumulative to the '862 patent because they relate to commercial embodiments of multi-frequency readers that operate at the very same frequencies recited in claims 2 and 3 of the '862 patent and would provide the closest prior art as to the orientation of two antennas in a reader. The non-cumulative nature of these undisclosed prior art products is further supported by the prosecution history of the '862 patent. The examiner during prosecution did not consider any disclosures relating to the claimed antenna orientation, or any then-existing dual-frequency RFID readers.

ANSWER: To the extent that the allegations of Paragraph 251 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs admit that no prior art products were disclosed to the Patent Office during prosecution of the '862 patent. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 251 of the Counterclaims. The mere purported existence of multi-frequency readers allegedly referenced in the Davis Presentation would have been cumulative of prior art references that were already considered by the Patent Office. For example, on September 19, 2008, the examiner cited and considered JP2002-0768983 to Yoshikazu, which was submitted to the Patent Office by the Applicant on August 22, 2008 and disclosed a data carrier system that received “radio waves of frequencies at 125 kHz and 13.56 MHz to a reader/writer.” As another example, on September 19, 2008, the examiner cited and considered JP2005-284455 to Riichi et al, which was submitted to the Patent Office by the Applicant on August 22, 2008 and disclosed an RFID system for performing data communication between antennas using electromagnetic coupling wherein RFID reader/writer case structure is made common to a plurality of different electromagnetic coupling systems such that “reading/writing for RFID tags

of the plurality of electromagnetic coupling systems can thereby be performed by one RFID reader/writer.”

252. But-for patent agent Ellsworth, Davis, and Hulusi’s failures to disclose the Davis Presentation and the prior art products referenced in the Davis Presentation, the claims of the ’862 patent would not have issued, at least in their current form.

ANSWER: To the extent that the allegations of Paragraph 252 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 252 of the Counterclaims.

253. This withholding further constituted egregious misconduct.

ANSWER: To the extent that the allegations of Paragraph 253 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 253 of the Counterclaims.

254. Patent agent Ellsworth, Blakely and HID employees Davis and Hulusi knowingly withheld the Davis Presentation and the prior art products referenced in the Davis Presentation with the specific intent to deceive the U.S. Patent Office and gain allowance. For example, Davis recognized, and told Hulusi of, the importance of his prior Davis Presentation as prior art to any dual reader patent application, yet he did not disclose the Davis Presentation to the U.S. Patent Office during prosecution of the ’862 patent.

ANSWER: To the extent that the allegations of Paragraph 254 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs admit that the Davis Presentation was not disclosed in the prosecution of the ’862 patent. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 254 of the Counterclaims.

255. Accordingly, at least one or more of the individuals identified herein committed inequitable conduct and the ’862 patent is unenforceable.

ANSWER: To the extent that the allegations of Paragraph 255 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 255 of the Counterclaims.

3. [Alleged] Failure to Disclose Conlin’s ’677 Application

256. One or more individuals associated with the filing and prosecution of the '862 patent committed inequitable conduct by failing to disclose the '677 application.

ANSWER: To the extent that the allegations of Paragraph 256 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 256 of the Counterclaims.

257. For example, patent agent Ellsworth was aware of the '677 application on or before September 7, 2006 because an IDS filed on that date in the '660 application included reference to the '167 publication, which was the publication of the 11/076,090 application (the "'090 application") that claimed priority to the '677 application. Ex. Y, at 1. By submitting the '167 publication on the IDS, patent agent Ellsworth was aware that the filing date for the '677 application was March 15, 2004—over two months before the May 18, 2004 filing of the earliest application date listed on the face of the '862 patent. Patent agent Ellsworth signed the September 7, 2006 IDS for the '660 application (*id.* at 3), and thus was aware of the '677 application while the '576 application was pending.

ANSWER: Plaintiffs admit that Ellsworth was a patent agent. Plaintiffs admit that Doc. No. 14-25 appears to be an Information Disclosure Statement signed by Ellsworth on September 7, 2006, that refers to Publication No. 2005/0204167, which states that it is the publication of Appl. No. 11/076,090. Plaintiffs admit that March 15, 2004, is more than two months before May 18, 2004, which Plaintiffs admit is the earliest application date listed on the face of the '862 patent. Plaintiffs admit that Ellsworth signed an IDS for the '660 application on September 7, 2006. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 257 of the Counterclaims, and therefore deny them.

258. By not disclosing the '677 application while prosecution was pending, patent agent Ellsworth committed inequitable conduct because he knew that it was material prior art to the '576 application by submitting the '167 publication in the co-pending '660 application, which is entitled "Synchronization Techniques in Multi-Technology/Multi-Frequency RFID Reader Arrays."

ANSWER: To the extent that the allegations of Paragraph 258 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 258 of the Counterclaims.

259. Hulusi and attorney Blakely also had knowledge of the material '677 application, but did not disclose it. On October 14, 2005, Hulusi and attorney Blakely were included on an email from Russ Weed of GE, which stated that "XceedID filed a patent application prior to GE Security and HID entering into our License Agreement," which referred to the '677 application. Ex. B, at 14.

ANSWER: To the extent that the allegations of Paragraph 259 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Exhibit B to Defendant's Counterclaims appears to include an October 14, 2005 email from Russ Weed to Davis, Hulusi, Blakely, and others, which included the statement that "XceedID filed a patent application prior to GE, Security and HID entering into our License Agreement." Doc. No. 14-2 at 15. Plaintiffs deny that the '677 application is a "material" application. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 259 of the Counterclaims and therefore deny them. Indeed, there is no basis for the assumption that "XceedID filed a patent application" refers to the '677 application. In fact, on information and belief, the application referenced is instead the '167 publication, which was published on September 15, 2005, from an application that was filed on March 8, 2005, shortly before GE Security entered into a license agreement with HID on March 23, 2005, and surreptitiously granted a sublicense to XceedID.

260. By not disclosing the '677 application to the U.S. Patent Office during prosecution of the '862 patent, Hulusi and attorney Blakely committed inequitable conduct, including because Hulusi and attorney Blakely knew that XceedID's patent applications on multi- or dual-frequency RFID readers were material to HID's patent applications on the same.

ANSWER: To the extent that the allegations of Paragraph 260 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 260 of the Counterclaims.

261. Indeed, as described above, the information contained in the '677 application is material prior art to the patentability of the subject matter claimed in the '862 patent. For example, the '677 application discloses dual frequency RFID readers that have the claimed antenna arrangement, but the examiner did not have any such art before him during prosecution of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 261 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 261 of the Counterclaims.

262. In addition, Applicant argued during prosecution that (1) prior art readers were limited to operation at only one frequency and that the prior art of record provided no motivation to modify readers to have two antennas tuned to operate at different carrier frequencies in close proximity to one another; and (2) the prior art of record did not render the antenna orientation obvious. The '677 application refutes and/or is inconsistent with these positions taken by the Applicant for the '862 patent during prosecution before the U.S. Patent Office. The Applicant, moreover, would not have been able to make the arguments it did had the '677 application been disclosed to, and considered by, the U.S. Patent Office.

