UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
ORLANDO DIVISION

PROXICOM WIRELESS, LLC, Plaintiff, v. TARGET CORPORATION, Defendant.	CASE NO.: 6:19-cv-01886-RBD-LRH **AMENDED COMPLAINT AND DEMAND FOR JURY TRIAL**

Plaintiff Proxicom Wireless, LLC ("Proxicom"), by and through undersigned counsel, files this amended complaint pursuant to FED. R. CIV. PRO. 15(a)(2) and the Court's Order granting Motion for Extension of Time (Doc. 30) for its suit against Defendant Target Corporation ("Target") and, pursuant to FED. R. CIV. PRO. 8 alleges as follows:

NATURE of Action

1. This is an action for patent infringement under 35 U.S.C. § 271 *et seq*. arising out of Target's infringement of U.S. Patent Nos. 8,090,359; 8,116,749; 8,374,592; 8,385,896; 8,385,913; 8,369,842; 9,038,129; 7,936,736 and 9,161,164 (collectively, the "patents-in-suit"). The following allegations of patent infringement arise from actions performed by or attributable to Target.

PARTIES, JURISDICTION & Venue

2. Plaintiff Proxicom is a limited liability company duly organized and existing under the laws of the State of Florida and having its principal place of business at 1680 N. Riverside Dr., Indialantic, Florida 32903. Proxicom has only two members: the inventors of the patents-in-suit, James Arthur Proctor, Jr. and James Arthur Proctor, III, individuals who are citizens of the State of Florida.

3. Target Corporation is a corporation duly organized and existing under the laws of the State of Minnesota and having its principal place of business at 1000 Nicollet Mall, Minneapolis, Minnesota, 55403. For purposes of diversity, Target is a citizen of the State of Minnesota.

4. Because this is an action arising under the patent laws of the United States, this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a). Additionally, because there is complete diversity of citizenship between the parties and the amount in controversy exceeds $75,000 (exclusive of attorneys' fees, interest and costs), this Court also has subject matter jurisdiction pursuant to 28 U.S.C. § 1332(a)(1).

5. This Court has personal jurisdiction over Target because, *inter alia*, Target maintains or has maintained continuous and systematic contacts with, and regularly transacts business in, the State of Florida and this judicial district, and because Proxicom's claims arise out of Target operating, conducting, engaging in, or carrying on a business venture in the State of Florida and this judicial district and committing tortious acts in the State of Florida and this judicial district.

6. Venue is proper in the Middle District of Florida under 28 U.S.C. §§ 1391 and 1400(b) because Target is subject to personal jurisdiction and, therefore, is deemed to reside in this judicial district, and because Target maintains established places of business in this judicial district and has committed and continues to commit acts of infringement in violation of 35 U.S.C. § 271 at its places of business in this judicial district. Target's regular and established places of business in this judicial district include at least six stores in Orlando, Florida, as well as stores in Winter Park, Altamonte Springs, Casselberry, Waterford Lakes, Hunters Creek, and Kissimmee,

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Florida. Additionally, Proxicom has suffered harm in this judicial district due to Target's infringement of the patents-in-suit.

TECHNICAL BACKGROUND

7. The Patents-in-suit each claim priority to two provisional applications that were filed in early September, 2008. As of 2008, mobile wireless communication standards had progressed to the point where high-speed data connections were possible over mobile networks. U.S. Patent No. 8,090,359 (a true and correct copy of which is attached hereto as Exhibit 1), 1:26-30. These standards included ("3G") third-generation broadband cellular network technology, for example, EDGE and GPRS. *Id.*, 1:29-30.

8. Therefore, mobile devices (such as mobile phones) had access to high-speed networks. Some web sites, such as social networking sites, had been optimized to make use of the high speed of mobile networks, but for the most part these web sites were simply standard social networking sites that had been redesigned for use on a mobile phone with little change in capability. *Id.*, 1:34-37.

9. At the time, most mobile phones supported at least two wireless standards, one for a cellular wireless wide area network connection (such as EDGE and GPRS), and a second for a local area network that is typically used for short-range communication such as Bluetooth or WiFi. Exhibit 1, 2:11-23. These two channels, however, had not been used in the innovative manner of the inventions of the patents-in-suit. Wide-area networks had commonly been used for high-speed data connections. Short-range connections had commonly been used to connect hands-free devices such as headsets or peripherals. Short-range connections were also used in peer-to-peer network applications. *Id.*, 2:17-27.

10. Peer-to-peer communication via these commonly-available short-range communication channels (WiFi, Bluetooth) had been attempted for mobile social networking by some social networking services as of 2008. *Id*., 2:24-27. For example, a service called Flobbi allowed community members to identify each other via Bluetooth transmissions and then interact with chat, with the messages being carried over the Bluetooth connection. *Id.*, 3:67-4:4. These social networking services typically consisted of a software application executing on each mobile phone to facilitate direct communication between each device by creating an ad-hoc network among nearby devices. *Id*., 2:29-31. Each device in the network is a "peer" of the other devices, and each of the "peer" devices share information directly with other devices in the ad-hoc network. The social-networking services necessarily stored the information to be exchanged locally on the peer devices, which rendered the services vulnerable to fraud, for example, if one of the peer devices copied or misused the information. *Id*., 2:37-47.

11. Global Positioning System (GPS) receivers were also commonly available and incorporated into mobile phones. GPS is a satellite-based system operated by the United States government. GPS receivers provide location information for the mobile device using these satellite signals. Signals from several satellites must be simultaneously read (for triangulation) to determine a location. Obstacles like buildings block the relatively weak satellite-based GPS signals. *Id.*, 1:43-50. As a result, GPS capabilities for mobile devices were typically targeted at navigation to a specified location outdoors, or GPS was used for mobile social networking to allow a user to see where their friends were located in a relatively large geographic location on a map. *Id*., 1:38-43, 1:50-54.

