## UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF FLORIDA ORLANDO DIVISION

DECURTIS LLC,	)
a Delaware limited liability corporation,	)
Plaintiff,	) ) ) No
v.	) ) JURY TRIAL DEMANDED )
CARNIVAL CORPORATION,	)
a Panamanian corporation,	)
Defendant.	)

# COMPLAINT FOR DAMAGES AND INJUNCTIVE RELIEF AND REQUEST FOR JURY TRIAL

DeCurtis LLC files this complaint for damages and injunctive relief against Carnival Corporation and states as follows:

- 1. This is an action for declaratory judgments of unenforceability and non-infringement under the patent laws of the United States, for violation of Section 2 of the Sherman Act, tortious interference with contract, and unfair competition.
- 2. DeCurtis LLC seeks declaratory judgments of unenforceability and non-infringement because Carnival Corporation ("Carnival") has raised a real and immediate dispute concerning Carnival U.S. Patent Nos. 10,037,642 ("the '642 Patent"); 10,045,184 ("the '184 Patent"); 10,049,516 ("the '516 Patent"); 10,157,514 ("the '514 Patent"); 10,171,978 ("the '978 Patent"); 10,304,271 ("the '271 Patent"); and 10,499,228 ("the '228 Patent"). Specifically, DeCurtis LLC seeks a declaration of unenforceability as to all seven of these Carnival Patents,

which Carnival has used to threaten DeCurtis LLC and its customers. DeCurtis LLC further seeks a declaration of non-infringement as to whether the DeCurtis Experience Platform and associated technology that DeCurtis LLC has implemented for its customers Virgin Cruise Intermediate Limited, Inc. ("Virgin") and Norwegian Cruise Line ("NCL") (the "DXP System") infringes or causes infringement of one or more claims of the '184 Patent, the '514 Patent, the '271 Patent, the '642 Patent, and the '228 Patent.

3. Additionally, Carnival has monopolized and restrained trade in the market for guest engagement systems that provide seamless engagement with cruise ship facilities through the use of wireless sensing technologies. Carnival is also attempting to monopolize the market for cruise travel with such systems. As detailed below, Carnival effected this unlawful monopolization by, among other things: (a) fraudulently obtaining patents from the U.S. Patent and Trademark Office ("USPTO"); (b) threatening objectively baseless litigation based on patents known to be unenforceable with the intent to adversely affect DeCurtis LLC's business; and (c) threatening and interfering with DeCurtis LLC's customers and potential customers. This conduct threatens to cause significant and irreparable damage to DeCurtis LLC.

#### The Parties

- 4. Plaintiff DeCurtis LLC is a Delaware limited liability corporation headquartered in Orlando, Florida. DeCurtis LLC designs, develops, engineers, manufactures, markets, and sells systems and methods for providing guests a seamless engagement with cruise ship facilities through the use of wireless sensing technologies.
- 5. Defendant Carnival Corporation ("Carnival") is a Panamanian corporation with its principal place of business in Miami, Florida. Among other businesses, Carnival operates

cruise lines for use by the public. Carnival is listed as the assignee of the '642, '184, '516, '514, '978, '271, and '228 patents

6. Carnival has indicated its intent to sell to other cruise lines systems and methods for providing guests a seamless engagement with cruise ship facilities through the use of wireless sensing technologies. In other words, Carnival intends to compete with DeCurtis LLC.

#### **Jurisdiction And Venue**

- 7. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201(a), and 1337(a). This action arises under the antitrust laws of the United States, specifically Sections 4 and 16 of the Clayton Act (15 U.S.C. §§ 15, 26) for violations of Section 2 of the Sherman Act (15 U.S.C. § 2). This action also arises under the Declaratory Judgment Act, 28 U.S.C. § 2201, and under the patent laws of the United States, 35 U.S.C. §§ 100, *et seq*. This Court has jurisdiction over DeCurtis LLC's state-law claims against Carnival under 28 U.S.C. § 1367(a).
- 8. Venue is proper under 15 U.S.C. §§ 15 and 22, and 28 U.S.C. § 1391(b)(1) and (2), (c)(2), and (d), and 1400(b). The injury to DeCurtis LLC arising from Carnival's unlawful monopolization substantially occurred in this district. Moreover, Carnival accuses DeCurtis of committing acts of infringement in this district. Further, Carnival maintains a sales manager and other personnel and facilities in this district. Carnival cruise ships also depart from ports in this district, including Port Canaveral, Jacksonville, and Tampa.
- 9. This Court has personal jurisdiction over Carnival pursuant to 15 U.S.C. § 22 because Carnival transacts business and maintains substantial contacts in this district. Further, Carnival's conduct had the intended effect of causing injury to DeCurtis LLC, which is located in this district.

10. This Court also has personal jurisdiction over Carnival pursuant to 15 U.S.C. § 22 because Carnival is a foreign company that transacts business in this district and throughout the United States.

## **General Allegations**

- 11. Competitors in the cruise industry are eager to identify new ways to enhance the on-board experience of their guests. Cruise lines with the ability to provide guests with a "VIP" experience through a higher level of service have a competitive advantage.
- 12. One way for a cruise line to provide a "VIP" experience to its guests is through a guest engagement system that allows a seamless engagement with the facility through the use of wireless sensing technologies. Such a system consists of small, wearable or readily portable guest devices that provide near field ("touch") communications to certain sensors as well as broadcast signals to other sensors located throughout the ship. The sensors can be connected to a system or systems that manage information regarding the guest, including the guest's preferences for food, drink, entertainment, and experiences.
- 13. These systems allow a guest to board the ship without the need to go through check in. Additionally, among many other benefits, when the guest enters restaurants, bars, spas, and casinos, the systems recognize the guest and alert cruise personnel to the guest's stated preferences for food, drink, and experiences without requiring the guest to identify those preferences. The systems also obviate the need for the guest to carry credit cards or cash.
- 14. David DeCurtis has been a pioneer in developing such guest engagement systems for cruise ships and has been involved in their design and engineering since at least 2008. The company that he founded—DeCurtis LLC—has designed and engineered innovative guest engagement systems.

- 15. From approximately 2008 to the present, DeCurtis LLC has worked as an independent contractor developing guest engagement systems for Disney Cruise Lines.
- 16. DeCurtis LLC's first project for Disney Cruise Lines was to design a guest embarkation system. At the time, Disney Cruise Lines had two new ships—the Disney Dream and the Disney Fantasy—that nearly doubled the passenger capacity of other ships in the Disney line. Disney had been planning to invest in new port facilities to accommodate the much larger passenger volume. However, DeCurtis LLC designed and built a guest embarkation system called "Worldwide Quick" that hastened the onboarding process. The success of that system, which used near field wireless communication ("NFC"), allowed Disney to forego the expense of building new port facilities.
- 17. Next, DeCurtis LLC designed for Disney Cruise Lines a system used to muster passengers to lifeboat stations in the event of an emergency. This system, known as the "Mobile Assembly Suite" or "MAS," initially used guest devices that emitted NFC communications along with readers placed in locations throughout the ship. Ultimately, DeCurtis LLC improved upon the MAS system to include Bluetooth low-energy wireless communications ("BLE").
- 18. Executives at Disney Cruise Lines concluded that the MAS system was such an important safety improvement for the industry at large that it allowed DeCurtis LLC to market the system to other cruise lines. As such, the MAS system is currently in use by a number of cruise lines, including Carnival.
- 19. While DeCurtis LLC was working on these successful projects for Disney Cruise Lines, John Padgett had become the Senior Vice President for Guest Experiences at Disney's theme parks group.

- 20. Padgett had not been involved with DeCurtis LLC's work on either the Worldwide Quick guest embarkation system or the MAS system.
- 21. Padgett was the head of a secret project at Disney known internally as the "X Band" project, later known as the "MagicBand" project, a guest engagement system.
- 22. Padgett wanted to persuade Disney management to authorize a billion dollar budget for this project. Accordingly, Padgett planned a presentation to top executives, including Disney's chairman (Bob Iger) and the head of theme parks and cruise lines businesses (Tom Staggs). For use in the presentation, Padgett obtained an approximately 50,000 square-foot movie studio in the Hollywood Studios theme park to build replicas of various theme park attractions.
- 23. Padgett gave DeCurtis three months to put together a presentation of the "MagicBand" cruise ship experience for Iger and Staggs. DeCurtis did so and his presentation was a great success.
  - 24. Padgett obtained his requested budget to develop the "MagicBand" prototype.
- 25. Meanwhile, Disney had previously engaged a major global consulting company to design and implement a guest engagement system for "Be Our Guest," a Disney theme park restaurant. After approximately two years without sufficient progress, Padgett lost confidence in that company's work. Padgett asked DeCurtis to start from scratch and design a new system within a time frame of only eight months. DeCurtis agreed to do so on the condition that he would have control over the project.
- 26. In that short time frame, DeCurtis LLC designed and built a guest engagement system for Disney's "Be Our Guest" restaurant. The system made use of guest devices having guest identifiers, wireless communication capability, a network of sensors, a communication

network connecting the sensors, a central server, and vending terminals configured to authorize a payment based on a guest device using encrypted bi-directional communications to selectively authorize payment based on the identity of the guest device. "Be Our Guest" went on to win the "Technology of the Year" award from the American Restaurant Association in 2012.

- 27. In or around 2013, Padgett left Disney and became an executive at Carnival Corporation.
- 28. At the time, Carnival Cruise Lines was already a client of DeCurtis LLC, which was working on a project to rebuild Carnival's gangway boarding process.
- 29. After his arrival, Padgett tasked DeCurtis LLC with designing the systems and methods for a guest engagement system for Carnival that came to be called the "OceanMedallion" project, and with building the prototypes to demonstrate how the system would work once it was built and implemented.
- 30. DeCurtis LLC designed a successful "proof of concept" presentation for Carnival's executives.
- 31. In the meantime, Padgett had hired Michael Jungen to join him at Carnival as a vice president of information technology. Padgett and Jungen had worked closely together at Disney. Padgett and Jungen are co-inventors on multiple patents and patent applications.
- 32. At some point in 2015, Carnival decided to reject DeCurtis's concept for a platform to execute the guest management system.
- 33. Jungen decided to replace DeCurtis LLC with another company—TE2—in the role of chief development architect of the "OceanMedallion" guest engagement system.
- 34. Thereafter, DeCurtis LLC personnel were excluded from conferences, meetings, and emails, and DeCurtis LLC's proposed projects were rejected.