ANSWER: To the extent that the allegations of Paragraph 262 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that an office action response dated April 12, 2007, includes applicant remarks stating, “[t]hus, the reader of Brand can only communicate with passive transponders which are tuned to the same single carrier frequency as the antennas in the array. Applicant’s specification states at page 2, lines 16–30, that those skilled in the RFID art commonly recognize two different standard carrier frequencies at which prior art readers and passive transponders communicate, namely, 125 kHz and 13.5 MHz. However, these prior art passive transponders and readers are limited to operation at only one or the other of these two frequencies due to technical, operational and physical size constraints. Transponders operating at 125 kHz are conventionally termed proximity cards and transponders operating at 13.5 MHz are conventionally termed smart cards.” Doc. No. 14-22 at 9. Plaintiffs admit that the office action response also includes applicant remarks stating, “As noted above, Brand recognizes the desirability of a reader which is capable of simultaneously reading (i.e., communicating with) multiple passive transponders operating at a single carrier frequency of 125 kHz which are within the communication range of the reader. Brand further discloses means for achieving this objective. Yet, nowhere does Brand disclose or suggest the desirability of providing a

reader having an antenna array which can read multiple transponders, two or more of which operate at two different carrier frequencies, such as 125 kHz and 13.5 MHz.” *Id.* Plaintiffs admit that an office action response dated March 11, 2008, after the applicant made amendments to the claims includes applicant remarks, stating “The Examiner asserts that the lattices (19A and 19B) of Egbert make obvious the antennas of the present invention. Applicants respectfully disagree with the Examiner’s interpretation of Egbert. More specifically, Applicant’s understanding of Egbert is that the lattices (19A and 19B) are taught to be at opposite ends of a corridor and such lattices are to operate at the same frequency. That is, the lattices operate at the operating frequency of the RFID system to detect when objects having an RFID tag pass between the lattices.” Doc. No. 14-24 at 13. Plaintiffs further admit that the response includes applicant remarks stating, “[t]here is no mention in Egbert as to how the lattices should be oriented and/or overlapped.” *Id.* at 14. Plaintiffs deny the remaining allegations and characterizations of Paragraph 262 of the Counterclaims.

263. As described above, the ’677 application is also non-cumulative to the prior art that was disclosed during prosecution of the ’862 patent, including because the disclosures of the ’677 application are closer the claims than the disclosures of the prior art that the examiner applied during prosecution.

ANSWER: To the extent that the allegations of Paragraph 263 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 263 of the Counterclaims.

264. But-for patent agent Ellsworth, Hulusi, and attorney Blakely’s failures to disclose the ’677 application, the claims of the ’862 patent would not have issued, at least in their current form.

ANSWER: To the extent that the allegations of Paragraph 264 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 264 of the Counterclaims.

265. This withholding further constituted egregious misconduct.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 265 of the Counterclaims.

266. Patent agent Ellsworth, Hulusi, and attorney Blakely knowingly withheld the '677 application with the specific intent to deceive the U.S. Patent Office, and knowing of its materiality to the pending claims, to gain allowance. For example, attorney Blakely and Hulusi discussed the '677 application, but did not disclose that same reference in the context of HID's own applications. Additionally, patent agent Ellsworth prosecuted HID's '660 application, which is in the same technical space as the '862 patent, but did not disclose these prior art references in both applications.

ANSWER: To the extent that the allegations of Paragraph 266 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Sheridan Ross P.C. prosecuted HID's '660 application before the Patent Office, and that Ellsworth assisted in the prosecution of the '660 application. Plaintiffs admit that the '667 application was not disclosed as a prior art reference during the prosecution of the '660 application or the '862 patent. Plaintiffs deny the remaining allegations and characterizations in Paragraph 266 of the Counterclaims.

267. Accordingly, at least one or more of the individuals identified herein committed inequitable conduct and the '862 patent is unenforceable.

ANSWER: To the extent that the allegations of Paragraph 267 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 267 of the Counterclaims.

4. [Alleged] Failure to Disclose the '167 Publication

268. One or more individuals associated with the filing and prosecution of the '862 patent committed inequitable conduct by failing to disclose the '167 publication.

ANSWER: To the extent that the allegations of Paragraph 268 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 268 of the Counterclaims and therefore deny them.

269. For example, patent agent Ellsworth was aware of the '167 publication and its materiality on or before September 7, 2006 because he signed the IDS filed for the aforementioned co-pending '660 application on that date, which included reference to the '167 publication (the publication of the '090 application that claimed priority to the '677 application). Ex. Y, at 1, 3. By submitting the '167 publication on the IDS, patent agent Ellsworth was aware that the priority date for the '167 publication was March 15, 2004—over two months before the May 18, 2004 filing of the earliest application date listed on the face of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 269 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit the '167 publication was referenced in an IDS filed on September 7, 2006, that was signed by Ellsworth during the prosecution of the '660 application. Plaintiffs admit that the face of the '167 publication shows that it is the publication of the '090 application that claims priority from the '677 application and U.S. Provisional application No. 60/553,685, which are shown as filed on March 15, 2004. Plaintiffs admit that March 15, 2004, is more than two months before the May 18, 2004, which Plaintiffs admit is the date of the earliest application listed on the face of the '862 patent. However, at least certain claims of the '862 patent are entitled to a priority date at least as early as February 17, 2004. Additionally, the '167 publication and the '660 application are directed to distinct subject matter. Plaintiffs deny the remaining allegations and characterizations in Paragraph 269 of the Counterclaims.

270. By submitting the '167 publication in the '660 application, which was entitled “Synchronization Techniques in Multi-Technology/Multi-Frequency RFID Reader Arrays,” patent agent Ellsworth knew that the '167 publication were material prior art to the '576 application.

ANSWER: To the extent that the allegations of Paragraph 270 of the Counterclaims set forth legal conclusions, no response is required. Plaintiffs admit that the '660 application was entitled “Synchronization Techniques in Multi-Technology/Multi-Frequency RFID Reader Arrays.” To the extent that any further response is required, Plaintiffs deny the allegations and characterizations in Paragraph 270 of the Counterclaims

271. By not disclosing the known and material '167 publication, while prosecution was pending, patent agent Ellsworth breached his duty to the U.S. Patent Office and committed inequitable conduct.

ANSWER: To the extent that the allegations of Paragraph 271 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 271 of the Counterclaims and therefore deny them.

272. Hulusi and Davis also had knowledge of the '167 publication by June 12, 2006. For example, Hulusi sent Davis an email on that date to which the '167 publication was attached, stating: "I would like to attack this patent with everyone thing [*sic*] we have lets try and nullify it." Ex. B, at 21. Davis further emailed Pete Lowe, the CTO of AAAB, on June 12, 2006, asking Lowe to "call me to discuss attached patent application by XceedID?" *Id.*

ANSWER: Plaintiffs admit that Exhibit B to Defendant's Counterclaims appears to include a June 12, 2006 email from Hulusi to Davis including the statement that "I would like to attack this patent with everyone thing [*sic*] we have lets [*sic*] try and nullify it." Doc. No. 14-2 at 22. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 272 of the Counterclaims.

273. Hulusi and Davis committed inequitable conduct by not disclosing the '167 publication to the U.S. Patent Office while prosecution of the '862 patent was pending. Indeed, Hulusi and Davis knew the '167 publication was material prior art based at least on their desire to "nullify it."

ANSWER: To the extent that the allegations of Paragraph 273 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 273 of the Counterclaims.

274. Indeed, as described above, the information contained in the '167 publication is material prior art to the patentability of the subject matter claimed in the '862 patent. For example, the '167 publication discloses dual frequency RFID readers that have the claimed antenna arrangement. The examiner did not have this art before him during prosecution and was deprived of the opportunity to consider it during prosecution.

ANSWER: To the extent that the allegations of Paragraph 274 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that

the '167 publication is not cited prior art to the '862 patent. Plaintiffs deny the remaining allegations and characterizations in Paragraph 274 of the Counterclaims.

275. In addition, Applicant argued during prosecution that (1) prior art readers were limited to operation at only one frequency and that the prior art of record provided no motivation to modify readers to have two antennas tuned to operate at different carrier frequencies in close proximity to one another; and (2) the prior art of record did not render the antenna orientation obvious. The '167 publication refutes and/or is inconsistent with these positions taken by the Applicant for the '862 patent during prosecution before the U.S. Patent Office. The Applicant, moreover, would not have been able to make the arguments it did had the '167 publication been disclosed to, and considered by, the U.S. Patent Office.