THE Proctors' Innovative Technology

12. Proxicom was founded by Messrs. James Arthur Proctor, III and James Arthur Proctor, Jr. (father and son, collectively, "the Proctors"). Between them, the Proctors are named inventors on more than 290 United States patents. Mr. James A. Proctor, III holds a B.S.E.E. from the University of Florida and an M.S.E.E. from the Florida Institute of Technology. He is a former member of the faculty of the Florida Institute of Technology where he taught graduate courses in electrical engineering. Mr. James A. Proctor, III has forty years of experience in engineering and management roles at Harris Corporation in Melbourne, Florida working with communications systems.

13. Mr. James A. Proctor, Jr., holds a B.S.E.E. from the University of Florida and an M.S.E.E. from the Georgia Institute of Technology. Mr. Proctor, Jr. is an accomplished technology executive and serial entrepreneur in the wireless and communications field, having contributed to the startup, growth, operation, and exits of a number of programs and companies.

14. Proxicom was founded by the Proctors to research and develop wireless technology using proximity wireless signals. The Proctors are coinventors on the patents-in-suit, each of which has been assigned to Proxicom.

15. The Proctors have developed numerous innovative technologies in the field of wireless communications, including cellular and local area networking, with applications for use by governments and businesses. The Proctors' inventions, various aspects of which are embodied by the claims of the patents-in-suit, including each of the claims referenced herein, address several deficiencies with prior art peer-to-peer systems and methods by improving control of user information and privacy.

16. One inspiration for the inventions taught and claimed in the patents-in-suit was the difficulty that Mr. Proctor, Jr. experienced in sharing files securely. In 2008, Mr. Proctor, Jr. realized that devices such as laptops that had WiFi and Bluetooth capabilities for short-range communication, couldn't communicate securely with other similar devices, or exchange documents using those short-range communication channels. In fact, users could be tracked by third parties with the then-existing peer-to-peer technology. A third party could copy the identifier associated with a user or user's device and misuse it. Accordingly, there was a need in the art for technology that could facilitate secure communications between mobile devices using short-range communication technologies.

17. Because of these security concerns, prior to the inventions that are embodied in the claims of the patents-in-suit, including the claims referenced herein, mobile applications that relied on privacy and security rarely used location or proximity information. *See* Exhibit 1, 1:26-60. Prior art peer-to-peer systems and methods, in which peer devices communicated directly with one another, were vulnerable to security breaches and fraud, making them inadequate for use in commerce or for providing user privacy. *See id*., 2:37-45. There was a need for improved security and for fraud resistance. *See id*. The Proctors recognized the need for a trusted third party server to help facilitate these kinds of electronic transactions. *See id.*, 1:67-2:10. The Proctors also understood that a trusted third party server could be used in conjunction with wireless devices with both a short-range and long-range communication channel in an innovative manner. An example of this innovation is taught by the embodiment of Figure 2 that is identical in each of the patents-in-suit.

18. The embodiment of Figure 2 teaches a Central Server (100) in combination with a first wireless device (202) that is connected to a cellular network (101), and also a second wireless

device (204) that does not have a cellular connection that transmits its identifying information using a short range wireless link (203). Exhibit 1, 7:20-29. In the annotated version of Figure 2 reproduced below the first wireless device is shown in orange (labelled "Long-range & Short-range (1st) device"). The second wireless device is shown in blue (labelled "Short-range (2nd) device"):

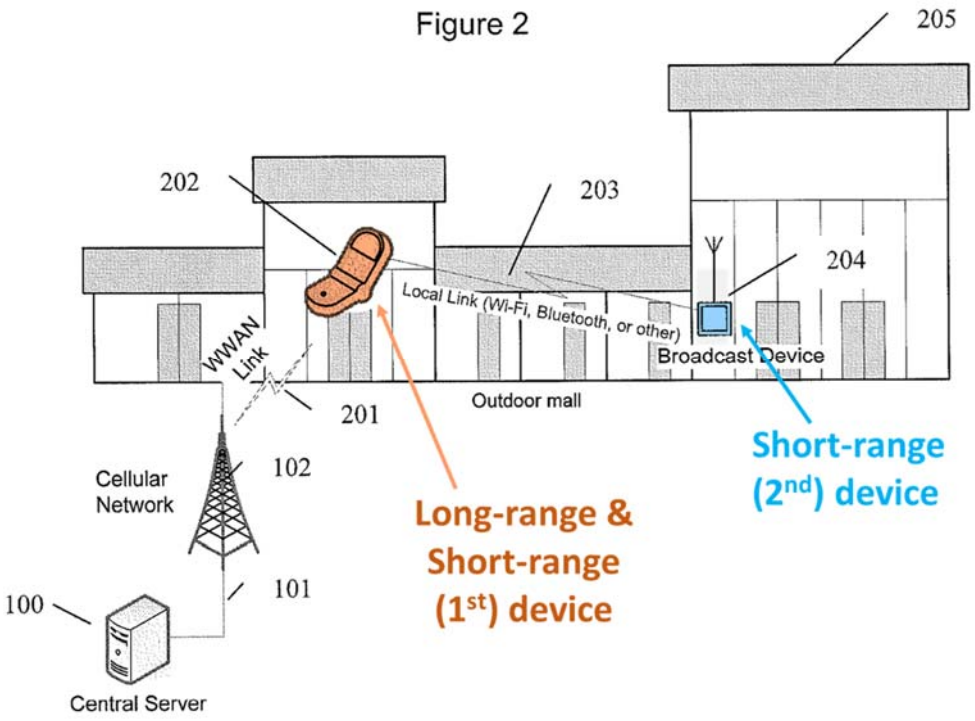


Exhibit 1, Figure 2 (annotated).