- 35. These circumstances made it impossible for DeCurtis LLC to continue working on the guest engagement project for Carnival.
- 36. Thereafter, independent of its relationship with Carnival, DeCurtis LLC developed other systems and methods for providing seamless engagement with cruise ship facilities through the use of wireless sensing technologies without using any Carnival patented technology or any confidential information belonging to Carnival.
- 37. DeCurtis LLC's software solution, as made available for customers Virgin and NCL, is known as the "DeCurtis Experience Platform" (the "DXP System"). The DXP System is an end-to-end, enterprise grade software solution for cruise lines that enables location and proximity-based services to assist in operational efficiency, experience enhancement and customer engagement. The DXP System covers, among other things, activity and voyage reservations, free-flow embarkation and disembarkation modules, e-mustering, food and beverage reservations and ordering, table management, wayfinding, cabin/housekeeping notifications, and safety solutions.
- 38. The DXP System makes use of trackable devices that communicate with sensors. DeCurtis LLC knew of and made use of these features before working with Carnival on its guest engagement platform. In fact, for example, they were part of the guest engagement system that DeCurtis LLC created for the Disney "Be Our Guest" restaurant.
- 39. DeCurtis LLC has marketed the DXP System to cruise lines that are competitors of Carnival.
- 40. So far, NCL and Virgin have engaged DeCurtis LLC to develop guest engagement systems for their respective cruise lines. NCL announced its partnership with DeCurtis on May 4, 2018.

- 41. DeCurtis LLC has designed, built, and installed certain aspects of a guest engagement system for Virgin, which were tested by Virgin in February 2020 on a cruise of its ship Scarlet Lady across the Atlantic Ocean with passengers consisting of Virgin employees, family, and friends. The Scarlet Lady is currently scheduled to launch commercially with the DXP System in July 2020.
- 42. Carnival's reaction to the competitive threat from DeCurtis LLC in this market has been to engage in anticompetitive acts that have the effect of preserving or increasing Carnival's monopoly power. These acts include the enforcement of fraudulently-obtained patents.
- 43. Beginning in March 2017, Carnival filed applications for a number of patents covering systems and methods for providing guests a seamless engagement with cruise ship facilities through the use of wireless sensing technologies. The family of patents, which were issued in 2018 and 2019, includes:
  - (a) U.S Patent No. 10,037,642 ("the '642 Patent); the '642 Patent was filed on July 20, 2017 and issued on July 31, 2018. It purports to be a divisional of U.S. application Ser. No. 15/460,972 filed Mar. 16, 2017, which is a continuation of U.S. application Ser. No. 15/459,906 filed Mar. 15, 2017, which in turn claims the benefit of U.S. Provisional Applications No. 62/420,998, filed on Nov. 11, 2016, and No. 62/440,938, filed on Dec. 30, 2016. A copy of the '642 Patent is attached hereto as Exhibit A.
  - (b) U.S. Patent No. 10,045,184 ("the '184 Patent"); the '184 Patent was filed on May 15, 2017 and issued on August 7, 2018. It purports to claim priority to U.S. Provisional Applications No. 62/420,998, filed on Nov. 11, 2016, and No. 62/440,938, filed on Dec. 30, 2016. A copy of the '184 Patent is attached hereto as Exhibit B.

- (c) U.S. Patent No. 10,049,516 ("the '516 Patent"); the '516 Patent was filed on March 16, 2017 and issued on August 14, 2018. It purports to be a continuation of U.S. application Ser. No. 15/459,906 filed Mar. 15, 2017, which in turn claims the benefit of U.S. Provisional Applications No. 62/420,998, filed on November 11, 2016, and No. 62/440,938, filed on December 30, 2016. A copy of the '516 Patent is attached hereto as Exhibit C.
- (d) U.S. Patent No. 10,157,514 ("the '514 Patent"); the '514 Patent was filed on March 16, 2017 and issued on December 18, 2018 as a continuation of the application giving rise to the '184 Patent. The '514 Patent purports to be a continuation of application Ser. No. 15/459,906 filed March 15, 2017, which in turn claims the benefit of U.S. Provisional Applications No. 62/420,998, filed on November 11, 2016, and No. 62/440,938, filed on December 30, 2016. The '514 Patent issued on December 18, 2018. A copy of the '514 Patent is attached hereto as Exhibit D.
- (e) U.S. Patent No. 10,171,978 ("the '978 Patent"); the '978 Patent was filed on July 20, 2017 and issued on January 1, 2019. It purports to be a divisional of U.S. application Ser. No. 15/460,997 filed March 16, 2017, which is a continuation of U.S. application Ser. No. 14/459,906 filed March 15, 2017, which in turn claims the benefit of U.S. Provisional Applications No. 62/420,998, filed on November 11, 2016, and No. 62/440,938, filed on December 30, 2016. A copy of the '978 Patent is attached hereto as Exhibit E.
- (f) U.S. Patent No. 10,304,271 ("the '271 Patent"); the '271 Patent was filed on March 16, 2017 and issued on May 28, 2019. It purports to be a continuation of U.S. application Ser. No. 15/459,906 filed March 15, 2017, which in turn claims the benefit of

- U.S. Provisional Applications No. 62/420,998, filed on November 11, 2016, and No. 62/440,938, filed on December 30, 2016. A copy of the '271 Patent is attached hereto as Exhibit F; and
- (g) U.S. Patent 10,499,228 ("the '228 Patent"); the '228 Patent was filed on January 18, 2019 and issued on December 3, 2019. It purports to be a continuation-in-part of and claims the benefit of U.S. patent application Ser. No. 15/460,972, which was filed on March 16, 2017, which is a continuation of U.S. patent application Ser. No. 15/459,906, which was filed on March 15, 2017, now U.S. patent Ser. No. 10/045,184 issued Aug. 7, 2018, and claimed the benefit of U.S. Provisional Applications No. 62/420,998, filed on November 11, 2016, and No. 62/440,938, filed on December 30, 2016. A copy of the '228 Patent is attached hereto as Exhibit G.

(collectively, the "Carnival Patents").

44. As Carnival knows, the Carnival Patents are unenforceable because the applicants intentionally concealed relevant prior art and failed to identify correctly the inventorship of several of the Carnival Patents.

#### Fraudulent Failure To Identify Inventor

- 45. To the extent that the Carnival Patents are based on patentable inventions, they are unenforceable for fraudulently failing to name David DeCurtis as an inventor.
- 46. At all relevant times, federal law has required that an application for a patent filed with the USPTO "shall include, or be amended to include, the name of the inventor for any invention claimed in the application." 35 U.S.C. § 115(a).
- 47. Where an application does not name the correct inventor(s), and the applicant has not filed a request to correct inventorship, USPTO personnel are directed to reject the claims

under 35 U.S.C. § 101 and 35 U.S.C. § 115. Additionally, at all relevant times, the patent regulations have provided 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 [USPTO], which includes a duty to disclose to the [USPTO] all information known to that individual to be material to patentability," as defined under the regulations. 37 C.F.R. § 1.56(a).

- 48. Under the patent regulations, the duty of candor and good faith applies to "individuals associated with the filing or prosecution of a patent application," including not only the inventors and attorneys, but "[e]very other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, the applicant, an assignee, or anyone to whom there is an obligation to assign the application." 37 C.F.R. § 1.56(c). This duty includes the correct identification of all inventors.
- 49. On the applications for the '184 Patent, the '514 Patent, the '228 Patent, the '516 Patent, the '271 Patent, the '642 Patent, and the '978 Patent, Padgett and Jungen, both of them Carnival employees at the time, are named as inventors. But these patents omit David DeCurtis as an inventor despite his material contributions to the conception of at least one aspect in one or more claims in each of these patents. David DeCurtis contributed to the ideas in these patents during his work on the Experience Innovation Center ("EIC") project at Carnival between 2014 and 2015.
- 50. Before filing the applications for the '184 Patent, the '514 Patent, the '228 Patent the '516 Patent, the '978 Patent, the '271 Patent, and the '642 Patent, Carnival and its agents recognized David DeCurtis as the inventor on a number of the patent ideas included in these applications. Upon information and belief, corroborating evidence exists at Carnival demonstrating DeCurtis's role as an inventor.

- 51. For example, DeCurtis did, in fact, conceive of the idea for guest device wearables that could be mounted in a variety of accessory form factors. DeCurtis conceived of this idea as an improvement to the Disney "MagicBand" concept, which was restricted to a single wearable band.
- 52. DeCurtis's idea was that guests on extended cruise voyages would wear the guest devices in a variety of different social situations and that it would be desirable to have the guest device easily interface with a number of different wearable accessories (*e.g.*, wristband, necklace, lapel pin, etc.).
- 53. DeCurtis first conveyed this idea to Padgett in approximately July 2014 during a meeting in Padgett's office at Carnival. Padgett had wanted to use a version of the MagicBand guest device but DeCurtis explained that a plastic wrist device would not work for cruise ship passengers, especially those dressed for dinner in formal wear. DeCurtis proposed using a gold coin (like a pirate coin) and explained that the device should fit into a pocket, on a belt, or as part of a necklace. Padgett accepted DeCurtis's idea, which became embodied in the "Ocean Coin" concept (later renamed "OceanMedallion"). DeCurtis then worked with Adam Leonards and Glenn Curtis to develop DeCurtis's idea, which existed before Leonards began work on the idea or Curtis joined the "OceanMedallion" project.
- 54. DeCurtis's ideas related to wearable guest devices are now reflected in claim elements of at least the '271 Patent, the '642 Patent, and at least claim 20 of the '514 Patent, specifically elements relating to the shape, size, and design of portable guest devices and the ability of these portable guest devices to interact with accessories.
- 55. Additionally, Carnival and Padgett knew that DeCurtis was among a group of inventors for techniques related to unlocking doors using low power BLE technologies.