ANSWER: To the extent that the allegations of Paragraph 275 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that an office action response dated April 12, 2007, includes applicant remarks stating, “[t]hus, the reader of Brand can only communicate with passive transponders which are tuned to the same single carrier frequency as the antennas in the array. Applicant’s specification states at page 2, lines 16-30, that those skilled in the RFID art commonly recognize two different standard carrier frequencies at which prior art readers and passive transponders communicate, namely, 125 kHz and 13.5 MHz. However, these prior art passive transponders and readers are limited to operation at only one or the other of these two frequencies due to technical, operational and physical size constraints. Transponders operating at 125 kHz are conventionally termed proximity cards and transponders operating at 13.5 MHz are conventionally termed smart cards.” Doc. No. 14-22 at 9. Plaintiffs admit that the office action response also includes applicant remarks stating, “As noted above, Brand recognizes the desirability of a reader which is capable of simultaneously reading (i.e., communicating with) multiple passive transponders operating at a single carrier frequency of 125 kHz which are within the communication range of the reader. Brand further discloses means for achieving this objective. Yet, nowhere does Brand disclose or suggest the desirability of providing a reader having an antenna array which can read multiple transponders, two or more of which operate

at two different carrier frequencies, such as 125 kHz and 13.5 MHz.” *Id.* Plaintiffs admit that an office action response dated March 11, 2008, after the applicant made amendments to the claims includes applicant remarks, stating “The Examiner asserts that the lattices (19A and 19B) of Egbert make obvious the antennas of the present invention. Applicants respectfully disagree with the Examiner’s interpretation of Egbert. More specifically, Applicant’s understanding of Egbert is that the lattices (19A and 19B) are taught to be at opposite ends of a corridor and such lattices are to operate at the same frequency. That is, the lattices operate at the operating frequency of the RFID system to detect when objects having an RFID tag pass between the lattices.” Doc. No. 14-24 at 13. Plaintiffs further admit that the response includes applicant remarks stating, “[t]here is no mention in Egbert as to how the lattices should be oriented and/or overlapped.” *Id.* at 14. Plaintiffs deny the remaining allegations and characterizations of Paragraph 275 of the Counterclaims.

276. As described above, the ’167 publication is also non-cumulative to the prior art that was disclosed during prosecution of the ’862 patent, including because the disclosures of the ’167 publication are closer the claims than the disclosures of the prior art that the examiner applied during prosecution.

ANSWER: To the extent that the allegations of Paragraph 276 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations in Paragraph 276 of the Counterclaims.

277. But-for patent agent Ellsworth, Davis, and Hulusi’s failures to disclose the ’167 publication to the U.S. Patent Office, the claims of the ’862 patent would not have issued, at least in their current form.

ANSWER: To the extent that the allegations of Paragraph 277 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations in Paragraph 277 of the Counterclaims.

278. This withholding further constituted egregious misconduct.

ANSWER: To the extent that the allegations of Paragraph 278 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations in Paragraph 278 of the Counterclaims.

279. Patent agent Ellsworth, Davis, and Hulusi knowingly withheld the '167 publication with the specific intent to deceive the U.S. Patent Office because they failed to disclose that publication to the U.S. Patent Office and gain allowance.

ANSWER: To the extent that the allegations of Paragraph 279 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations in Paragraph 279 of the Counterclaims.

280. Accordingly, at least one or more of the individuals identified herein committed inequitable conduct and the '862 patent is unenforceable.

ANSWER: To the extent that the allegations of Paragraph 280 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 280 of the Counterclaims.

5. [Alleged] Failure to Disclose the Smart Card Alliance Report

281. One or more individuals associated with the filing and prosecution of the '862 patent committed inequitable conduct by failing to disclose the Smart Card Alliance Report.

ANSWER: To the extent that the allegations of Paragraph 281 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 281 of the Counterclaims.

282. For example, patent agent Ellsworth was aware of the Smart Card Alliance Report on or before September 7, 2006, because the Smart Card Alliance Report was included in an IDS filed for the aforementioned co-pending '660 application on that date that he signed. Ex. Y, at 2, 3.

ANSWER: Plaintiffs admit that Ellsworth was a patent agent, and that Exhibit Y to Defendant's Counterclaims appears to include an Information Disclosure Statement signed by Ellsworth that lists a non-patent literature document that includes the words "Smart Card Alliance

Report.” Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 282 of the Counterclaims, and therefore deny them.

283. Additionally, by submitting the Smart Card Alliance Report in the ’660 application, which was entitled “Synchronization Techniques in Multi-Technology/Multi-Frequency RFID Reader Arrays,” patent agent Ellsworth knew that the Smart Card Alliance Report was material prior art to the ’576 application.

ANSWER: To the extent that the allegations of Paragraph 283 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that Exhibit Y to Defendant’s Counterclaims appears to include an Information Disclosure Statement that lists a reference with the words “Smart Card Alliance Report,” and that the ’660 application is “entitled ‘Synchronization Techniques in Multi-Technology/Multi-Frequency RFID Reader Arrays.’” Plaintiffs deny the remaining allegations and characterizations in Paragraph 283 of the Counterclaims.

284. By not disclosing the Smart Card Alliance Report while prosecution of the ’862 patent was pending, patent agent Ellsworth committed inequitable conduct.

ANSWER: To the extent that the allegations of Paragraph 284 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 284 of the Counterclaims.

285. Indeed, as described above, the information contained in the Smart Card Alliance Report is material prior art to the patentability of the subject matter claimed in the ’862 patent. For example, the Smart Card Alliance Report discloses dual frequency RFID readers that have the claimed antenna arrangement and a substantial discussion on the motivation to create a RFID reader with the claimed antenna arrangement. The examiner did not have any such art before him during prosecution and was deprived of being able to fully and fairly examine the pending claims of the application.

ANSWER: To the extent that the allegations of Paragraph 285 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny that “the information contained in the Smart Card Alliance Report is material prior art to the patentability of the subject matter claimed in the ’862 patent” and “dual frequency RFID readers that

have the claimed antenna arrangement and a substantial discussion on the motivation to create a RFID reader with the claimed antenna arrangement.” Indeed, the Smart Card Alliance Report teaches that “multi-technology readers that combine technologies using different RF frequencies are not ideal solutions because of the cost of the readers.” Doc. No. 14-10 at 35. Plaintiffs lack knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 261 of the Counterclaims, and therefore deny them.

286. In addition, Applicant argued during prosecution that (1) prior art readers were limited to operation at only one frequency and that the prior art of record provided no motivation to modify readers to have two antennas tuned to operate at different carrier frequencies in close proximity to one another; and (2) the prior art of record did not render the antenna orientation obvious. The Smart Card Alliance Report refutes and/or is inconsistent with these positions taken by the Applicant for the '862 patent during prosecution before the U.S. Patent Office. The Applicant, moreover, would not have been able to make the arguments it did had the Smart Card Alliance Report been disclosed to, and considered by, the U.S. Patent Office.