19. The patents explain that, for this embodiment, the second device (204, in blue) is deployed in a museum at a particular exhibit. The first device (202, in orange) belongs to a museum patron. The second device (204) will simply broadcast an identifier via the short range wireless connection (e.g., Bluetooth). *Id.*, 7:30-33. The first wireless device (202, in orange) will pass that identifier to the central server (100). *Id.*, 7:37-38. The central server is aware of the association of the second wireless device (204) with a particular museum (and a particular exhibit within the museum). Also, the central server is aware that the patron (with device 202) is in

proximity to the particular exhibit in which the second device (204) is installed, because the patron's device (202) received a short-range signal from the second device (204). The patron's device need not identify itself to the first device (204) or any other device in the museum. The central server passes information that is relevant to the museum exhibit to the patron's device (204). *Id.*, 7:37-41.

20. The inventions that are embodied in the claims of the patents-in-suit, including the claims referenced herein, are a technical improvement over conventional peer-to-peer systems and methods in that the inventions offered enhanced security, privacy, and fraud resistance. For example, through the innovative use of a server in combination with wireless devices, a device's identifier could be periodically changed. *See* Exhibit 1, 4:22-30, 7:9-15. Only the server need be aware of the pattern of changing identifiers, because the server may decode the identifier upon request.

21. Common prior art systems and methods were unable to accommodate a changing identifier. For prior-art peer-to-peer systems such as Bluetooth and WiFi, changing the transmitted identifier (such as the MAC address of a device) would prevent subsequent communications from being received and interpreted properly. *Id.*, 7:15-19. Therefore, common prior-art systems were vulnerable to spoofing and fraud, as a device's identifier could be easily copied and misused.

22. Another disadvantage of conventional prior art peer-to-peer methods was the difficulty of enforcing policies for the delivery of locally-stored content without the potential for fraud such as spoofing (copying) of identifiers between peers. *Id.*, 2:37-43. For example, a policy might include a rule to verify the identity and presence of a party before providing access to content (such as a picture of the user). Exhibit 1, 4:32-35. Another example of a policy is a rule requiring confirmation that a device (or associated user) is on a field list or belongs to a specific group or

organization. *Id.*, 4:40-41. As another example, a policy may apply past feedback ratings for a particular user and provide information only if the user has past positive feedback. *Id.*, 4:41-48.

23. It was difficult to enforce policies in prior art peer-to-peer systems because, for those systems, a device must exchange information directly with another device in an attempt to itself verify the identity of the second device. By the time a device determines whether information should be shared with the second device, information such as the device's (trackable) identifier has already been shared.

24. The inventions that are embodied in the claims of the patents-in-suit improve systems and methods for exchange of information between devices. The inventions do this by using an unconventional combination of a server with wireless devices and several different communication channels to enable enforcement of disclosure policies. The disclosure policies allow better control of exchange of information between two entities. By enabling the use of policies for security verification between entities, the premature revelation of private information can be avoided. Exhibit 1, 3:15-21, 4:12-40. For example, the verification required for applying a policy can be performed in accordance with the inventions in an anonymous way. *Id.*, 4:36-41.

25. By using a central server to "broker" communications in combination with the innovative use of short and long-range communication channels in an unconventional manner, the inventions reduce complexity and resource consumption of systems and methods for exchanging information between wireless devices. *See* U.S. Provision Patent Application No. 61/095,001 (a true and correct copy of which is attached here as Exhibit 10) at 6 (to avoid ambiguity, Proxicom uses the original page numbering that appears at the bottom-middle of the provisional applications). The server may verify the identity of a wireless device based on its identifier, instead of requiring a consumer device to attempt such verification itself.

26. The claimed inventions reduced the amount of computational resources needed as compared to a peer-to-peer approach, as explained in Application No. 61/095,001:

> [U]tilizing a peer to peer based network, supporting an application such as social networking, the information flow between the devices running the applications are carried over the peer to peer network itself. This approach creates complexity in a handset, and unnecessary additional resources are utilized. Further, in most cases, it reduces or eliminates the dependency on a central server to "broker" the transaction, reducing the ability to manage security and information disclosure. The complexity also is increased because one of the main devices targeted by the present invention is the phone. In the case of performing peer to peer networking using Bluetooth in a phone significant resources including memory and application software processing would be required to support full IP protocol networking over such a connection. The support for IP based networking already is included for WWAN connections and as a result, communication between one device to another using the WWAN is currently supported in many devices with no modification. The use of simple detection of one or more identifiers ***requires significantly less resources*** in a phone than performing a complete peer to peer IP based network with dynamic configuration of nodes being added and dropped continuously.

Exhibit 10 at 6-7 of 19 (emphasis added) (original page numbering); *see also* U.S. Provision Patent Application No. 61/095,359 (a true and correct copy of which is attached here as Exhibit 11 at 8 of 28 (original page numbering).

27. The Proctors' inventions, embodied by the claims of the patents-in-suit, including those claims listed herein, thereby improve the methods or systems for exchange of information between wireless devices. For example, the claims of the patents-in-suit, including the claims listed herein, implement a server / first device / second device combination in a manner that allows

a mobile device to advantageously receive information associated with a "broadcast only" device, which costs less. *See id*. at 7 of 19 (original page numbering).

28. The inventions that are embodied by the claims of the patents-in-suit, including the claims referenced herein, are also a technical improvement to systems and methods that determine a device's location or proximity in that the inventions enable the systems and methods to work reliably indoors by using proximity to determine a device location rather than relying on weak or unreliable GPS signals. Exhibit 10 at 6 (original page numbering). This represents a major technological improvement over the conventional prior art approach because numerous applicable environments that are important for commerce are largely indoors. *See id*.

29. One problem with prior art GPS-based systems was inadequate signal strength in many indoor environments. *See* Exhibit 1 at 2:37-43. GPS will often not operate indoors, where the GPS signal is weak. Exhibit 11 at 7, 12 (original page number). GPS signals may also be unreliable, particularly in large cities with numerous tall buildings.