- 56. David DeCurtis in fact, contributed to the conception of the overall door unlocking concept during his work on the Carnival EIC program. This work built upon the BLE-door lock concepts that Padgett and his team experimented with at Disney.
- 57. For example, in approximately the summer of 2014, DeCurtis told Padgett that guest wearable devices must have both BLE and NFC capabilities to ensure the ability to unlock doors even when a BLE battery was exhausted. This idea is now reflected in at least claim 10 of the '514 Patent.
- 58. Moreover, in January and February of 2015, DeCurtis helped to conceive of techniques for communicatively coupling door access panels via power efficient networks to a centralized reservation and logging system. These ideas are reflected in at least the claims of the '184 Patent and the '228 Patent.
- 59. Also in January and February 2015, DeCurtis helped to conceive of techniques for efficiently leveraging BLE communications in both a low-power beacon state, as well as a more power-intensive bi-directional state. These ideas are reflected in at least the claim 11 of the '184 Patent and claim 1 of the '978 Patent.
- 60. Finally, in early 2015 DeCurtis conceived and communicated to others on the EIC project the idea for using capacitive touch door handles that would only trigger the latch upon a user touching the door handle to improve safety. Carnival and its agents recognized DeCurtis's sole conception of this idea. This idea is now reflected in at least the claims of the '516 Patent.
- 61. Based on standard practices and procedures at the USPTO, Padgett and Jungen would have had to disclose the inventors on each of the inventions for which they sought patents. The Carnival Patents do not identify David DeCurtis as an inventor.

- 62. To this date, none of the '184 Patent, the '514 Patent, the '228 Patent, the '516 Patent, the '271 Patent, the '642 Patent, or the '978 Patent have been amended to include David DeCurtis as an inventor.
- 63. More than half of the persons named as inventors on the Carnival Patents, including Padgett and Jungen, were familiar with the filing requirements of the USPTO from filing other, unrelated patents. Several of the named inventors on the Carnival Patents have applied for more than 10 patents. Among the most frequent filers were Padgett, Jungen, and Leonards.
- 64. Despite a duty to disclose it, Padgett and Jungen each knowingly and intentionally concealed from the USPTO that David DeCurtis was an inventor on many of the patent ideas presented as purported inventions claimed in the applications for the Carnival Patents.
- 65. The failure to identify DeCurtis as an inventor was not inadvertent; it was repeated over the course of multiple patent applications filed at different times over a period of three years.
- 66. As Carnival, Padgett, and Jungen knew, had David DeCurtis been named as an inventor on the Carnival Patents, DeCurtis would have been under an obligation to explain to the USPTO examiner that certain other aspects of the inventions that Carnival was trying to patent, including aspects of the invention that is the subject of the '184 Patent, were taught and/or suggested by prior art Disney systems discussed below. For example, although the applications for the Carnival Patents disclosed some of the patents and patent applications for Disney's existing "Be Our Guest" guest engagement system, the applications do not disclose the full extent of the "Be Our Guest" system that was already in use and otherwise available to the public and extensively described in multiple published articles.

- 67. Padgett knew that the patent applications for Disney's existing "Be Our Guest" guest engagement system did not disclose the full extent of the system that was already in use. David DeCurtis had raised this fact with Padgett at the time the Disney application was filed. Padgett responded that he did not care and that DeCurtis should not worry about it.
- 68. Carnival, Padgett, and Jungen knew that these prior art systems and publications relating to those systems would materially affect the prosecution of certain aspects of the Carnival Patents. They therefore intentionally concealed DeCurtis's involvement in other aspects by misrepresenting the inventorship of the Carnival Patents.
- 69. Upon information and belief, other employees and representatives of Carnival who were associated with the filing or prosecution of the patent family were also (1) then aware that David DeCurtis was an inventor of many of the patent ideas asserted as claims in the family of Carnival Patents, (2) had a duty to disclose David DeCurtis's involvement with these ideas, and (3) intentionally concealed this fact from the USPTO.
- 70. The USPTO would not have issued the '184 Patent, the '514 Patent, the '228 Patent, the '516 Patent, the '271 Patent, the '642 Patent, or the '978 Patent if it had known that the applicants had misrepresented inventorship by failing to disclose the true origin of these purported inventions.
- 71. Each of the Carnival Patents share substantially similar, and in many cases identical, specifications. The inventions disclosed in the Carnival Patents are all directed to guest engagement systems, and they all stem from related developmental work on the EIC system. Carnival and its agents omitted David DeCurtis from each of the Carnival Patents with the similar motive of avoiding the possibility that DeCurtis would identify certain material prior art that would impact the prosecution of the entire Carnival Patent family. As such, the fraudulent

omission of David DeCurtis on any one of the Carnival Patents infects each of the other patents, rendering each omission an independent basis for finding all of the patents unenforceable.

#### Fraudulent Concealment Of Prior Art

- 72. The Carnival Patents were fraudulently obtained, and Carnival therefore knows that they are unenforceable, because the purported inventors, patent attorneys, and others associated with their filing and prosecution knowingly failed to disclose to the USPTO material prior art that would have otherwise prevented the Carnival Patents from issuing.
- 73. As inventors of the Carnival Patents, which were filed before the USPTO, at least Padgett and Jungen would have been familiar with the duty of disclosure. At least Padgett and Jungen breached this duty of disclosure by intentionally failing to disclose material prior art.
- 74. For example, the Disney "Be Our Guest" system was in public use in the United States as early as 2012—more than one-year before the earliest purported priority date of any of the Carnival Patents. Any person skilled in the art of designing guest engagement systems would understand the technology, systems, and methods involved in the "Be Our Guest" guest engagement system. As known to Carnival and its agents, the "Be Our Guest" systems was therefore in "public use" and "available to the public," qualifying it as prior art under AIA 35 U.S.C. § 102(a)(1).
- 75. Additionally, publicly available information from this time makes clear that relevant implementation details of the technology powering Disney's systems, including the "Be Our Guest" system were known to the public and, thus, were prior art. For example, a May 31, 2013 article in the MIT Technology Review describes the Disney MagicBand as "an electronic wristband" that "uses Bluetooth and contactless NFC technology." The article describes how the MagicBand "replaces a person's ticket and can be used to tag into rides and other attractions at

the park. It can also be used to open a guest's hotel door, and to pay in stores at the resort. In the future, the Bluetooth link will make it possible for you to wander up to an attraction or Disney character and greeted using your first name."

- 76. With respect to the Carnival Patents identified above, the duty of disclosure required the disclosure of information sufficient to inform the USPTO regarding the full extent of the "Be Our Guest" system as well as other similar systems that were available, including the Child Detection Agency ("CDA") system available on Disney Cruise Lines. Although certain patents and patent applications related to these systems were disclosed to the USPTO in connection with the prosecution of the Carnival Patents, these patents and patent applications failed to disclose the full extent of the prior art systems and the available publications relating to those systems, and therefore failed to satisfy the duty of disclosure.
- 77. Carnival employees and agents involved in the prosecution of the Carnival Patents understood that the implementation details of the prior art Disney systems were material to the prosecution of the Carnival Patents. For example, in a Travel Weekly interview published on November 23, 2014, Padgett made the following comments regarding the significance of relevant features of the Disney MagicBand system that he had previously worked on:

Obviously the MagicBand would be the most central, unifying element that holistically reinvented the Disney World experience. It was all created with the mindset of what was good for the guest. What you see with the MagicBand [is] access to the room, access to the park, access to Fast Pass, access to payments. But it's not just that you do those things, but it's that you do them in a way that's more personalized, more customized, more seamless and more hassle-free than has ever been created before. That's the best example in the industry by far.

78. Despite appreciating the significance of these features within the prior art Disney systems, neither Padgett nor others involved in the prosecution of the Carnival Patents disclosed information sufficient to allow the patent examiner to appreciate them to the fullest extent.

- 79. Had the USPTO examiner been made aware of the full extent of the Disney "Be Our Guest" or "CDA" guest engagement system prior art, the USPTO examiner would not have issued several of the Carnival Patents, including at least the '184 Patent.
- 80. For example, the USPTO examiner originally rejected independent claim 1 of the '184 Patent because of prior art, most notably the "Lang patent." The Carnival applicants (Padgett, *et al.*) asserted that Lang taught a device emitting a beacon signal with the device being mounted on a doorjamb. The applicants amended claim 1 to refer to guests devices that were portable and were to be carried by the users of the guest engagement system. The applicants argued that the prior art did not teach "the claimed system in which 'sensors each mounted at a different know [sic] location' are 'operative to detect the periodic beacon signals [...] emitted [...] by guests devices' where the guest devices are portable and carried by users." However, the amended claim that the applicants asserted as valid against the prior art cited by the USPTO examiner is precisely the invention embodied in the Disney "Be Our Guest" restaurant. "Be Our Guest" opened to the public in 2012. A person having ordinary skills in the art would have been able to identify this aspect of the invention simply by experiencing the restaurant.
- 81. Upon information and belief (that information including the patent prosecution history), Padgett, Jungen, and other Carnival employees and representatives knew that the USPTO examiner would not have issued several of the Carnival Patents, including the '184 Patent, if the USPTO examiner had been made aware of the full extent of the Disney "Be Our Guest" and/or "CDA" guest engagement system prior art.
- 82. Padgett and Jungen had a specific intent to deceive the USPTO by withholding disclosure of the full extent of the Disney "Be Our Guest" and "CDA" guest engagement system prior art.