ANSWER: To the extent that the allegations of Paragraph 286 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that an office action response dated April 12, 2007, includes applicant remarks stating, “[t]hus, the reader of Brand can only communicate with passive transponders which are tuned to the same single carrier frequency as the antennas in the array. Applicant’s specification states at page 2, lines 16-30, that those skilled in the RFID art commonly recognize two different standard carrier frequencies at which prior art readers and passive transponders communicate, namely, 125 kHz and 13.5 MHz. However, these prior art passive transponders and readers are limited to operation at only one or the other of these two frequencies due to technical, operational and physical size constraints. Transponders operating at 125 kHz are conventionally termed proximity cards and transponders operating at 13.5 MHz are conventionally termed smart cards.” Doc. No. 14-22 at 9. Plaintiffs admit that the office action response also includes applicant remarks stating, “As noted above, Brand recognizes the desirability of a reader which is capable of simultaneously reading (i.e.,

communicating with) multiple passive transponders operating at a single carrier frequency of 125 kHz which are within the communication range of the reader. Brand further discloses means for achieving this objective. Yet, nowhere does Brand disclose or suggest the desirability of providing a reader having an antenna array which can read multiple transponders, two or more of which operate at two different carrier frequencies, such as 125 kHz and 13.5 MHz.” *Id.* Plaintiffs admit that an office action response dated March 11, 2008, after the applicant made amendments to the claims includes applicant remarks, stating “The Examiner asserts that the lattices (19A and 19B) of Egbert make obvious the antennas of the present invention. Applicants respectfully disagree with the Examiner’s interpretation of Egbert. More specifically, Applicant’s understanding of Egbert is that the lattices (19A and 19B) are taught to be at opposite ends of a corridor and such lattices are to operate at the same frequency. That is, the lattices operate at the operating frequency of the RFID system to detect when objects having an RFID tag pass between the lattices.” Doc. No. 14-24 at 13. Plaintiffs further admit that the response includes applicant remarks stating, “[t]here is no mention in Egbert as to how the lattices should be oriented and/or overlapped.” *Id.* at 14. Plaintiffs deny the remaining allegations and characterizations of Paragraph 286 of the Counterclaims.

287. As described above, the Smart Card Alliance Report is also non-cumulative to the prior art that was disclosed during prosecution of the ’862 patent, including because the disclosures of the Smart Card Alliance Report are closer the claims than the disclosures of the prior art that the examiner applied during prosecution.

ANSWER: To the extent that the allegations of Paragraph 287 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 287 of the Counterclaims.

288. But-for patent agent Ellsworth’s failure to disclose the Smart Card Alliance Report, the claims of the ’862 patent would not have issued, at least in their current form.

ANSWER: To the extent that the allegations of Paragraph 288 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 288 of the Counterclaims.

289. This withholding further constituted egregious misconduct.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 289 of the Counterclaims.

290. Patent agent Ellsworth knowingly withheld the Smart Card Alliance Report with the specific intent to deceive the U.S. Patent Office and to gain allowance of the '862 patent, including because he chose not to disclose the Smart Card Alliance Report to the U.S. Patent Office during prosecution of the '862 patent while at the same time knowing of its materiality and choosing to disclose it in prosecution of a co-pending application in the same technical space as the '862 patent and on behalf of Counterdefendants.

ANSWER: To the extent that the allegations of Paragraph 290 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 290 of the Counterclaims.

291. Accordingly, at least one or more of the individuals identified herein committed inequitable conduct and the '862 patent is unenforceable.

ANSWER: To the extent that the allegations of Paragraph 291 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 291 of the Counterclaims.

6. [Alleged] Failure to Disclose the XceedID XF Series and the GES Transition Series Readers

292. One or more individuals associated with the filing and prosecution of the '862 patent committed inequitable conduct by failing to disclose the XceedID XF Series Readers and/or the GES Transition Series Readers.

ANSWER: To the extent that the allegations of Paragraph 292 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 292 of the Counterclaims.

293. For example, Davis and Hulusi knew of the XceedID XF Series Readers by April 29, 2005 because Davis addressed Hulusi in an email that stated that “XceedID’s patent filing is on their migration device” but hopefully that his Davis Presentation “can be used in a ‘prior art’ defense.” Ex. B, at 8.

ANSWER: Plaintiffs admit that Exhibit B to Defendant’s Counterclaims appears to include an April 29, 2005 email from Davis to Hulusi including the statement that “I don’t know what XceedID’s patent filing is on their migration device but hopefully this can be used in a ‘prior art’ defense; this made back in July of 2003.” Doc. No. 14-2 at 9. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 293 of the Counterclaims.

294. Additionally, on June 8, 2006, Davis emailed Hulusi describing the text of an XceedID advertisement for:

Multi Technology Readers
Proximity and Contactless Readers
125 kHz and 13.56 Mhz smart cards
www.xceedid.com

Id. at 19.

ANSWER: Plaintiffs admit that Exhibit B to Defendant’s Counterclaims appears to include a June 8, 2006 email from Davis to Hulusi stating that an “ad word link looks like” the figure depicted in Paragraph 294 of the Counterclaims. Doc. No. 14-2 at 20. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 294 of the Counterclaims.

295. On June 14, 2005, Hulusi emailed Davis stating that he “took a good look at the XceedID reader” and recommend that HID “hire an outside company to ‘reverse engineer’ the design.” *Id.* at 11. On information and belief, HID reverse engineered an XceedID reader prior to October 21, 2008, and therefore knew about XceedID’s antenna arrangement.

ANSWER: Plaintiffs admit that Doc. No. 14-2 includes an email from Hulusi to Davis that includes the statements quoted in Paragraph 295 of the Counterclaims. Plaintiffs are without

knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 295 of the Counterclaims, and therefore deny them.

296. As discussed above, HID Representatives including attorney Blakely, Davis, and Hulusi met with XceedID's representatives in August of 2005, and brought with them a datasheet for an XceedID's XF Series Reader.

ANSWER: Plaintiffs admit that Blakely, Davis, and Hulusi met with XceedID's representatives in August of 2005. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 296 of the Counterclaims, and therefore deny them.

297. Because attorney Blakely, Davis, and Hulusi had knowledge of the XceedID XF Series Readers in August of 2005, they had knowledge of the XceedID XF Series Readers while prosecution was pending.

ANSWER: Plaintiffs admit that Blakely, Davis, and Hulusi generally knew of XceedID's XF Series readers in August 2005. It is HID's understanding that neither Blakely, Davis, nor Hulusi, however, had any knowledge of the antenna arrangements of the XF Series readers in August 2005. Neither Davis nor Hulusi were or are patent attorneys or agents, and neither was responsible for HID's patent prosecution in August 2005. Plaintiffs admit that the prosecution of the '862 patent was ongoing in August 2005. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 297 of the Counterclaims, and therefore deny them.

298. Attorney Blakely, Davis, and Hulusi chose to withhold the XceedID XF Series Readers from the U.S. Patent Office during prosecution of the '862 patent.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 298 of the Counterclaims.

299. Relating to the GES Transition Series Reader, as discussed previously in WaveLynx's Counterclaims, XceedID developed with GES the Transition Series Readers. And as also previously discussed in WaveLynx's Counterclaims, attorney Blakely represented HID in the Colorado XceedID lawsuit filed on October 5, 2004, which alleged that: "On or about September 17, 2004, ITG

discovered that XceedID had designed and engineered a universal card reader for General Electric Security, part of GE Infrastructure, that is capable of reading HID's RFID security access cards.” Ex. E, ¶ 33. Attorney Blakely signed HID’s complaint. *Id.* at pg. 13.

ANSWER: Plaintiffs admit that the Complaint filed in the Colorado XceedID Lawsuit filed on October 5, 2004, included the allegation quoted in Paragraph 299 of the Counterclaims. *See* Doc. No. 14-5 ¶ 33. Plaintiffs further admit that Todd Blakely was one of the attorneys listed on and signed the Complaint. However, based on XceedID’s later representations, HID agreed to withdraw the complaint without prejudice. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 299 of the Counterclaims, and therefore deny them.

300. Davis and Hulusi also knew of the GES Transition Series Reader. On June 24, 2005, Hulusi sent Davis an email discussing an “investigation into dual-tech readers. I’m hoping to get new GE reader units shortly.” Ex. B, at 11.

ANSWER: Plaintiffs admit that Doc. No. 14-2 appears to be set of emails included an email from Hulusi to Davis that includes the statement quoted in Paragraph 300 of the Counterclaims. Plaintiffs admit that Davis and Hulusi were generally aware of “GE reader units” as referenced in the email. Doc. No. 14-2 at 12. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 300 of the Counterclaims, and therefore deny them.

301. Attorney Blakely, Davis, and Hulusi knew of the GES Reader on or before December 31, 2006 and chose to withhold the GES Transition Series Readers from the U.S. Patent Office during prosecution of the ’862 patent.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 301 of the Counterclaims.