30. The Proctors' inventions are also an improvement over conventional prior art peer-to-peer methods in that, through the innovative manner in which a server is combined with wireless devices and the use of short-range and wide-range transmissions, the entities associated with each wireless device (such as a user associated with one device, and a business like a retailer that is associated with the second device) can continue to communicate with each other even when the wireless devices are no longer in proximity to each other. *See* Exhibit 1 at 2:35-37. Conventional peer-to-peer approaches commonly required two devices to remain in proximity in order to continue to communicate effectively.

THE PATENTS IN SUIT

31. The patents-in-suit each claim priority through two provisional applications, Application No. 61/095,001 (**Exhibit 10**), which was filed September 8, 2008, and Application No. 61/095,359 (**Exhibit 11**), which was filed September 9, 2008.

32. Proxicom is the assignee and owner of all rights to enforce U.S. Patent No. 8,090,359 ("'359 Patent"), entitled "Exchanging Identifiers Between Wireless Communication to Determine Further Information to Be Exchanged or Further Services to Be Provided," and has full rights to sue and recover damages from all past, present and future infringements of the '359 Patent. The '359 Patent was duly and legally issued by the United States Patent and Trademark Office on January 3, 2012. The inventors of the '359 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida. A true and correct copy of the '359 Patent is attached as **Exhibit 1**.

33. The '359 Patent relates to techniques for facilitating the exchange of information and transactions between two entities that are associated with two wireless devices, when the two devices are in close proximity to each other. Conventional prior art peer-to-peer methods for exchanging information between wireless devices required the devices to reveal personal information, such as a static identifier, so that other peer devices could identify a particular user's wireless device. *See* Exhibit 1, 4:12-30. Conventional prior art peer-to-peer systems also required complex equipment and processes in order for each peer device to determine and track the identity of other peer devices over time. *Id.*, 6:54-63.

34. The inventions taught and claimed in the '359 Patent solved these problems in an unconventional way that improves the functioning and performance of systems and methods of exchanging information between wireless devices.

35. For example, the method of claim 1 of the ’359 Patent recites a central server that receives a second device identifier from a first wireless device. The second device provides its identifier to the first wireless device using short range wireless communication. The central server uses the second device identifier “to determine one or more of an identity or related information concerning an entity or object located in proximity to the second device.” Exhibit 1, 23:46-49.

36. By employing a trusted server, a user’s device need not broadcast an identifier that can be readily tracked. As a result, users have greater control over their information and may “opt out” of location (or proximity) tracking. A wireless device may transmit an anonymous identifier, and other wireless devices may authenticate the first wireless device’s identifier via the trusted server, without revealing the identity of the first wireless device.

37. Because the anonymous identifier is received via *short range* wireless signal, the trusted server also knows that the second wireless device is in proximity to the first wireless device, and the server can use this knowledge as part of the authentication process.

38. In conventional prior art peer-to-peer systems, devices could not communicate with each other by using anonymous identifiers. That technical limitation put users’ privacy at risk. Exhibit 1, 7:9-19.

39. The system and methods described in the ’359 Patent also beneficially enables the use of simpler, lower-cost wireless devices that consume less power. This is made possible by the inclusion of the trusted server, which handles authentication in the context of the claimed wireless devices that communicate via short and long-range signals in accordance with the inventions. For example, a method that permits the use of low-cost beacons is a major technological advantage in an indoor application such as a retailer, as the entire indoor space can be “blanketed” in low-cost, low-power beacons to provide near-total indoor coverage.

40. Further, by using the concept of proximity, the inventions do not require GPS signals (which can be unreliable indoors) to identify relevant location information. Instead, the inventions employ a device that transmits a short-range signal. Only devices in proximity to each other will detect the same short-range signal. That proximity information is reported to a server via a long-range signal. Therefore, systems and methods that employ the claimed inventions can detect and report the location of a user's device reliably indoors if the location of devices broadcasting short-range signals is known.

41. Also, unlike conventional peer-to-peer systems, the wireless devices recited by claim 1 need not authenticate each other, because the central server performs that function, which improves the security and fraud resistance of the method over routine and conventional prior art peer-to-peer methods.

42. Claim 1 further recites that, "subsequent to the step of the central server receiving the second device identifier information from the first wireless device," the central server then takes "further action to deliver information or a service to the first wireless device based at least in part upon (a) the second device identifier" and "(i) feedback ratings relevant to an entity associated with either the first wireless device or the second device identifier information; (ii) information representing a reward for an entity associated with the first device's participation in a loyalty program; or (iii) a current step in a multiple step process for an ongoing electronic commerce transaction." *Id.*, 23:56-63

43. Through the innovative use of a trusted server that not only can determine information related to a device, but also is aware of what that devices is in proximity to, the method of claim 1 encompasses providing relevant information to a user, such as relevant feedback

ratings—for example, the server can provide feedback ratings for nearby goods and services that the server has access to that are relevant to a particular user.

44. Prior to 2008, it was not routine in the prior art to use proximity or location information to facilitate electronic transactions. The innovative and unconventional combination of a trusted third party server with wireless devices, together with the use of proximity with anonymous (or private) identifiers, improves security and fraud resistance and also provides a method that works indoors (e.g., in a museum, airport or retail environment).

45. The unconventional combination of steps recited by claim 1 of the '359 Patent improves the functioning and performance of systems and methods of exchanging information between wireless devices.