- 83. Upon information and belief, other Carnival employees and representatives who were associated with the filing or prosecution of the Carnival guest engagement system patents, including the '184 Patent, had a specific intent to deceive the USPTO by withholding disclosure of the full extent of the Disney "Be Our Guest" and "CDA" guest engagement system prior art.
- 84. Padgett, Jungen, and, upon information and belief, other Carnival employees and representatives, fraudulently procured the Carnival Patents knowing that DeCurtis LLC and its customers would be forced to engage in the expensive and time-consuming process of designing alternatives to the fraudulently-obtained and otherwise unenforceable patents to avoid the expense and risk of patent infringement litigation.

#### **Interference With Customers**

- 85. In or around 2017, DeCurtis LLC entered into a contractual and business relationship with NCL, which operates Norwegian Cruise Lines, to license the DXP to NCL.
- 86. In or around 2017, DeCurtis LLC entered into a contractual and business relationship with Virgin to license the DXP to Virgin.
- 87. Carnival learned of DeCurtis LLC's contractual and business relationships with NCL and Virgin to design, engineer, and sell guest engagement systems.
- 88. Perceiving DeCurtis LLC as a competitive threat, Carnival engaged in a campaign to interfere with DeCurtis LLC's contractual and business relationships.
- 89. On or around January 29, 2020, Carnival caused its lawyer to send a letter to NCL's general counsel. In that letter, Carnival's counsel referenced NCL's intent to develop a technology platform with DeCurtis LLC and suggested that platform might infringe what counsel called Carnival's "robust and growing patent portfolio," and referenced, among other things, the '271 Patent, the '978 Patent, the '516 Patent, the '514 Patent, the '642 Patent, the '184 Patent,

and the '228 Patent. Carnival's lawyer closed the letter by requesting that NCL notify Carnival of "potential infringement of any Carnival patent and/or unauthorized use of other Carnival intellectual property related to wearable devices."

- 90. Carnival's counsel referenced the Carnival Patents even though Carnival employees (including Padgett and Jungen) knew at the time that the Carnival Patents did not identify the correct inventors, were procured by fraud, and were unenforceable.
- 91. Then, in February 2020, Carnival's chief executive officer, Arnold Donald, contacted NCL's chief executive officer and asked his counterpart questions about DeCurtis's platform, the DXP System, and discussed the supposed infringement of Carnival's patents.
- 92. Donald referenced the Carnival Patents even though Carnival employees (including Padgett and Jungen) knew at the time that the Carnival Patents did not identify the correct inventors, were procured by fraud, and were unenforceable.
- 93. Following the call, NCL put on hold any work by DeCurtis LLC on Guest Engagement Systems and told DeCurtis LLC it would not pay amounts owed under the contract.
- 94. On or around February 4, 2020, Carnival caused its lawyer to send a letter to Virgin's Vice President Legal. In the letter, Carnival's lawyer again referenced Carnival's "robust and growing" patent portfolio and identified among other things, the '271 Patent, the '978 Patent, the '516 Patent, the '514 Patent, the '642 Patent, the '184 Patent, and the '228 Patent.
- 95. Carnival also caused its lawyer to send DeCurtis a January 29, 2020 letter claiming that the public descriptions of the technology platform that NCL was developing in conjunction with DeCurtis "closely track" Carnival's technology. Carnival identified the Carnival Patents and advised of its intent "to vigorously enforce its intellectual property rights."

On February 20, 2020, Carnival sent a second letter to DeCurtis, reiterating the statements from the first letter and also claiming that "recent events ha[d] heightened the reasons for Carnival's concern" that DeCurtis was infringing on its patents. Specifically, Carnival noted that Virgin had announced the launch of the "Band," and claimed that this technology, too, was similar to its OceanMedallion (which it had, in fact, hired DeCurtis LLC to develop in 2014). Carnival said it had "serious concerns" that DeCurtis LLC was not "respect[ing] its intellectual property rights." Carnival promised it would "exercise its rights to prevent and remedy any infringement" and warned that the consequences of "willful infringement" are "severe." Carnival's lawyer further demanded inspection of DeCurtis LLC's books and records pursuant to the services agreement under which DeCurtis helped to develop the OceanMedallion.

- 96. On February 24, 2020, Carnival sent a letter to Virgin's outside counsel asking Virgin to confirm certain information about the "Band" in order to "evaluate whether Virgin's planned launch of 'the Band' and related technology may raise issues under Carnival's patents."
- 97. Virgin has subsequently informed DeCurtis LLC of Carnival's communications, which has threatened DeCurtis's relationship with Virgin and otherwise caused DeCurtis substantial financial harm.

#### **Sham Threats of Litigation**

- 98. The communications described above from Carnival to NCL and Virgin amounted to sham threats of litigation.
- 99. The threats were objectively baseless in that no reasonable litigant making such threats could realistically expect success on the merits.
- 100. At all relevant times, Carnival employees (including Padgett) knew that the patents referenced in these threats were unenforceable under federal law and USPTO regulations

because of their failure to disclose material prior art and the failure to identify David DeCurtis as one of the inventors

101. Carnival's purpose in making these threats was not to seek government redress or otherwise protect legitimate patent rights. Rather, Carnival intended to inhibit competition and adversely affect the business of DeCurtis LLC.

#### The Relevant Markets

- 102. A relevant product market is the market for systems and methods for providing guests with seamless engagement with the facilities of cruise ships through the use of wireless sensing technologies ("Guest Engagement Systems").
- 103. Because of the characteristics of Guest Engagement Systems, it is unlikely that cruise lines as the buyers of such products would switch to purchasing another type of system in response to a small, but significant price increase.
- 104. Guest Engagement Systems are uniquely tailored to cruise ships. For example, a critical element of a guest engagement system for a cruise ship is an indoor location tracking system. Such a system must be designed to handle the location of over 4,000 passengers simultaneously engaged in thousands of activities throughout a ship. This would include essentially pinpoint locations in an emergency to locate missing passengers when all of the passengers must muster at lifeboat stations. Guest engagement systems for theme parks or hotels would not need the full capabilities of such systems. Furthermore, unlike a hotel, all of a cruise ships' guests disembark essentially at once and a new group of guests embark equally quickly. A hotel or theme park does not routinely have such issues. Cruise ships cross time zones and geopolitical boundaries that must be taken into account by the system. In addition, the location and proximity features of a cruise ship guest engagement system must be integrated with unique

applications on a cruise ship such as the property management systems, the crew management systems, and the safety systems.

- 105. Consequently, a cruise line could not simply substitute systems implemented for other types of facilities, such as theme parks or hotels. To do so would require expensive and time-consuming modifications and additional original programming in order to make a system designed for other facilities applicable to cruise ships.
  - 106. The relevant geographic market for Guest Engagement Systems is worldwide.
- 107. A second but related relevant product market is the market for cruise ship travel with Guest Engagement Systems.
- 108. Given the importance of Guest Engagement Systems on cruise ships, cruise line travel without such systems is not competitive with cruise line travel with such systems. On information and belief based on statements in Carnival's website, Carnival, as the largest cruise line holding company with 104 ships and more than forty-seven percent of the cruise passengers worldwide in 2018, is putting such systems on all of its ships currently in its fleet or as new ships are built. NCL, as the third largest cruise line holding company with twenty-four ships and nine percent of the passengers, had a contract with DeCurtis to place such systems on all of its ships before Carnival interfered. Based on statements in its annual report, MSC Cruise Line, which accounts for seven percent of the passengers carried in 2018, appears to be intending to place such systems on all new and existing ships.
- 109. It is unlikely that sufficient numbers of consumers would switch to a cruise line without Guest Engagement Systems in response to a small, but significant increase in price to counteract any attempt at supra-competitive pricing.

110. The relevant geographic market for cruise ship travel with Guest Engagement Systems is worldwide.

## **Anticompetitive Effect**

- 111. As a result of Carnival's conduct, prices for Guest Engagement Systems are higher, and output is lower, than otherwise would be the case.
- 112. Furthermore, as a result of Carnival's conduct, cruise lines with Guest Engagement Systems would be able to charge consumers undertaking cruise ship travel higher prices than would otherwise be the case.
- 113. As a result of Carnival's conduct, the public engaging in cruise line travel that wanted a cruise experience with a Guest Engagement System would have fewer choices.
- 114. In addition, as a result of Carnival's anticompetitive acts, DeCurtis LLC has been injured in its business.

# Carnival's Monopoly Power In The Guest Engagement Systems Market

- 115. Carnival has monopoly power in the relevant market for Guest Engagement Systems.
- 116. On information and belief (based on an Internet search), currently only three entities offer such Guest Engagement Systems: Carnival, DeCurtis LLC, and a collaboration between Aruba and Favendo.
- 117. If DeCurtis LLC were eliminated as a competitor through fraudulent patent infringement litigation or threats of such litigation, Carnival would have over 87 percent of the market based on the number of cruise ships that are (a) either outfitted with Guest Engagement Systems or (b) likely to be so outfitted in fleets that have some ships already offering such systems. (Because existing cruise ships are out of service only 12 14 days every three years, an

entire cruise line fleet cannot be retrofitted with a Guest Engagement System immediately but only over a period of time).

- 118. Barriers to entry exist for the creation, design, engineering, manufacture, and sale of Guest Engagement Systems. These barriers include the necessity of high capital outlays, and significant investment in research and development to design alternatives to Carnival's patents, as well as distribution and marketing expenses to overcome the preferences of cruise line customers for a dominant incumbent.
- 119. Furthermore, entrants into this market must enter with both the hardware and software capabilities of Guest Engagement Systems for cruise lines to effectively compete. Those firms with hardware capabilities in other industries or for other facilities that are most likely new entrants, particularly in sensing technology, do not have the appropriate software capabilities to design and implement systems for cruise ships with that sensing technology. It would take at least five years for such firms to develop such capabilities.
- 120. Carnival has created additional barriers to entry by threatening other cruise lines that it will file infringement actions against cruise ship companies seeking to use DeCurtis LLC's systems and methods. In the face of such litigation threats, a potential new entrant or its cruise line customers may decide that the cost of protracted litigation is too great to risk entry.