302. Attorney Blakely, Davis, and Hulusi knew that the XceedID XF Series and GES Transition Series Readers were material because they knew HID was prosecuting patent applications directed to multi- and dual- frequency readers and that GES products and XceedID patents and products would impact HID’s patents and products. Indeed, on information and belief, the claims application were written to cover prior art RFID readers, including those of XceedID and GES.

Therefore, by not disclosing the GES Transition Series Readers to the U.S. Patent Office while prosecution was pending, attorney Blakely, Davis, and Hulusi committed inequitable conduct.

ANSWER: To the extent that the allegations of Paragraph 302 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that HID was prosecuting patent applications directed to multi- and dual- frequency readers. Plaintiffs deny the remaining allegations and characterizations in Paragraph 302 of the Counterclaims.

303. As discussed previously above, XceedID XF Series Readers and the GES Transition Series Reader were material prior art to the patentability of the subject matter claimed in the '862 patent because the XceedID XF Series Readers and the GES Transition Series Reader disclose dual frequency RFID readers that have the claimed antenna arrangement. The examiner did not have any such art before him during prosecution of the '862 patent and was thereby deprived of being able to fully and fairly examine the pending claims of the application.

ANSWER: To the extent that the allegations of Paragraph 303 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that the XceedID XF Series Readers and the GES Transition Series Reader were not considered by the examiner during prosecution. Plaintiffs deny the remaining allegations and characterizations of Paragraph 303 of the Counterclaims.

304. In addition, Applicant argued during prosecution that (1) prior art readers were limited to operation at only one frequency and that the prior art of record provided no motivation to modify readers to have two antennas tuned to operate at different carrier frequencies in close proximity to one another; and (2) the prior art of record did not render the antenna orientation obvious. The XceedID XF Series Reader and the GES Transition Series Reader refute and/or are inconsistent with these positions taken by the Applicant for the '862 patent during prosecution before the U.S. Patent Office. The Applicant, moreover, would not have been able to make the arguments it did had the XceedID XF Series or the GES Transition Series Readers been disclosed to, and considered by, the U.S. Patent Office.

ANSWER: To the extent that the allegations of Paragraph 304 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that an office action response dated April 12, 2007, includes applicant remarks stating, “[t]hus, the reader of Brand can only communicate with passive transponders which are tuned to the same single carrier frequency as the antennas in the array. Applicant’s specification states at page 2, lines 16–30,

that those skilled in the RFID art commonly recognize two different standard carrier frequencies at which prior art readers and passive transponders communicate, namely, 125 kHz and 13.5 MHz. However, these prior art passive transponders and readers are limited to operation at only one or the other of these two frequencies due to technical, operational and physical size constraints. Transponders operating at 125 kHz are conventionally termed proximity cards and transponders operating at 13.5 MHz are conventionally termed smart cards.” Doc. No. 14-22 at 9. Plaintiffs admit that the office action response also includes applicant remarks stating, “As noted above, Brand recognizes the desirability of a reader which is capable of simultaneously reading (i.e., communicating with) multiple passive transponders operating at a single carrier frequency of 125 kHz which are within the communication range of the reader. Brand further discloses means for achieving this objective. Yet, nowhere does Brand disclose or suggest the desirability of providing a reader having an antenna array which can read multiple transponders, two or more of which operate at two different carrier frequencies, such as 125 kHz and 13.5 MHz.” *Id.* Plaintiffs admit that an office action response dated March 11, 2008, after the applicant made amendments to the claims includes applicant remarks, stating “The Examiner asserts that the lattices (19A and 19B) of Egbert make obvious the antennas of the present invention. Applicants respectfully disagree with the Examiner’s interpretation of Egbert. More specifically, Applicant’s understanding of Egbert is that the lattices (19A and 19B) are taught to be at opposite ends of a corridor and such lattices are to operate at the same frequency. That is, the lattices operate at the operating frequency of the RFID system to detect when objects having an RFID tag pass between the lattices.” Doc. No. 14-24 at 13. Plaintiffs further admit that the response includes applicant remarks stating, “[t]here is no mention in Egbert as to how the lattices should be oriented and/or overlapped.” *Id.* at 14. Plaintiffs deny the remaining allegations and characterizations of Paragraph 304 of the Counterclaims.

305. As described above, the XceedID XF Series Reader and the GES Transition Series Reader are also non-cumulative to the prior art that was disclosed during prosecution of the '862 patent, including because the features of the XceedID XF Series Reader and/or the GES Transition Series Reader are closer the claims than the disclosures of the prior art that the examiner applied during prosecution.

ANSWER: To the extent that the allegations of Paragraph 305 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required Plaintiffs deny the allegations and characterizations of Paragraph 305 of the Counterclaims.

306. But-for attorney Blakely, Davis, and Hulusi's failure to disclose at least the XceedID XF Series Reader or the GES Transition Series Reader to the U.S. Patent Office, the claims of the '862 patent would not have issued, at least in their current form.

ANSWER: To the extent that the allegations of Paragraph 306 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations of Paragraph 306 of the Counterclaims.

307. Withholding the XceedID XF Series and the GES Transition Series Readers further constituted egregious misconduct.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 307 of the Counterclaims.

308. Attorney Blakely, Davis, and Hulusi knowingly withheld the XceedID XF Series and the GES Transition Series Readers with the specific intent to deceive the U.S. Patent Office and gain allowance. Indeed, as discussed above, attorney Blakely was aware that his firm prosecutes patent applications directed to RFID readers for HID, and yet he did not disclose the XceedID XF Series or the GES Transition Series Readers during prosecution of the '862 patent. In addition, Davis and Hulusi were aware of the materiality of the XceedID or GES products to Counterdefendants' patents and patent applications (including the applications for the '862 patent), and yet neither Davis nor Hulusi disclosed the XceedID XF Series or the GES Transition Series Readers during prosecution of the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 308 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 308 of the Counterclaims.

309. Accordingly, at least one or more of the individuals identified herein committed inequitable conduct and the '862 patent is unenforceable.

ANSWER: To the extent that the allegations of Paragraph 309 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs deny the allegations and characterizations contained in Paragraph 309 of the Counterclaims.

7. Other Instances of [Alleged] Inequitable Conduct

310. On information and belief, other individuals at and representatives of HID, who had a duty of disclosure, committed additional instances of inequitable conduct in the prosecution of the applications that led to the '862 patent.

ANSWER: To the extent that the allegations of Paragraph 310 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations in Paragraph 310 of the Counterclaims.

311. For example, based on the prior lawsuits with XceedID, at least Hulusi and Davis knew that Conlin had previously invented the subject matter claimed later in the '862 patent. HID admitted in judicial pleadings that “[i]n the late Fall of 2003, HID learned from customers that XceedID was allegedly offering to design RFID security access readers for customers that would replicate or be compatible with HID’s iClass RFID products and/or HID controllers used to control the operation of HID Prox products.” Ex. E, ¶ 32. Likewise, HID admitted that “[o]n or about September 17, 2004, ITG discovered that XceedID had designed and engineered a universal card reader for General Electric Security, part of GE Infrastructure, that is capable of reading HID’s RFID security access cards.” *Id.* ¶ 33.

ANSWER: To the extent that the allegations of Paragraph 311 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that Doc. No. 14-5 is an October 5, 2004 Complaint filed in the Colorado XceedID Lawsuit that includes the statements quoted in Paragraph 311 of the Counterclaims. However, based on XceedID’s later representations, HID agreed to withdraw the complaint without prejudice. Plaintiffs deny the remaining allegations and characterizations in Paragraph 311 of the Counterclaims.