46. As another non-limiting example, claim 48 of the '359 Patent further improves the method of claim 1 in an unconventional manner. Claim 48 requires "the further action taken by the central server comprises: notifying the first wireless device of the presence of an entity or object associated with or in proximity to the second device." Prior to 2008, use of proximity was unconventional; prior art systems commonly used GPS. Use of proximity in the claimed manner is a technical improvement over prior-art GPS-based systems for at least two reasons: (i) a proximity-system is more reliable in indoor environments; and (ii) a proximity-based system allows the second wireless device to be moved (or for an array of wireless devices that includes the second wireless device, to be reconfigured) to reflect changes in the location of relevant objects (for example, retail goods or departments). Using proximity rather than absolute location enables such applications because there is no requirement for the wireless devices to know the actual location of a user's mobile device, or the actual location of a transmitting beacon device—only proximity, determined from short-range signals, need be known.

47. Another non-limiting example is described in claim 52 of the ’359 Patent, which requires that the second wireless device is a broadcast only device. This further improves the method of claim 1 in an unconventional manner. Because the server handles authentication, the second wireless device may be a simple, low-cost broadcast-only device. The ability to use low-cost devices is a technical advance over prior art systems and methods (e.g., peer-to-peer systems) that enables a business to cost-effectively deploy the technology in a way that reliably covers the entire square footage of an indoor space. For example, less complex wireless devices such as beacons can be deployed that are also less costly.

48. As another non-limiting example, claim 55 of the ’359 Patent further improves the method of claim 1 in an unconventional manner. Claim 55 requires that “the further action [of the central server] is based at least in part upon both (a) the second device identifier and (b) the an identifier associated with the first wireless device or an identifier associated with a user of the first wireless device.” The method of claim 55 is a technical improvement over prior-art GPS or peer-to-peer systems because, through the innovative combination of wireless devices and server(s) in conjunction with the use of short and long-range signals, the information delivered to a user of the first wireless device may be customized to that user, and relate to products in proximity to that user. Such customization is not possible indoors with conventional GPS based systems, or in conventional peer-to-peer based systems in which no intermediary server is used in the claimed innovative manner.

49. Proxicom is the assignee and owner of all rights to enforce U.S. Patent No. 8,116,749 (“’749 Patent”), entitled “Protocol for Anonymous Wireless Communication,” and has full rights to sue and recover damages from all past, present and future infringements of the ’749 Patent. The ’749 Patent was duly and legally issued by the United States Patent and

Trademark Office on February 14, 2012. The inventors of the ’749 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida.

50. A true and correct copy of the ’749 Patent is attached as **Exhibit 2**.

51. The ’749 Patent is a sibling of the ’359 Patent. The ’749 Patent also relates to techniques for facilitating the exchange of information and transactions between two entities that are associated with two wireless devices, when the two devices are in close proximity to each other. The ’749 Patent focuses on embodiments that improve security and fraud resistance over prior art methods. As mentioned above, conventional prior art peer-to-peer methods for exchanging information between wireless devices required the devices to reveal personal information, such as a static identifier, so that other peer devices could identify a particular user’s wireless device. *See* Exhibit 2 at 4:13-27.

52. The inventions claimed in the ’749 Patent solved this problem in an unconventional way that improves the functioning and performance of systems by using modified device identification information to improve device security. By employing the claimed unconventional combination of a server in combination with wireless devices using short-range and long-range signals in the claimed manner, a device may anonymously transmit an identifier and even change that identifier over time, relying on the server to authenticate its identifier rather than sharing personal information with surrounding wireless devices. Conventional prior art peer-to-peer approaches required a fixed identifier.

53. As a non-limiting example, claim 1 of the ’749 Patent recites a method that comprises a second wireless device that provides modified identification information. Using an unconventional combination of a server with wireless devices, the server associates the modified identification information with a particular user or entity associated with that second wireless

device. The second wireless device may transmit an anonymous identifier and also modify that identifier to prevent others from "copying" or learning the anonymous identifier and associating it with a particular device or user over time. The inventions represent a technical improvement in that by modifying the identifier in the claimed innovative manner the security of a wireless device (and its user) is significantly improved. The method of claim 1 is unconventional in that it is unlike conventional peer-to-peer approaches, for which a particular user's identifier could be determined and tracked.

54. As another non-limiting example, claim 14 of the '749 Patent further improves method of claim 1 in an unconventional manner. Claim 14 requires that "the user or entity identification information is changed to provide for a confirmation of the identification information provided to the central server, or to provide a validation of the legitimacy of one or both of the first or the second wireless devices and respective applications." For example, a device interfacing with a server cannot spoof the server that it is in proximity to a given "second wireless device" because there is no unchanging, fixed identifier that could be reported to the server despite not actually in proximity to the device. As a result, significantly enhanced authenticity of the proximity is achieved.

55. Proxicom is the assignee and owner of all rights to enforce U.S. Patent No. 8,374,592 ("'592 Patent"), entitled "Exchanging Identifiers Between Wireless Communication to Determine Further Information to Be Exchanged or Further Services to Be Provided," and has full rights to sue and recover damages from all past, present and future infringements of the '592 Patent. The '592 Patent was duly and legally issued by the United States Patent and Trademark Office on February 12, 2013. The inventors of the '592 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida.

56. A true and correct copy of the ’592 Patent is attached as **Exhibit 3**.

57. The ’592 Patent is a continuation of the ’359 Patent and teaches and claims technological improvements in addition to those claimed in the ’359 Patent.

58. As a non-limiting example, the unconventional combination of steps recited by claim 19 of the ’592 Patent improves the functioning and performance of systems and methods of exchanging information between wireless devices. Based on the claimed unconventional combination of a server with wireless devices, the server determines that two wireless devices are in proximity. The server can make this determination because the server receives a second wireless device identifier (that was transmitted via a short range wireless communication) from a first wireless device. Therefore, the server can readily determine that the first wireless device is in proximity to the second wireless device. The server delivers information representing a reward for participation in a loyalty program.