## Carnival Has A Dangerous Probability of Monopolizing The Market for Cruise Ship Travel With Guest Engagement Systems

- 121. Carnival has a dangerous probability of obtaining monopoly power in the relevant market for cruise ship travel with Guest Engagement Systems.
- 122. The number of major independent cruise lines is very concentrated, with just three cruise line holding companies making up the vast bulk of cruise lines measured by the number of ships in service, passengers carried, and revenue. These are Carnival, NCL, and Royal Caribbean

Cruise Lines. Together, these three cruise line holding companies account for more than fifty-four percent of the cruise ships worldwide, seventy-nine percent of the passengers carried, and seventy-two percent of the revenues.

- 123. Carnival, with its nine cruise line brands, accounts for more than thirty-three percent of all cruise line ships in service.
- 124. Were Carnival to be successful in blocking, for example, NCL from obtaining access to Guest Engagement Systems, Carnival would have in excess of eighty-four percent of the cruise ships currently outfitted with Guest Engagement Systems or cruise ships likely to be so outfitted in fleets that already offer such systems.
- 125. It is highly likely that Carnival has also threatened Royal Caribbean Cruise Lines with patent infringement litigation or that Royal Caribbean is aware of Carnival's threats to NCL and Virgin. In either case, Royal Caribbean may decide that it would be too risky to use DeCurtis LLC's Guest Engagement System.
- 126. This enhances the risk that Carnival's cruise ships would be dominant in cruise ship travel with Guest Engagement Systems.

#### **Interstate Commerce**

- 127. Carnival's conduct in restraint of trade was in interstate commerce. Upon information and belief, Carnival used the U.S. Mail and the Internet to intentionally defraud the USPTO.
- 128. Moreover, as a result of Carnival's conduct, the price of Guest Engagement Systems sold in interstate commerce is likely to be higher than it would have been but for Carnival's conduct.

#### **Declaratory Judgment**

System and services infringe on Carnival's patents, NCL has suspended work and payments to DeCurtis. Additionally, DeCurtis has had to indemnify Virgin against claims of infringement. Carnival's unfounded accusations of infringement are causing concrete and immediate injury to DeCurtis's business by casting a cloud of suspicion over the technology and services that are core to its business. DeCurtis seeks a declaratory judgment that its DXP System does not infringe certain Carnival patents in order to protect its business from Carnival's unwarranted interference. Furthermore, DeCurtis seeks a declaratory judgment that the Carnival Patents are unenforceable.

## **Causation And Damages**

- 130. As a direct and proximate result of Carnival's conduct, DeCurtis LLC has been injured.
- 131. But for Carnival's conduct, DeCurtis LLC would have been able to compete more effectively.
  - 132. DeCurtis LLC has or will suffer damages because of Carnival's conduct.

### **COUNT I**

## **Declaratory Judgment – Unenforceability**

- 133. DeCurtis LLC restates and incorporates by reference the allegations in paragraphs 1 through 101, and paragraph 129, as if fully set forth herein.
- 134. Carnival and its agents withheld material prior art from the USPTO during the filing and prosecution of the Carnival Patents.
- 135. Had Carnival and its agents not withheld material prior art from the USPTO, the Carnival Patents would not have issued.

- 136. Accordingly, the Carnival Patents are unenforceable.
- 137. Alternatively, the Carnival Patents are unenforceable because David DeCurtis is not named as an inventor.
- 138. A substantial, immediate, and real controversy exists between DeCurtis and Carnival regarding whether the Carnival Patents are unenforceable. A judicial declaration is necessary to determine the parties' respective rights regarding the unenforceability of the Carnival Patents.
  - 139. DeCurtis seeks a judgment declaring that the Carnival Patents are unenforceable.

### **COUNT II**

## Monopolization In Violation Of Section 2 Of The Sherman Act

- 140. DeCurtis LLC restates and incorporates by reference paragraphs 1 through 132 as though fully set forth herein.
- 141. Carnival has a monopoly and monopoly power in the market for Guest Engagement Systems.
- 142. Carnival has engaged in anticompetitive acts in furtherance of its specific intent to acquire and maintain that monopoly power. These acts include communications from Carnival to customers of DeCurtis LLC (who are also Carnival's competitors) insinuating that DeCurtis LLC has infringed or is infringing Carnival's patents. Carnival intended such communications to be understood as thinly veiled threats that Carnival will bring patent infringement litigation against DeCurtis's customers, and in fact those communications were so understood by their recipients. Carnival undertook these acts even though it knows that its patents are unenforceable.
- 143. Carnival has undertaken these acts with the intent to interfere with DeCurtis LLC's business and to threaten other competitors and customers with litigation.

- 144. By reason of Carnival's conduct, DeCurtis LLC has been injured in its business.
- 145. Unless the injunctive relief requested below is granted, irreparable injury will occur, and will continue to occur, to DeCurtis LLC.

### **COUNT III**

# Attempted Monopolization In Violation Of Section 2 Of The Sherman Act

- 146. DeCurtis LLC restates and incorporates by reference paragraphs 1 through 132 as though fully set forth herein.
- 147. Carnival has a dangerous probability of achieving monopoly power in the markets for Guest Engagement Systems and cruise travel with Guest Engagement Systems.
- 148. Carnival has a specific intent to achieve monopoly power in the markets for Guest Engagement Systems and cruise travel for Guest Engagement Systems.
- 149. Carnival has engaged in anticompetitive acts in furtherance of its specific intent to acquire monopoly power. These acts include communications from Carnival to customers of DeCurtis LLC (who are also Carnival's competitors) insinuating that DeCurtis LLC has infringed or is infringing Carnival's patents. Carnival intended such communications to be understood by these customers as thinly veiled threats that Carnival will bring patent infringement litigation against DeCurtis LLC and DeCurtis LLC's customers, and in fact those communications were so understood by their recipients. Carnival undertook these acts even though it knows that its patents are unenforceable.
- 150. Carnival has undertaken these acts with the intent to interfere with DeCurtis LLC's business and to threaten other competitors and customers with litigation.
  - 151. By reason of Carnival's conduct, DeCurtis LLC has been injured in its business.

152. Unless the injunctive relief requested below is granted, irreparable injury will occur, and will continue to occur, to DeCurtis LLC.

### **COUNT IV**

### **Tortious Interference With Contract And Business Relationships**

- 153. DeCurtis LLC restates and incorporates by reference paragraphs 1 through 101 as though fully set forth herein.
- 154. In or around 2017, DeCurtis LLC entered into a business and contractual relationship with NCL to license the DXP to NCL.
- 155. In or around 2017, DeCurtis LLC entered into a business and contractual relationship with Virgin to license the DXP to Virgin.
  - 156. Carnival had knowledge of these business and contractual relationships.
- 157. As described above, Carnival intentionally and unjustifiably interfered in these business and contractual relationships by making thinly veiled threats that it would bring patent infringement litigation against DeCurtis LLC and DeCurtis LLC's customers even though Carnival knows that its patents are unenforceable.
- 158. Carnival's actions were not taken in good faith and its allegations of infringement are objectively baseless.
- 159. As a consequence of Carnival's actions, NCL has stopped working with DeCurtis LLC in violation of its contractual obligations.
- 160. Carnival's actions have also threatened DeCurtis LLC's relationship with Virgin and otherwise caused DeCurtis LLC substantial financial harm.

161. DeCurtis LLC has been (and if not stopped, will be further) damaged by Carnival's intentional and unjustified interference in DeCurtis LLC's business and contractual relationships.

### **COUNT V**

# **Unfair Competition** (Florida Common Law)

- 162. DeCurtis LLC restates and incorporates by reference paragraphs 1 through 101 as though fully set forth herein.
- 163. DeCurtis LLC and Carnival are competitors and compete over a common pool of customers in the market for Guest Engagement Systems.
- 164. As described above, Carnival intentionally engaged in deceptive and fraudulent conduct by making false representations to NCL and Virgin that it had enforceable patents that it claimed DeCurtis LLC was infringing when it knew at all relevant times that its patents are unenforceable.
- 165. As described above, Carnival's actions resulted in consumer confusion. NCL has stopped working with DeCurtis LLC due to the confusion caused by Carnival's conduct. Carnival's deceptive and fraudulent representations created in NCL the misapprehension that DeCurtis LLC had infringed on Carnival's patents.
- 166. Further, as described above, Carnival's actions resulted in consumer confusion because Carnival's deceptive and fraudulent representations also created in Virgin the misapprehension that DeCurtis LLC was infringing on Carnival's patents, which has threatened DeCurtis LLC's relationship with Virgin and otherwise caused DeCurtis LLC substantial financial harm.

167. In addition, upon information and belief, Carnival has engaged in fraudulent and deceptive conduct resulting in consumer confusion by communicating, advertising, and/or marketing to other customers in the market for Guest Engagement Services that the Carnival Patents are enforceable, when it has known at all relevant times that its patents are unenforceable. DeCurtis LLC has been damaged as a result of Carnival's unfair competition.

## **COUNT VI**

## Declaratory Judgment – Non-Infringement One Or More Claims Of The '184 Patent

- 168. DeCurtis restates and incorporates by reference the allegations in paragraphs 1 through 101, and paragraph 129, as if fully set forth herein.
- 169. On information and belief, Carnival claims to own all rights, title, and interest in the '184 Patent.
  - 170. The '184 Patent has four independent claims, claims 1, 7, 11, and 19.
  - 171. Claim 1 of the '184 Patent recites:

A guest engagement system comprising:

a plurality of portable guest devices provided to users of the guest engagement system to be carried by the users, each guest device including a wireless communication antenna and operative to emit a periodic beacon signal broadcasting a unique identifier of the guest device using Bluetooth low energy (BLE) communications;

a sensor network comprising a plurality of sensors each mounted at a different known location and operative to detect the periodic beacon signals including the unique identifiers emitted using BLE communications by portable guest devices of the plurality of portable guest devices that are proximate to the sensor;

a communication network connecting each of the plurality of sensors of the sensor network; and

a central server communicatively connected to each of the plurality of sensors of the sensor network via the communication network, and storing a log associating each unique identifier of a portable guest device detected using BLE communications by a sensor of the sensor network with the known location of the sensor and a timestamp,

wherein the plurality of sensors of the sensor network comprises a plurality of access panels each configured to control an associated electronically controlled door lock,

each access panel is operative to detect the periodic beacon signals including the unique identifiers emitted using BLE communications by guest devices that are proximate thereto, and to selectively unlock the associated electronically controlled door lock based on the unique identifier of the detected periodic beacons, and

### each access panel comprises:

a radio configured for wireless communication with a door lock communication module electrically connected to an electronically controlled locking mechanism of the associated electronically controlled door lock;

a first transceiver configured for wireless BLE communication with the guest devices to identify users seeking to activate the electronically controlled locking mechanism; and

a second transceiver configured for communication with the central server storing identifiers of users authorized to activate the electronically controlled locking mechanism.