312. HID also previously asserted in litigation that Conlin, Wendling, and Menzel—not Quan—invented the subject matter now claimed in the '862 patent, stating “that the inventions, developments and discoveries disclosed in the Applications,” which included the '677 application, “were conceived and/or first reduced to practice by Conlin, Wendling, and Menzel.” Ex. A, ¶ 47. Both Hulusi and Davis would have been aware that HID had so pled because of their roles at HID and their involvement in HID intellectual property matters, as described elsewhere herein. And yet,

no representative of HID disclosed these prior inventions by Conlin and others to the U.S. Patent Office.

ANSWER: To the extent that the allegations of Paragraph 312 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs deny the allegations and characterizations in Paragraph 312 of the Counterclaims. The '862 patent claims distinct subject matter from any purported invention by Conlin, Wendling, or Menzel. In addition, Hulusi and Davis were not and are not patent agents or attorneys. Hulusi was not substantially involved in patent prosecution at HID, and Davis did not have responsibility for HID's patent prosecution until after Pete Lowe was terminated in December 2007.

313. Other individuals involved in intellectual property relating to HID and dual frequency readers were also aware of the '677 application and '167 publication, based on the CDCA XceedID lawsuit. *Id.* ¶¶ 44-45. Further, other individuals knew of the prior art GES Transition Series Readers based on their involvement in HID litigation or intellectual property licensing.

ANSWER: Plaintiffs admit that, at some point, one or more individuals at HID became aware of the GES Transition Series Readers. But Plaintiffs deny that the GES Transition Series Readers are prior art to the '862 patent. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 313 of the Counterclaims concerning "other individuals involved in intellectual property relating to HID and dual frequency readers," or "other individuals . . . based on their involvement in HID litigation or intellectual property licensing" and, on that basis, deny them.

314. Additionally, other individuals committed inequitable conduct by failing to disclose prior art dual-frequency readers, despite being substantively involved in patent prosecution and having a duty to so disclose. For example, the '862 patent concedes that there are "[e]xemplary RFID systems," and that there "are currently two standard carrier frequencies which have **been generally accepted** for use in RFID systems. RFID systems, which employ RFID transponders of the type conventionally termed proximity cards or proximity tags, **typically communicate** by means of data signals at a carrier frequency within a range of 100 to 150 kHz. . . . In contrast, RFID systems employing RFID transponders of the type conventionally termed smart cards **typically communicate** by means of data signals at a carrier frequency of 13.56 MHz, which is deemed high frequency. The frequency bandwidth available for use around the carrier frequency of 13.56 MHz is defined by **industry-wide standards such as ISO standards 15693 and 14443.**" Ex. 2, col 1, ll. 29-30; Ex. 2,

col. 2, ll. 7-21. The '862 patent further states that “[a]t present, use of RFID transponders operating at the low carrier frequency and RFID transponders operating at the high carrier frequency have proliferated throughout the world.” Ex. 2, col 2, ll. 22-24 (emphasis added).

ANSWER: To the extent that the allegations of Paragraph 314 of the Counterclaims set forth legal conclusions, no response is required. To the extent a response is required, Plaintiffs admit that the '862 patent specification states that “[e]xemplary RFID systems are disclosed in U.S. Pat. No. 4,730,188 to Milheiser (the '188 Patent), U.S. Pat. No. 5,541,574 to Lowe et al. (the '574 Patent), and U.S. Pat. No. 5,347,263 to Carroll et al. (the '263 Patent), all of which are incorporated [t]herein by reference.” Doc. No. 12-2 at 1:29–34. Plaintiffs further admit that the '862 patent specification states that “[t]here are currently two standard carrier frequencies which have been generally accepted for use in RFID systems. RFID systems, which employ RFID transponders of the type conventionally termed proximity cards or proximity tags, typically communicate by means of data signals at a carrier frequency within a range of 100 to 150 kHz. This carrier frequency range is nominally referred to herein as 125 kHz carrier frequency and is deemed low frequency. In contrast, RFID systems employing RFID transponders of the type conventionally termed smart cards typically communicate by means of data signals at a carrier frequency of 13.56 MHz, which is deemed high frequency. The frequency bandwidth available for use around the earner frequency of 13.56 MHz is defined by industry-wide standards such as ISO standards 15693 and 14443.” *Id.* at 2:6–21. Plaintiffs admit that the '862 Patent specification states that “[a]t present, use of RFID transponders operating at the low carrier frequency and RFID transponders operating at the high carrier frequency have proliferated throughout the world.” *Id.* at 2:22–24. The complete version of these statements, which have been selectively quoted by WaveLynx in the Counterclaims, show that the applicant for the '862 patent disclosed low- and high-frequency readers to the Patent Office, including in the background of the invention portion of the '862 Patent specification. The applicant thus disclosed to the Patent Office prior art like alleged prior art raised in the Counterclaims (e.g., the “HID Material Prior Art”),

exemplifying why such references are cumulative, not material, and/or that the applicant or anyone associated with the prosecution of the '862 patent lacked any intent to deceive the Patent Office. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the allegations and characterizations in Paragraph 314 of the Counterclaims concerning "other individuals," and on that basis, deny them. Plaintiffs deny the remaining allegations and characterizations of Paragraph 314 of the Counterclaims.

315. Despite noting exemplary RFID systems, industry standards and practices, and proliferation of low and high carrier frequency RFID transponders, no individual with a duty to disclose material prior art disclosed any RFID products to the U.S. Patent Office, which would have allowed the examiner to, *inter alia*, evaluate antenna orientation in the admitted prior art.

ANSWER: To the extent that the allegations of Paragraph 315 of the Counterclaims set forth legal conclusions, no response is required. Plaintiffs deny the allegations and characterizations in Paragraph 315 of the Counterclaims.

316. Accordingly, for all these reasons, the '862 patent is unenforceable based on inequitable conduct committed by patent agent Ellsworth, attorney Blakely, and HID employees Hulusi, Davis, and Quan.

ANSWER: To the extent that the allegations of Paragraph 316 of the Counterclaims set forth legal conclusions, no response is required. Plaintiffs deny the allegations and characterizations in Paragraph 316 of the Counterclaims.

317. Counterdefendants have nonetheless filed a lawsuit against WaveLynx alleging infringement of the '862 patent, even though the '862 patent is unenforceable due to Counterdefendants' inequitable conduct. Accordingly, an actual controversy exists with respect to the enforceability of the '862 patent. Thus, a judicial determination of the respective rights of the parties with respect to the invalidity of the '862 patent is now necessary and appropriate under 28 U.S.C. § 2201 for at least the preceding reasons.

ANSWER: To the extent that the allegations of Paragraph 317 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that they filed a lawsuit against WaveLynx alleging infringement of the '862 patent. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 317 of the Counterclaims.

COUNTERCLAIM COUNT IV

DECLARATORY JUDGMENT OF [ALLEGED] NONINFRINGEMENT OF THE '562 PATENT

318. WaveLynx incorporates the foregoing paragraphs and allegations as if set forth herein.

ANSWER: Plaintiffs incorporate by reference their responses to Paragraphs 1–317 above.

319. WaveLynx does not infringe any claim of the '562 patent, including at least because none of WaveLynx' products, including the Ethos Readers, "receiv[e] . . . a message from an upstream device" and, based on that message, "transition[] . . . from . . . a non-secure Wiegand mode" to "at least one of a secure Wiegand mode and a packet-mode." This basis for non- infringement is exemplary and not exhaustive.

ANSWER: To the extent that the allegations of Paragraph 318 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations in Paragraph 318 of the Counterclaims.