59. Because the innovative method of claim 19 operates effectively indoors, the method is a technological improvement over prior art GPS-based location determination, as the method provide for accurate and reliable determination of indoor location (e.g., via determining proximity to a device for which the server knows the location). Also the method effectively delivers loyalty program information that is relevant to the user’s current location, e.g., where the user is located within a museum, airport or retail store, as opposed to delivering generic information.

60. As another non-limiting example, claim 22 of the ’592 Patent further improves method of claim 19 in an unconventional manner. Claim 22 requires that the first server is prevented from delivering information representing a reward to the first wireless device based upon a history of previous information delivered to said first wireless device. Through use of a server in combination with wireless devices that communicate with both short and long-range

signals in the claimed manner, duplicative network traffic is reduced and messages delivery may be customized.

61. Proxicom is the assignee and owner of all rights to enforce U.S. Patent No. 8,385,896 ("'896 Patent"), entitled "Exchanging Identifiers Between Wireless Communication to Determine Further Information to Be Exchanged or Further Services to Be Provided," and has full rights to sue and recover damages from all past, present and future infringements of the '896 Patent. The '896 Patent was duly and legally issued by the United States Patent and Trademark Office on February 26, 2013. The inventors of the '896 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida.

62. A true and correct copy of the '896 Patent is attached as **Exhibit 4**.

63. The '896 Patent is a continuation of the '359 Patent and teaches and claims technological improvements in addition to those claimed in the '359 Patent.

64. The inventions claimed in the '896 Patent solved the security and fraud resistance problems of conventional peer-to-peer prior art methods in an unconventional way that improves the functioning and performance of systems and methods of exchanging information between wireless devices and that enabled location or proximity information to be readily used in transactions, including in a retail environment.

65. As a non-limiting example, claim 1 of the '896 Patent recites a method using an unconventional combination of a server and wireless devices that improves the functioning and performance of systems and methods used in electronic transactions. Using this unconventional combination, the server identifies information concerning an entity or objected located in proximity to a wireless device. Unlike the routine and conventional practice at the time, the server also participates in elements of a transaction (e.g., receiving selection of one or more goods for

purchase; requesting confirmation of purchase; transmitting a receipt). The inventions recited in the claims of the ’896 Patent are a technological improvement that enable location or proximity information to be used in a secure manner.

66. As another non-limiting example, claim 17 of the ’896 Patent further improves the method of claim 1 in an unconventional manner. Claim 17 requires the server transmitting information to the first wireless device to enable authentication of said second wireless device or an entity associated with said second wireless device. Through use of a server in combination with wireless devices that communicate with both short and long-range signals in the claimed manner, the first wireless device can authenticate the second wireless device, which provides improved security and reduced network traffic. For example, the first wireless device may authenticate a second wireless device without requiring additional communication with the server.

67. Proxicom is the assignee and owner of all rights to enforce U.S. Patent 8,385,913 (“’913 Patent”), entitled “Using a First Wireless Link to Exchange Identification Information Used to Communicate Over a Second Wireless Link,” and has full rights to sue and recover damages from all past, present and future infringements of the ’913 Patent. The ’913 Patent was duly and legally issued by the United States Patent and Trademark Office on February 26, 2013. The inventors of the ’913 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida.

68. A true and correct copy of the ’913 Patent is attached as **Exhibit 5**.

69. The ’913 Patent is a sibling of the ’359 Patent. The ’913 Patent teaches and claims technological improvements focused on embodiments related to multiple wireless devices or identifiers.

70. As a non-limiting example, claim 1 of the ’913 Patent recites a method using an unconventional combination of a server and wireless devices that improves the functioning and performance of systems and methods used in the context of multiple wireless devices and identifiers. The method further improves the functioning of the systems and methods employing this innovative combination by reducing the messaging traffic on the network in an unconventional manner by suppressing the sending of devices identifiers to the server in some cases.

71. The inventions recited in the claims of the ’913 Patent are a technological improvement that enables exchange of information between wireless devices while limiting network traffic.

72. As a non-limiting example, claim 21 of the ’913 Patent further improves the method of claim 1 in an unconventional way. Claim 21 requires that the further information in the first wireless device includes a list of identifiers. This is a technical improvement to claim 1 in that less interaction with the server is required, reducing power consumption of the user’s device. The first wireless device may use or reference the list of identifiers without multiple requests to the server for each separate identifier. Power consumption is an important consideration in mobile applications, particularly when a user has enabled Bluetooth, WiFi, and/or GPS as well as multiple “Apps” in a smartphone while outside the home or office.

73. Proxicom is the assignee and owner of all rights to enforce U.S. Patent 8,369,842 (“’842 Patent”), entitled “Exchanging Identifiers Between Wireless Communication to Determine Further Information to Be Exchanged or Further Services to Be Provided,” and has full rights to sue and recover damages from all past, present and future infringements of the ’842 Patent. The ’842 Patent was duly and legally issued by the United States Patent and Trademark Office on

February 5, 2013. The inventors of the ’842 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida.

74. A true and correct copy of the ’842 Patent is attached as **Exhibit 6**.

75. The ’842 Patent is a continuation of the ’359 Patent and teaches and claims technological improvements that enable location or proximity information to be readily used in a commercial environment.

76. The claims of the ’842 Patent focus on embodiments related to authorizing wireless devices and transactions. The inventions claimed in the ’842 Patent solved the security and fraud resistance problems of conventional peer-to-peer prior art methods in an unconventional way that improves the functioning and performance of systems and methods of exchanging information between wireless devices and that enabled location or proximity information to be readily used in a commercial environment.

77. As a non-limiting example, claim 1 of the ’842 Patent recites a method using an unconventional combination of a server and wireless devices that improves the functioning and performance of systems and methods used to facilitate a transaction, where security is critical. Using this unconventional combination, the server identifies information concerning an entity or object that is located in proximity to a wireless device. The server provides authorization to the first or second wireless device to proceed with a transaction.