#### 172. Claim 7 of the '184 Patent recites:

A guest engagement system comprising:

a plurality of portable guest devices provided to users of the guest engagement system to be carried by the users, each guest device including a wireless communication antenna and operative to emit a periodic beacon signal broadcasting a unique identifier of the guest device using Bluetooth low energy (BLE) communications;

a sensor network comprising a plurality of sensors each mounted at a different known location and operative to detect the periodic beacon signals including the unique identifiers emitted using BLE communications by portable guest devices of the plurality of portable guest devices that are proximate to the sensor;

a communication network connecting each of the plurality of sensors of the sensor network;

a central server communicatively connected to each of the plurality of sensors of the sensor network via the communication network, and storing a log associating each unique identifier of a portable guest device detected using BLE communications by a sensor of the sensor network with the known location of the sensor and a timestamp; and

a plurality of interface devices providing personalized services to users of the guest engagement system,

wherein the plurality of sensors of the sensor network comprises a plurality of access panels each configured to control an associated electronically controlled door lock,

each access panel is operative to detect the periodic beacon signals including the unique identifiers emitted using BLE communications by guest devices that are proximate thereto, and to selectively unlock the associated electronically controlled door lock based on the unique identifier of the detected periodic beacons, and

each interface device comprises an associated sensor of the plurality of sensors of the sensor network, and provides the personalized services to a user proximate thereto based on an identity of the user determined based on the unique identifier emitted using BLE communications by a guest device of the user.

#### 173. Claim 11 of the '184 Patent recites

A guest engagement system comprising:

a plurality of portable guest devices provided to users of the guest engagement system to be carried by the users, each guest device having a unique identifier and including first and second wireless communication antennas respectively configured for Bluetooth low energy (BLE) and near field communication (NFC) communications:

a sensor network comprising a plurality of sensors each mounted at a different location, wherein at least one sensor of the plurality of sensors is operative to detect portable guest devices that are proximate thereto and receive unique identifiers therefrom based on BLE communication with the portable guest devices and at least another sensor of the plurality of sensors is operative to detect portable guest devices that are proximate thereto and receive unique identifiers therefrom based on NFC communication with the portable guest devices;

a communication network connecting each of the plurality of sensors of the sensor network; and

a central server communicatively connected to each of the plurality of sensors of the sensor network via the communication network, and storing a log associating each unique identifier of a portable guest device received using BLE or NFC communications by a sensor of the sensor network,

wherein each guest device is configured to selectively operate according to first and second operating modes, each guest device engaging in bi-directional communication using the first wireless communication antenna configured for BLE communications in the first operating mode and engaging in a beacon mode periodically broadcasting a beacon signal using the first wireless communication antenna configured for BLE communications in the second operating mode, and

each sensor of the sensor network is operative to transmit a command to a guest device in its communication range to cause the guest device to change operating mode between the first and second operating modes.

#### 174 Claim 19 of the '184 Patent recites'

A guest engagement system comprising:

a plurality of portable guest devices provided to users of the guest engagement system to be carried by the users, each guest device having a unique identifier and including first and second wireless communication antennas respectively configured for Bluetooth low energy (BLE) and near field communication (NFC) communications;

a sensor network comprising a plurality of sensors each mounted at a different location, wherein at least one sensor of the plurality of sensors is operative to detect portable guest devices that are proximate thereto and receive unique identifiers therefrom based on BLE communication with the portable guest devices and at least another sensor of the plurality of sensors is operative to detect portable guest devices that are proximate thereto and receive unique identifiers therefrom based on NFC communication with the portable guest devices; a communication network connecting each of the plurality of sensors of the sensor network; and

a central server communicatively connected to each of the plurality of sensors of the sensor network via the communication network, and storing a log associating each unique identifier of a portable guest device received using BLE or NFC communications by a sensor of the sensor network,

wherein the plurality of sensors of the sensor network comprises a plurality of vending terminals each configured authorize a payment based on a guest device, and

each vending terminal is operative to engage in encrypted bi-directional communication with a guest device using NFC communications to authenticate

- the guest device and selectively authorize the payment based on the identity of the authenticated guest device.
- 175. DeCurtis does not directly or indirectly infringe claims 1 and 7 of the '184 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise make use of access panels "operative to detect the periodic beacon signals including the unique identifiers emitted using BLE communications by guest devices that are proximate thereto, and to selectively unlock the associated electronically controlled door lock based on the unique identifier of the detected periodic beacons." The DXP System does not operate within a system having access panels that detect BLE communications for selectively unlocking electronically controlled door locks, but rather operates in a system using different communication protocols for unlocking doors.
- 176. In addition, DeCurtis does not directly or indirectly infringe claims 1 or 7 of the '184 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because its DXP System does not "stor[e] a log associating each unique identifier of a portable guest device detected using BLE communications by a sensor of the sensor network with the known location of the sensor and a timestamp." The DXP system does not store the identifier detected by a sensor of the sensor network in a log that associates the identifier with the location of the sensor. Instead, the DXP System translates the unique identifier detected by a sensor of the sensor network into a different identifier, and uses a location engine to triangulate the position of a user.
- 177. In addition, DeCurtis does not directly or indirectly infringe claim 11 of the '184 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because its DXP System does not employ, include, or

otherwise make use of "guest device[s] engaging in bi-directional communication using the first wireless communication antenna configured for BLE communications in the first operating mode" as required by claim 11 of the '184 Patent. The DXP System does not comprise guest devices configured for use in a system having sensors enabling bi-directional BLE communications, and the guest devices would require additional configuration to operate in a system having such sensors.

- Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because its DXP System does not employ, include, or otherwise make use of guest devices "configured to selectively operate according to first and second operating modes, each guest device engaging in bi-directional communication using the first wireless communication antenna configured for BLE communications in the first operating mode and engaging in a beacon mode periodically broadcasting a beacon signal using the first wireless communication antenna configured for BLE communications in the second operating mode." The DXP System does not comprise guest devices that are configured for use in a system requiring selective operation according to two distinct modes. The DXP System does not comprise sensors enabling selective operation according to two distinct modes, and the guest devices would require additional configuration to operate in a system having such sensors.
- 179. In addition, DeCurtis does not directly or indirectly infringe claims 11 or 19 of the '184 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because its DXP System does not employ, include, or otherwise make use of a plurality of guest devices, "each guest device having a unique identifier and including first and second wireless communication antennas respectively configured for

Bluetooth low energy (BLE) and near field communication (NFC) communications." The DXP System does not comprise guest devices having unique identifiers, rather guest devices can have multiple identifiers.

- In addition, DeCurtis does not directly or indirectly infringe claims 11 or 19 of the 180. '184 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because its DXP System does not comprise (i) "a sensor network comprising a plurality of sensors . . . wherein at least one sensor of the plurality of sensors is operative to detect portable guest devices that are proximate thereto and receive unique identifiers therefrom based on BLE communication . . . and at least another sensor of the plurality of sensors is operative to detect portable guest devices that are proximate thereto and receive unique identifiers therefore based on NFC communications . . . "; do not comprise (ii) "a communication network connecting each of the plurality of sensors of the sensor network"; (iii) do not comprise "a central server communicatively connected to each of the plurality of sensors of the sensor network via the communications network" and (iv) do not "stor[e] a log associating each unique identifier of a portable guest device received using BLE or NFC communications by a sensor of the sensor network." The DXP System is not configured to receive BLE and NFC communications over a single sensor network communicatively coupled to a central server. The DXP System is not configured to receive communications from a sensor network comprising NFC sensors communicatively coupled to a central server and capable of storing a log with each of the NFC identifiers received from a NFC sensor.
- 181. In addition, DeCurtis does not directly or indirectly infringe claim 19 of the '184 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because its DXP System does not employ, include, or

otherwise make use of vending terminals "operative to engage in encrypted bi-directional communication with a guest device using NFC communications to authenticate the guest device and selectively authorize the payment based on the identity of the authenticated guest device" as required by claim 19 of the '184 Patent. The DXP System does not comprise vending terminals, nor does it comprise guest devices that would allow any vending terminal to operate using encrypted bi-directional communication using NFC communications, and the DXP System as configured to be implemented by Virgin likewise will not operate in such a fashion.

- 182. A substantial, immediate, and real controversy exists between DeCurtis and Carnival regarding whether DeCurtis's infringes the '184 Patent by making, using, selling, and/or offering for sale DXP and related technologies and systems. A judicial declaration is necessary to determine the parties' respective rights regarding the '184 Patent.
- 183. DeCurtis seeks a judgment declaring that DeCurtis does not infringe, either literally or under the doctrine of equivalents, one or more claims of the '184 Patent by making, using, selling, and/or offering for sale the DXP System, either directly under 35 U.S.C. § 271(a), or indirectly under 35 U.S.C. §§ 271(b) and (c).

## **COUNT VII**

# Declaratory Judgment – Non-Infringement One Or More Claims Of The '514 Patent

- 184. DeCurtis restates and incorporates by reference the allegations in paragraphs 1 through 101, and paragraph 129, as if fully set forth herein.
- 185. An immediate, real, and justiciable controversy exists between DeCurtis and Carnival regarding the use of the '514 Patent.
- 186. On information and belief, Carnival claims to own all rights, title, and interest in the '514 Patent.