320. Figure 3 of the '562 patent depicts a system "in accordance with embodiments of the present invention," including an RS-485 line between the Host and the Access Control Panel and a Wiegand line between the Reader and the Access Control Panel:

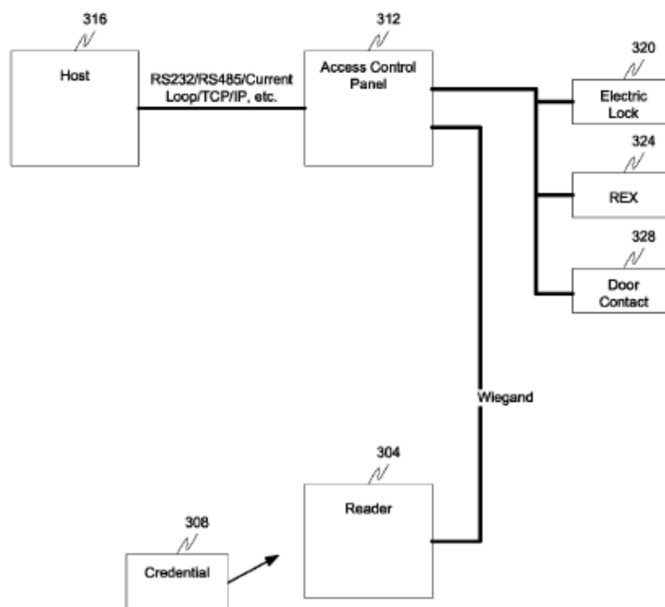


Fig. 3

ANSWER: Plaintiffs admit that the '562 patent states that Figure 3 “is a block diagram depicting a communication system in accordance with embodiments of the present invention.” Figure 3 shows a “RS232/RS485/Current Loop/TCP/IP, etc.” connection between 312 and 316 and a “Wiegand” connection between 312 and 304. Plaintiffs are without knowledge or information sufficient to form a belief as to the truth of the remaining allegations and characterizations in Paragraph 320 of the Counterclaims, and therefore deny them.

321. Contrary to the '562 patent, upon installation, the Ethos Readers are not “first” in a “Wiegand mode,” but are configured to communicate using the bidirectional OSDP protocol through an RS-485 serial interface. Once an OSDP message is received through an OSDP panel, the readers lock-in and communication is only possible by continuing to use the OSDP protocol absent a manual reset. Only when connected to a Wiegand panel are the readers capable of toggling to enable the making of a Wiegand transmission if the reader detects a credential presented to the reader, or a key press on the reader itself. When this scenario occurs, the reader is temporarily enabled to make the unidirectional Wiegand transmission and then it automatically reverts to the bidirectional OSDP state based on the reader’s internal programming and without receipt of any “message from an upstream device.” Once installed on a given panel, the Ethos Readers only communicate using OSDP or Wiegand, never both.

ANSWER: To the extent that the allegations of Paragraph 321 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations in Paragraph 321 of the Counterclaims. The Ethos readers operate in an “Auto-Detect” mode at least upon a power reset sequence. For example, as shown in their product manual, the readers enter a hunt mode that enables the Ethos Reader to revert to Wiegand or OSDP. *See, e.g., Ex. 38* (<https://wavelynxtech.com/wp-content/uploads/2020/01/WaveLynx-Mullion-Install-Guide-Rev-3.2.pdf>):

Wiegand/OSDP Tips:

- By default the reader will transmit credential and keypad data in Wiegand communication mode.
- Upon each power up, and before the reader reads a credential or a key is pressed, the reader will be listening for an incoming OSDP message. If a message is received during this period, the reader will automatically switch to OSDP-only communication mode.
- To return to OSDP auto-detect mode (default mode), tilt the reader 45 degrees to simulate tamper and cycle power in this state. The power up sequence should indicate OSDP auto-detect with 4 beeps.

Reader Startup Sequence		
Upon a power reset, the Ethos® Readers provide a reset sequence using the LED indicator and the beeper, to provide information about the reader type and its communication mode. The first sequence (sequence A) describes the credential technologies built in the reader: First, a silent LED sequence will indicate the supported RF protocols. Both LEDs turn off for 250 milliseconds.		
BLE	HF	Prox
Beeper Silent, Red LED on for 500 milliseconds	Beeper Silent, Green LED on for 500 milliseconds	Beeper Silent, AMBER LED on for 500 milliseconds
After the above AV sequence identifies the supported RF protocols, the reader will then indicate the supported host communication using beep/flash sequences. Then beeper and both LEDs turn off for 250 milliseconds.		
Wiegand	OSDP	Auto-Detect
Beep and Blink Red LED once for 200 milliseconds	Beep and Blink Green LED twice for 200 milliseconds each	Beep and Blink Green LED 4 times for 200 milliseconds each

Performance Levels

- Destructive Attack: I
- Line Security: I
- Endurance: IV (125 kHz, 13.56 MHz), I (BLE)
- Standby Power: I

Approvals

EN302291, EN301489, EN300330, IP55, UL294

322. Also once installed, the Ethos Readers either make Wiegand transmissions or communicate using the OSDP protocol; they do not switch between the two.

ANSWER: To the extent that the allegations of Paragraph 322 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations in Paragraph 322 of the Counterclaims. The Ethos readers purport to practice U.S. Patent No. 10,467,830 (“the ’830 patent”). For example, the Ethos Auto-Detect and Spec sheet notes that “OSDP Auto-Detect” is a “unique patented feature” that allows automatic detection and conversion to OSDP Secure Channel protocol “when the panel is upgraded, eliminating the need to rewire or reconfigure the reader.” The ’830 patent discloses a hunting sequence that expands upon functionality described above in the OSDP Autodetect and Reset Sequence. The ’830 patent discloses a credential reader monitoring activity the credential interface and transmits a received credential after the access control reader has been connected to the power source. And, as recited in claim 20, the credential reader reverts to hunt mode after the expiration of

a hysteresis timer, i.e., dependent upon whether or not activity is detected at the credential interface within a threshold amount of time after the access control reader has been connected to the power source. This is illustrated in Fig. 5 of the '830 patent.

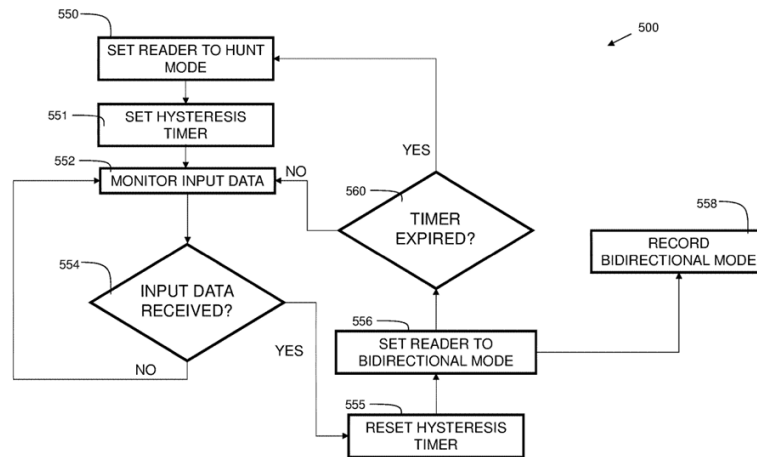


FIG. 5

323. As such, the accused products cannot meet at least the following claim language of the '562 patent: “based on . . . the message [from an upstream device] . . . transitioning the credential reader from the first mode of operation to a second mode of operation, wherein the first mode comprises a non-secure Wiegand mode and wherein the second mode comprises at least one of a secure Wiegand mode and a packet-mode.”

ANSWER: To the extent that the allegations of Paragraph 323 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations in Paragraph 323 of the Counterclaims.

324. Therefore, use of the Ethos Readers cannot infringe any claim of the '562 patent. WaveLynx is therefore not a direct or indirect infringer of the '562 patent.

ANSWER: To the extent that the allegations of Paragraph 324 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations in Paragraph 324 of the Counterclaims.

325. On information and belief, Counterdefendants did not inspect or test any WaveLynx Ethos Reader in relation to whether it infringes claim 1 of the '562 patent prior to the filing of this Amended Complaint. Testing would have revealed that the Ethos Readers do not operate in a “default Wiegand mode” or there is any conceivable transition from a non-secure Wiegand mode to one of a secure Wiegand mode or a packet mode in response to “a message from an upstream device,” as described above.