78. As another non-limiting example, claim 5 of the ’842 Patent further improves the method of claim 1 in an unconventional way. Claim 5 requires that the server use the identifier to determine authentication information relating to the second wireless device or an entity associated with said second wireless device. Claim 5 provides a further technical improvement that enhances the security of the method, in that the server participates in authentication. The first wireless device

need not attempt to authenticate an identifier without the benefit of a server and the information known to the server (which includes the proximity of the first and second wireless devices that is known to the server).

79. Proxicom is the assignee and owner of all rights to enforce U.S. Patent 9,038,129 ("'129 Patent"), entitled "Enforcing Policies in Wireless Communication Using Exchanged Identities," and has full rights to sue and recover damages from all past, present and future infringements of the '129 Patent. The '129 Patent was duly and legally issued by the United States Patent and Trademark Office on May 19, 2015. The inventors of the '129 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida.

80. A true and correct copy of the '129 Patent is attached as **Exhibit 7**.

81. The '129 Patent is a sibling of the '359 Patent. The '129 Patent teaches and claims additional technological improvements enables secure enforcement of disclosure policies for exchange of information between wireless devices.

82. The claims of the '129 Patent focus on embodiments related to disclosure policies used by the server to manage privacy of information. The conventional and common prior art peer-to-peer methods of exchanging information between wireless devices did not allow for secure enforcement of policies for the disclosure of information, because the wireless devices were required to communicate directly with each other and disclose personal information. The unconventional combination of a server and wireless devices that is claimed by the '129 Patent improves the functioning and performance of systems and methods for exchanging information between wireless devices by allowing a server to enforce disclosure policies, for example, in order to disclose a device's information only to certain other devices.

83. As a non-limiting example, claim 1 of the ’129 Patent recites a method using an unconventional combination of a server and wireless devices in conjunction with two different communication channels. The claimed method improves the functioning and performance of systems and methods used to exchange information between a first and a second wireless device, by using a server to enforce a disclosure policy that is associated with the second wireless device. The first and second wireless devices are near each other, and the first wireless device receives a unique identifier from the second wireless device.

84. In a conventional peer-to-peer system, the first and second wireless devices would communicate directly, limiting the ability of the second device to protect the privacy of its information. In accordance with claim 1, the first wireless device first sends the identifier that is associated with the second device to a server. The server consults a disclosure policy for the second wireless device. The information that the server shares with the first wireless device is controlled by the disclosure policy. Therefore, a policy can be applied to protect the privacy of information for the second wireless device (or for a person or business that is associated with that second wireless device).

85. Proxicom is the assignee and owner of all rights to enforce U.S. Patent 7,936,736 (“’736 Patent”), entitled “Enforcing Policies in Wireless Communication Using Exchanged Identities,” and has full rights to sue and recover damages from all past, present and future infringements of the ’736 Patent. The ’736 Patent was duly and legally issued by the United States Patent and Trademark Office on May 3, 2011. The inventors of the ’736 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida.

86. A true and correct copy of the ’736 Patent is attached as **Exhibit 8**.

87. The ’736 Patent is a sibling of the ’359 Patent. The ’736 Patent teaches and claims additional technological improvements related to disclosure policies used by the server to manage privacy of information.

88. As a non-limiting example, claim 1 of the ’736 Patent recites a method using an unconventional combination of a server and wireless devices that improves the functioning and performance of systems and methods used to exchange information between applications executing on first and a second wireless device. The server retrieves, and then enforces, a disclosure policy that is associated with the second wireless device. The first and second wireless devices are near each other, and the first wireless device receives a unique identifier from the second wireless device. In a conventional peer-to-peer system, the first and second wireless device would communicate directly, limiting the ability of the second device to protect the privacy of its information. In accordance with claim 1, the first wireless device sends the identifier that is associated with the second device to a server. The server consults a disclosure policy for the second wireless device. The information that the server shares with the first wireless device is controlled by the disclosure policy. Therefore, a policy can be applied to protect the privacy of information for the second wireless device (or for a person or business that is associated with that second wireless device).

89. As another non-limiting example, claim 22 of the ’736 Patent further improves the server of claim 1 in an unconventional manner. By returning information to the first wireless device that causes the device to limit re-sending of previously-reported identifiers, claim 22 is a technical improvement that reduces network traffic and power consumption of the first wireless device, both of which are important considerations in a mobile device.

90. Proxicom is the assignee and owner of all rights to enforce U.S. Patent 9,161,164 ("'164 Patent"), entitled "Exchanging Identifiers Between Wireless Communication to Determine Further Information to Be Exchanged or Further Services to Be Provided," and has full rights to sue and recover damages from all past, present and future infringements of the '164 Patent. The '164 Patent was duly and legally issued by the United States Patent and Trademark Office on October 13, 2015. The inventors of the '164 Patent are James Arthur Proctor, Jr. of Indialantic, Florida and James Arthur Proctor, III of Indialantic, Florida.

91. A true and correct copy of the '164 Patent is attached as **Exhibit 9**.

92. The '164 Patent is a continuation of the '359 Patent and teaches and claims additional technological improvements over the prior art. The claims of the '164 Patent, focus on embodiments related to disclosure policies used by the server to manage privacy of information.

93. As a non-limiting example, claim 1 of the '164 Patent recites a system comprising an unconventional combination of a server and wireless devices that improves the functioning and performance of systems and methods used to exchange information between wireless devices by using a server to enforce a disclosure policy for a wireless device. The server sends a second device identifier to a first wireless device as permitted by a disclosure policy. The first wireless device receives proximity beacon information and compares the proximity beacon information to the second device identifier to determine whether the first wireless device is in proximity to a device associated with the second device identifier.

94. By employing the innovative combination of a server with wireless devices in conjunction with a disclosure policy, the invention of claim 1 enables the first wireless device to itself determine its proximity with a second device while still enforcing a disclosure policy. Claim

1 is a technical improvement that reduces network traffic and power consumption on the first wireless device, both of which are beneficial in mobile applications.