187. The '514 Patent has four independent claims, claims 1, 11, 12, and 20.

#### 188. Claim 1 of the '514 Patent recites:

# A portable wireless device comprising:

a body having a fully enclosed cavity, the body having all dimensions equal to or smaller than 2.5 inches, and the body having a thickness equal to or smaller than  $\frac{5}{8}$  inch;

a processor, a memory, a battery, and first and second wireless communication antennas disposed in the cavity,

wherein the first and second wireless communication antennas are respectively configured for Bluetooth low energy (BLE) and near field communication (NFC) communications, the first communication antenna configured for BLE communications has a J-shape that is elevated above a printed circuit board (PCB), the processor disposed in the cavity is configured to engage in bidirectional BLE and NFC communications using the first and second wireless communication antennas disposed in the cavity, and the processor selectively operates according to first and second operating modes having different respective intervals between periodic listen time periods during which the processor periodically listens for communications through the first or second wireless communication antennas.

## 189. Claim 11 of the '514 Patent recites:

#### A portable wireless device comprising:

a body having a fully enclosed cavity, the body having all dimensions equal to or smaller than 2.5 inches, and the body having a thickness equal to or smaller than  $\frac{5}{8}$  inch;

a processor, a memory, a battery, and first and second wireless communication antennas disposed in the cavity,

wherein the first and second wireless communication antennas are respectively configured for Bluetooth low energy (BLE) and near field communication (NFC) communications.

the processor is configured to establish secure communication links with remote communication devices using the first wireless communication antenna configured for BLE communications,

the memory stores both public and private identifiers unique to the portable wireless device,

the processor controls the first wireless communication antenna to emit a periodic beacon signal broadcasting the unique public identifier of the portable wireless device using BLE communications, and

the processor controls the first wireless communication antenna to transmit the private identifier only across secure communication links established with remote communication devices using BLE communications.

#### 190. Claim 12 of the '514 Patent recites:

A portable wireless device comprising:

a body having a peripheral member having front and rear openings respectively covered by front and rear caps, the peripheral member extending around a periphery of an enclosed cavity disposed within a space formed by the front and rear caps and the peripheral member, and

a processor, a memory, a battery, and first and second wireless communication antennas disposed in the cavity, and

a printed circuit board (PCB) disposed in the cavity and having the processor and the memory mounted thereon,

wherein the first and second wireless communication antennas are respectively configured for Bluetooth low energy (BLE) and near field communication (NFC) communications, and

wherein the first communication antenna configured for BLE communications has a J-shape that is elevated above the PCB.

## 191. Claim 20 of the '514 Patent recites:

A portable wireless device comprising:

a body having a fully enclosed cavity, and

a printed circuit board (PCB), a processor, a memory, a battery, and first and second wireless communication antennas disposed in the cavity,

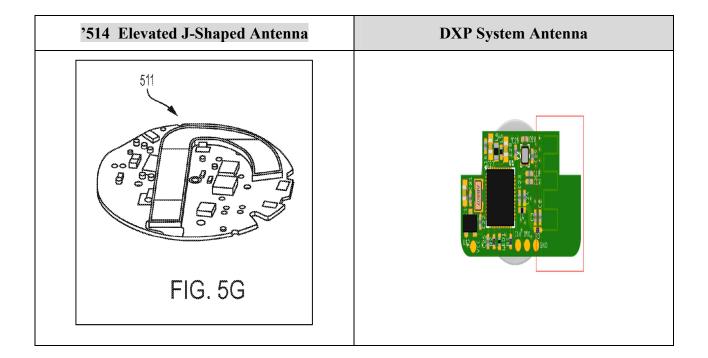
wherein the body has a frustum shape, including a front surface that is circular, a rear surface that is circular and has a diameter greater than that of the front surface, and a side surface that extends between the front and rear surfaces and is formed of a metal housing, having at least one gap extending through the metal housing from the front surface to the rear surface, and a non-conducting material disposed in the at least one gap of the metal housing,

wherein the front and rear surfaces have diameters of 0.75 to 2.5 inches, the body has a thickness of ½ to ½ inch, and an angle between the front surface and the side surface of the frustum-shaped body is in a range of 86 to 88 degrees,

wherein the first and second wireless communication antennas are respectively configured for Bluetooth low energy (BLE) and near field communication (NFC) communications and the processor disposed in the cavity is configured to engage in bi-directional BLE and NFC communications using the first and second wireless communication antennas disposed in the cavity and

the first communication antenna configured for BLE communications has a J-shape that is elevated above a surface of the PCB on which the processor and memory are mounted.

192. DeCurtis does not directly or indirectly infringe claims 1, 12, and 20 of the '514 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise make use of a portable wireless device comprising a first communication antenna wherein the "first communication antenna configured for BLE communications has a J-shape that is elevated above a printed circuit board (PCB)." The DXP System does not comprise portable wireless devices that have a J-shaped antenna, elevated above a printed circuit board, and configured for BLE communications. Rather, the DXP system uses portable wireless devices having a meandered trace antenna that is in the shape of a square sine wave.



- 193. DeCurtis does not directly or indirectly infringe claim 11 of the '514 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise make use of a portable wireless device comprising a processor, wherein "the processor is configured to establish secure communication links with remote communication devices using the first wireless communication antenna configured for BLE communications." The DXP System is not configured such that the portable electronic devices establish secure communication links using a BLE antenna. Rather, the DXP System is configured such that the portable electronic devices operate only in unidirectional mode using a BLE antenna.
- 194. DeCurtis does not directly or indirectly infringe claim 11 of the '514 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise make use of a portable wireless device comprising a processor, wherein "the processor controls

the first wireless communication antenna to emit a periodic beacon signal broadcasting the unique public identifier of the portable wireless device using BLE communications, and the processor controls the first wireless communication antenna to transmit the private identifier only across secure communication links established with remote communication devices using BLE communications." The DXP System does not comprise portable wireless devices that are configured to limit the transmission of a private identifier over a secure communication link.

195. DeCurtis does not directly or indirectly infringe claim 20 of the '514 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise make use of a portable wireless device, "wherein the body has a frustum shape, including a front surface that is circular, a rear surface that is circular and has a diameter greater than that of the front surface" or that has "a side surface that extends between the front and rear surfaces and is formed of a metal housing." The DXP System does not comprise portable wireless devices that have a frustum shape, a circular front surface, a circular rear surface with diameter greater than that of the front surface, or a metal housing for any surface.

Carnival Patents:
Portable Wireless
Device and Accessory

DXP System:
Virgin Portable Wireless
Device and Accessory

FIG. 2B

BISH DERIVE MALE FOLICITY
STORY

FIG. 2C

DXP System:
NCL Portable Wireless
Device and Accessory

FIG. 2C

- 196. A substantial, immediate, and real controversy exists between DeCurtis and Carnival regarding whether DeCurtis infringes the '514 Patent by making, using, selling, and/or offering for sale DXP and related technologies and systems. A judicial declaration is necessary to determine the parties' respective rights regarding the '514 Patent.
- 197. DeCurtis seeks a judgment declaring that DeCurtis does not infringe, either literally or under the doctrine of equivalents, one or more claims of the '514 Patent by making, using, selling, and/or offering for sale the DXP System, either directly under 35 U.S.C. § 271(a), or indirectly under 35 U.S.C. §§ 271(b) and (c).

## **COUNT VIII**

# **Declaratory Judgment – Non-Infringement One Or More Claims Of The '228 Patent**

198. DeCurtis restates and incorporates by reference the allegations in paragraphs 1 through 101, and paragraph 129, as if fully set forth herein.

- 199. On information and belief, Carnival claims to own all rights, title, and interest in the '228 Patent
  - 200. The '228 Patent has two independent claims, claims 1 and 13.
  - 201. Claim 1 of the '228 Patent recites:

A guest engagement system comprising:

a plurality of guest devices provided to users of the guest engagement system, each guest device including a wireless communication antenna and operative to emit a periodic beacon signal broadcasting a unique identifier of the guest device using Bluetooth low energy (BLE) communications;

a sensor network comprising a plurality of sensors each mounted at a different known location and operative to detect the periodic beacon signals including the unique identifiers emitted using BLE communications by guest devices of the plurality of guest devices that are proximate to the sensor;

a communication network connecting each of the plurality of sensors of the sensor network;

a relational database in operable communication with the communication network, the relational database associating each user with their respective unique identifier and a gameplay status identifier;

one or more interactive displays, each in operable communication with the sensor network via the communication network and configured to present one or more interactive gaming options to the users of the guest engagement system based on the detected periodic beacon signal and the gameplay status identifier; and

a central server communicatively connected to each of the plurality of sensors of the sensor network via the communication network, and storing a log associating each unique identifier of a guest device detected using BLE communications by a sensor of the sensor network with the known location of the sensor and a timestamp in the relational database.

#### 202. Claim 13 of the '228 Patent recites:

A guest engagement system comprising:

a plurality of guest devices provided to users of the guest engagement system, each guest device having a unique identifier and including first and second wireless communication antennas respectively configured for Bluetooth low energy (BLE) and near field communication (NFC) communications;

a sensor network comprising a plurality of sensors each mounted at a different location, wherein at least one sensor of the plurality of sensors is operative to detect guest devices that are proximate thereto and receive unique identifiers therefrom based on BLE communication with the guest devices and at least another sensor of the plurality of sensors is operative to detect guest devices that are proximate thereto and receive unique identifiers therefrom based on NFC communication with the guest devices:

a communication network connecting each of the plurality of sensors of the sensor network;

a relational database in operable communication with the communication network, the relational database associating each user with their respective unique identifier and a gameplay status identifier;

one or more interactive displays, each in operable communication with the sensor network via the communication network and configured to present one or more interactive gaming options to the users of the guest engagement system based on a detected periodic beacon signal and the gameplay status identifier; and

a central server communicatively connected to each of the plurality of sensors of the sensor network via the communication network, and storing a log associating each unique identifier of a guest device received using BLE or NFC communications by a sensor of the sensor network in the relational database.