ANSWER: Plaintiffs deny the allegations and characterizations in Paragraph 325 of the Counterclaims.

326. Indeed, Counterdefendants amended their complaint to assert the '562 patent based, at least in part, on an unused 2017 datasheet for the Ethos Readers. Specifically, Exhibit 9 to Counterdefendants' Amended Complaint (D.I. 12), though apparently available through Google searching, is not listed on the Ethos Readers page on WaveLynx's Website (*see* <https://wavelynxtech.com/products/ethos-access-control-readers/>), nor was it included with any Ethos Readers sold. Had Counterdefendants tested the Ethos Readers prior to the filing of their Amended Complaint, they would have known that Exhibit 9 does not describe the operation of the Ethos Readers.

ANSWER: Plaintiffs admit that they amended their original complaint to add the '562 patent, and that the First Amended Complaint cites a datasheet for the Ethos Readers. WaveLynx's attempt to disavow Exhibit 9 to the First Amended Complaint attempts to avoid an admission that Ethos Readers infringe the '562 patent. That web page states that it is an “Application Note: OSDP Auto-Detect & Reader Reset Sequence.” It also states that the “Ethos Contactless Access Readers offer the patent-pending OSDP auto-detect' feature.” On information and belief, “OSDP auto-detect” is a reference to the '830 patent, which is the subject of the declaratory judgment claim recited above. *See* Ex. 29 (<https://wavelynxtech.com/company/access-control-patents/>) (identifying “US10467830B2” as “Electronic credential reader. (OSDP Autodetect)”).

327. As set forth herein, Counterdefendants knew, or at least should have known, that WaveLynx does not infringe the '562 patent, before filing its Amended Complaint against WaveLynx.

ANSWER: To the extent that the allegations of Paragraph 327 of the Counterclaims set forth legal conclusions, no response is required. To the extent that any response is required, Plaintiffs deny the allegations and characterizations in Paragraph 327 of the Counterclaims.

328. Counterdefendants have nonetheless filed a lawsuit against WaveLynx alleging infringement of the '562 patent, even though WaveLynx does not infringe the '562 patent. Accordingly, an actual controversy exists with respect to whether WaveLynx infringes the '562 patent. Thus, a judicial determination of the respective rights of the parties with respect to any alleged infringement of the '562 patent by WaveLynx is now necessary and appropriate under 28 U.S.C. § 2201 for at least the preceding reasons.

ANSWER: To the extent that the allegations of Paragraph 328 of the Counterclaims set forth legal conclusions, no response is required. To the extent that a response is required, Plaintiffs admit that they filed a lawsuit against WaveLynx alleging infringement of the '562 patent, that an actual controversy exists with respect to whether WaveLynx infringes the '562 patent, and that a judicial determination of the respective rights of the parties with respect to the alleged infringement of the '562 patent by WaveLynx is now necessary and appropriate. Plaintiffs deny the remaining allegations and characterizations contained in Paragraph 328 of the Counterclaims.

ADDITIONAL DEFENSES TO WAVELYNX'S COUNTERCLAIMS

Plaintiffs hereby reallege and incorporate by reference, as if fully set forth herein, their responses and any allegations, affirmative statements, and affirmative denials set forth in Paragraphs 1–60 of the Introduction, Paragraphs 1–45 in Plaintiff's Counterclaims In Reply, and Paragraphs 1–328 in Plaintiffs' Answer to the Counterclaims. Without admitting or acknowledging that it bears the burden of proof as to any of them, Plaintiffs assert at least the following additional defenses to WaveLynx's counterclaims. Plaintiffs reserve all other defenses at law or in equity that may exist now or in the future based upon discovery or further investigation.

RELEASE

WaveLynx's counterclaims are barred by release. The CDCA XceedID Lawsuit was resolved by a Settlement Agreement signed by XceedID on January 29, 2008, in which XceedID, including

REDACTED

REDACTED

BREACH OF CONTRACT

Defendant's counterclaims are barred, in whole or in part, by breach of contract. In addition to breaching the Release provision in the Settlement Agreement by asserting inequitable contract claims, and on information and belief, WaveLynx's principals Wendling and Conlin have breached other provisions of the Settlement Agreement. *See generally* Ex. 7.

UNCLEAN HANDS

Defendant's counterclaims are barred, in whole or in part, by the doctrine of unclean hands. *See, e.g., supra* INTRODUCTION ¶¶ 7–10, 11–23, 31, 33–40, 41–47, 48–50, 51–61.

ESTOPPEL/WAIVER

Defendant's counterclaims are barred, in whole or in part, by doctrines of estoppel and waiver, including to the extent Defendant takes any inconsistent position in any post-grant proceeding, for example, in an *inter partes* review ("IPR") proceeding.

FAILURE TO STATE A CLAIM

Defendant's counterclaims are barred, in whole or in part, because they fail to state a claim upon which relief may be granted.

ADDITIONAL DEFENSES

Plaintiffs may rely upon other matter constituting an avoidance or affirmative defense as set forth in Federal Rule of Civil Procedure 8(c), and they reserve the right to seek leave to amend this responsive pleading to add to, amend, withdraw, or modify these defenses as its investigation continues and as discovery may require.

PRAYER FOR RELIEF

WHEREFORE, in addition to the prayer for relief made by Plaintiffs in their original Complaint and First Amended Complaint, Plaintiffs respectfully request this Court to provide the following further relief:

- a. For a judgment declaring that WaveLynx has infringed one or more claims of the '877 patent directly, contributorily, and by inducement;
- b. For a grant of an injunction pursuant to 35 U.S.C. § 283, enjoining WaveLynx together with its respective officers, directors, agents, servants, employees, and attorneys, and upon those persons in active concert or participation with them from infringing the '877 patent by engaging in any commercial manufacture, use, offer to sell, or sale within the United States, or importation into the United States, of any product covered by the '877 patent for the full terms thereof or any additional period of exclusivity to which Plaintiffs or the '877 patent are or become entitled, and from inducing or contributing to such activities.
- c. The entry of an order declaring that Plaintiffs be awarded damages in an amount sufficient to compensate them for WaveLynx's infringement of the '877 patent, together with prejudgment and post-judgment interest and costs;
- d. That WaveLynx be ordered to provide an accounting for the damages resulting from infringement of each of the '877 patent, together with interests and costs, and all other damages

permitted by 35 U.S.C. § 284, including an accounting for infringing acts not presented at trial and an award by the court of additional damages for any such infringing acts;

e. For a judgment declaring that this case is exceptional and awarding Plaintiffs their expenses, costs, and attorneys' fees in accordance with 35 U.S.C. § 285, Rule 54(d) of the Federal Rules of Civil Procedure, and all other applicable statutes, rules, and common law;

f. The taxation of all allowable costs against WaveLynx; and

g. For such other and further relief as the Court deems just and proper under the circumstances.

Plaintiffs deny that Defendant is entitled to any relief in this case, and pray that the Court deny all relief sought by Defendant.

DEMAND FOR A JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs hereby request a trial by jury of all issues so triable.

Dated: October 17, 2022

FISH & RICHARDSON P.C.

By: /s/ Martina Tyreus Hufnal

Martina Tyreus Hufnal (#4771)
222 Delaware Avenue, 17th Floor
Wilmington, DE 19801
(302) 652-5070
hufnal@fr.com

Christopher Marchese
Tim Rawson
12860 El Camino Real, Suite 400
San Diego, CA 92130
(858) 678-5070
marchese@fr.com
rawson@fr.com

Taylor Caldwell Burgener
1000 Maine Ave, SW
Washington, DC 20024
(202) 626-6376
burgener@fr.com

ATTORNEYS FOR PLAINTIFFS
HID GLOBAL CORPORATION AND ASSA
ABLOY AB