203. DeCurtis does not directly or indirectly infringe claim 1 of the '228 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not "stor[e] a log associating each unique identifier of a portable guest device detected using BLE communications by a sensor of the sensor network with the known location of the sensor and a timestamp." The DXP system does not store the identifier detected by a sensor of the sensor network in a log that associates the identifier with the location of the sensor. Instead, the DXP System translates the unique identifier

detected by a sensor of the sensor network into a different identifier, and uses a location engine to triangulate the position of a user.

- 204. DeCurtis does not directly or indirectly infringe claim 13 of the '228 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not "stor[e] a log associating each unique identifier of a guest device received using BLE or NFC communications by a sensor of the sensor network in the relational database." The DXP System is not configured to receive BLE and NFC communications over a single sensor network communicatively coupled to a central server. The DXP System is not configured to receive communications from a sensor network comprising NFC sensors communicatively coupled to a central server and capable of storing a log with each of the NFC identifiers received from a NFC sensor.
- 205. A substantial, immediate, and real controversy exists between DeCurtis and Carnival regarding whether DeCurtis infringes the '228 Patent by making, using, selling, and/or offering for sale DXP and related technologies and systems. A judicial declaration is necessary to determine the parties' respective rights regarding the '228 Patent.
- 206. DeCurtis seeks a judgment declaring that DeCurtis does not infringe, either literally or under the doctrine of equivalents, one or more claims of the '228 Patent by making, using, selling, and/or offering for sale the DXP System, either directly under 35 U.S.C. § 271(a), or indirectly under 35 U.S.C. §§ 271(b) and (c).

#### **COUNT IX**

## Declaratory Judgment – Non-Infringement One Or More Claims Of The '271 Patent

207. DeCurtis restates and incorporates by reference the allegations in paragraphs 1 through 101, and paragraph 129, as if fully set forth herein.

- 208. On information and belief, Carnival claims to own all rights, title, and interest in the '271 Patent
  - 209. The '271 Patent has two independent claims, claims 1 and 10.

#### 210. Claim 1 of the '271 Patent recites:

## An assembly comprising:

a wireless device having a device body with a tapered shape including a front surface, a rear surface having a same shape as the front surface and a greater dimension than the front surface, and a cavity in which a processor and at least one wireless communication antenna are disposed; and

an accessory configured to be worn on a user body, the accessory having an accessory body having opposing outer and inner surfaces configured to respectively face away from and face toward the user body when the accessory is worn on the user body,

wherein the accessory body has a tapered cavity extending between the inner and outer surfaces and configured to releasably receive the wireless device, and the tapered cavity includes a front opening, in the outer surface of the accessory body, having a smaller dimension than a rear opening, in the inner surface of the accessory body, and the front opening having the same shape as and a smaller dimension than the front and rear surfaces of the device body to prevent the wireless device from passing through the front opening.

## 211. Claim 10 of the '271 Patent recites:

## A wireless device comprising:

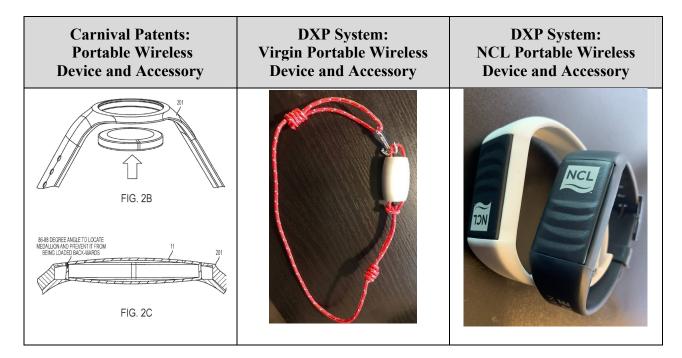
a body having a tapered shape including a front surface, a rear surface having a same shape as the front surface and a dimension greater than the front surface, and a peripheral side surface connecting the front and rear surfaces; and

four magnets embedded within the body and disposed on the peripheral side surface along an outer periphery of the body,

wherein the body includes a cavity in which a processor and at least one wireless communication antenna are disposed, and

wherein at least two adjacent magnets among the four magnets disposed on the peripheral side surface of the body each have a pole of a same polarity facing the outer periphery of the body.

212. DeCurtis does not directly or indirectly infringe claims 1 and 10 of the '271 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise make use of a wireless device comprising a "device body with a tapered shape including a front surface, [and] a rear surface having a same shape as the front surface and a greater dimension than the front surface" (claim 1); or a "body having a tapered shape including a front surface, a rear surface having a same shape as the front surface and a dimension greater than the front surface" (claim 10). The DXP System does not comprise wireless devices with front and rear surfaces having the same shape with the rear surface having a greater dimension.



213. DeCurtis does not directly or indirectly infringe claim 10 of the '271 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise

make use of a wireless device comprising "four magnets embedded within the body and disposed on the peripheral side surface along an outer periphery of the body." The DXP System does not comprise wireless devices with magnets.

- 214. A substantial, immediate, and real controversy exists between DeCurtis and Carnival regarding whether DeCurtis infringes the '271 Patent by making, using, selling, and/or offering for sale DXP and related technologies and systems. A judicial declaration is necessary to determine the parties' respective rights regarding the '271 Patent.
- 215. DeCurtis seeks a judgment declaring that DeCurtis does not infringe, either literally or under the doctrine of equivalents, one or more claims of the '271 Patent by making, using, selling, and/or offering for sale the DXP System, either directly under 35 U.S.C. § 271(a), or indirectly under 35 U.S.C. §§ 271(b) and (c).

# **COUNT X**

# **Declaratory Judgment – Non-Infringement One or More Claims Of The '642 Patent**

- 216. DeCurtis restates and incorporates by reference the allegations in paragraphs 1 through 101, and paragraph 129, as if fully set forth herein.
- 217. On information and belief, Carnival claims to own all rights, title, and interest in the '642 Patent.
  - 218. The '642 Patent has one independent claim, claim 1.
  - 219. Claim 1 of the '642 Patent recites:

An accessory configured to be worn by a user, the accessory comprising:

a metal body having opposing front and rear outer surfaces respectively configured to face away from and towards the user when the accessory is worn,

wherein the metal body has a tapered cavity extending between a front opening in the front outer surface of the metal body and a rear opening in the rear outer surface of the metal body, the rear opening has a same shape as the front opening, and the rear opening has a dimension that is greater than that of the front opening, and

wherein the metal body has at least one gap extending therethrough from the front outer surface to the rear outer surface, and from the tapered cavity to an outer peripheral surface of the metal body extending between the front and rear outer surfaces, and having a non-conducting material therein.

- 220. DeCurtis does not directly or indirectly infringe claim 1 of the '642 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise make use of an accessory configured to be worn by a user that comprises "a tapered cavity extending between a front opening in the front outer surface of the metal body and a rear opening in the rear outer surface of the metal body." The DXP System does not comprise an accessory configured to be worn by a user with the claimed shapes and further, the accessories configured to be worn by the users do not include metal bodies.
- 221. DeCurtis does not directly or indirectly infringe claim 1 of the '642 Patent by making, using, selling, and/or offering for sale the DXP System, either literally or under the doctrine of equivalents, at least because the DXP System does not employ, include, or otherwise make use of an accessory configured to be worn by a user that comprises a rear opening wherein "the rear opening has a same shape as the front opening" and wherein "the rear opening has a dimension that is greater than the front opening." The DXP System does not comprise an accessory configured to be worn by a user with the claimed shapes.
- 222. A substantial, immediate, and real controversy exists between DeCurtis and Carnival regarding whether DeCurtis infringes the '642 Patent by making, using, selling, and/or

offering for sale DXP and related technologies and systems. A judicial declaration is necessary to determine the parties' respective rights regarding the '642 Patent.

223. DeCurtis seeks a judgment declaring that DeCurtis does not infringe, either literally or under the doctrine of equivalents, one or more claims of the '642 Patent by making, using, selling, and/or offering for sale the DXP System, either directly under 35 U.S.C. § 271(a), or indirectly under 35 U.S.C. §§ 271(b) and (c).

#### **Prayer For Relief**

Wherefore, DeCurtis LLC prays that the Court enter judgment in its favor as follows:

- (a) declaring the Carnival Patents unenforceable;
- (b) declaring that DeCurtis LLC's conduct, including the DeCurtis Experience Platform, does not infringe, either directly or indirectly, any claim of the '184 Patent, the '514 Patent, the '228 Patent, the '271 Patent, or the '642 Patent, either literally or under the doctrine of equivalents, by making, using, selling, and/or offering for sale the DXP System, and that it is therefore not liable for damages or injunctive relief as a result of these activities;
- (c) declaring that the conduct of Carnival alleged above is adjudged and decreed to be in restraint of trade, unlawful monopolization, and attempted monopolization in violation of Section 2 of the Sherman Act;
- (d) awarding DeCurtis LLC threefold the damages that have been or will be sustained;
- (e) preliminarily and permanently enjoining Carnival from continuing its unlawful restraint of trade and monopolization and from tortiously interfering with the business and contracts of DeCurtis LLC;
  - (f) declaring that judgment be entered in favor of DeCurtis LLC and against Carnival

on each of DeCurtis LLC's claims;

- (g) finding that this is an exceptional case under 35 U.S.C. § 285;
- (h) awarding DeCurtis LLC its cost of suit, including reasonable attorneys' fees, as provided by law; and
- (i) granting DeCurtis LLC such other, further, and different relief as the nature of the case may require or as the Court may deem just and proper.

#### **DEMAND FOR JURY TRIAL**

DeCurtis LLC, by its attorneys, hereby demand pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, trial by jury of all issues triable by right.

Dated: April 8, 2020 DECURTIS LLC

By: /s/ Jason P. Stearns
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