95. As another non-limiting example, claim 4 of the ’164 Patent further improves the system of claim 1. By providing for a unique identifier to change from time to time, claim 4 is a technical improvement that enhances security and fraud resistance of the system. For example, a system that incorporates a changing identifier is resistant to copying and “spoofing” of the identifier—even if the identifier were to be copied, it could only be used (if at all) for a limited period of time, rendering systematic spoofing of identifiers for a system impractical or not economically feasible.

96. The inventions recited in the claims of the ’164 Patent are a technological improvement that enables robust determination of proximity, in that a wireless device may itself determine its proximity to other devices.

TARGET’s Use of Proxicom Patented Technology to Increase its Sales

97. Target has more than 1,800 stores in the United States operating under the Target brand name. Target is a prolific user of Proxicom’s patented technology in all of its Target stores, including Target stores within the Middle District of Florida. In the third quarter of 2019, Target reported $18.7 billion dollars in revenue, an increase of 4.7% from third quarter of 2018. Target also reported operating income of more than $1 billion dollars, an increase of 22.3% from third quarter of 2018.

98. Target is the developer of the Target mobile phone application (a/k/a the Target “App”) and makes it available for download, including via the App Store for iOS devices and the Google Play Store for Android devices. The App Store for iOS devices lists Target as the developer and seller of the Target App, and also indicates the copyright as “2019 Target

Corporation." The Google Play store lists Target as the developer contact for the Target App and also indicates that the Target App is "offered by" Target Corporation.

99. The Target App is a key part of Target's marketing and sales efforts. The Target App has been downloaded more than ten million times from the Google Play store and is listed in the top 20 shopping applications on the App store for iOS devices. Target heavily promotes the features of the Target App that integrate with its physical stores.

100. The Target App, by design, interacts with Target Bluetooth beacons in Target's stores in order to determine a consumer's in-store location. In 2015, Target began replacing the light fixtures in its stores with light-emitting diode (LED) fixtures (also known as luminaires) provided by Acuity Brands. These new light fixtures include not only LED lights, but also Bluetooth beacons (i.e., Target Bluetooth beacons) that are powered by the fixture. Target configures the Target Bluetooth beacons and controls their operation.

101. As early as September 2017, Target announced its plans to upgrade its Target App to provide indoor proximity functionality for the consumer:

> A few weeks ago, we shared some exciting news about Target's popular Cartwheel savings program becoming part of the Target mobile app. It's another example of Target blending digital with physical stores to make shopping easier, more convenient and more fun.
>
> ***Now, Target is further upping its app game with beacon and Bluetooth technology that shows your location on the app's map as you move throughout the store. The technology — think of it as GPS for your shopping cart — will be live in about half of Target's stores in time for the holidays. And as guests use the in-store location technology to shop, the app will also display nearby Cartwheel deals.***
>
> "Now you'll never have to miss out on an opportunity to save," says Target's chief information and digital officer Mike McNamara. "This

> promises to make it easier than ever to find what you're looking for, so you can fill up your cart and get on your way."

Exhibit 12 at 1 (available at https://corporate.target.com/article/2017/09/target-app-mike-mcnamara) (emphasis added).

102. Currently, all (or substantially all) Target stores, including those located in Florida and in this judicial district, are equipped with Target Bluetooth beacons that cover essentially all the areas in which consumers shop.

103. Target began testing its Target Circle loyalty program in 2017 at a limited number of stores, including Target stores in Dallas-Fort Worth, and later, Charlotte, Denver, Indianapolis, Kansas City, and Phoenix.

104. In October 2019, Target launched its Target Circle loyalty program nationwide as a rebranded version of Cartwheel. Target, consistent with its September 2017 announcement, used the Target App to offer nearby Target Circle offers to consumers at its stores.

105. On Target's November 20, 2019 third quarter earnings conference call, Target reported that:

> And of course, the fourth quarter will benefit from Target Circle, our new loyalty program that launched nationwide last month. Even though the program is brand new, Target Circle already has more than 35 million members, making it America's fastest growing loyalty program. During an 18-month test period, guests enrolled in Target Circle save more, shop more frequently and spend 2% to 5% more than guests who weren't in the program.

Exhibit 13 (Target Corp Q3 2019 Earnings Call (Nov. 20, 2019), prepared remarks of Brian Cornwell, Board Chairman and CEO).

106. Target has heavily promoted the nationwide launch of Target Circle. Target, in fact, specifically reported increased marketing expenses due to the October 2019 launch of Target Circle on its 3Q 2019 earnings call.

107. Target instructs and encourages its consumers to install the Target App on their mobile devices and rewards them for installing the Target App by, among other things, providing in-store services and information.

108. Target conditions consumers' receipt of benefits that are available via the Target App on consumers' downloading, installing, and using the Target App and associated software on their devices (e.g., phone or tablets). For example, consumers must download and install the Target App in order to receive map-based information about the in-store location of products offered by Target. As another example, consumers must download and install the Target App in order to receive information regarding certain special offers (e.g., Target Circle offers) via the Target App. Exemplary features of the Target App are described further below.

109. Target also establishes the manner or timing of consumers' use of the Target App. For instance, Target configures the Target App with menu structures and buttons that establish how and when a consumer uses the Target App. As one example, a "Cartwheel Offers Near You" (now "Target Circle Near You") feature becomes available to the consumer via the Target App when the consumer is detected as being at a Target store.

110. As another example, for checkout and payment features of the Target App, Target establishes the manner and timing of the consumer's use of those features. The consumer must log into the Target App in order to use the "Wallet" feature, in which Target Circle Offers may be

used when the consumer purchases a product, and in-store payment features are available. The Target App Wallet feature allows the consumer to display a bar code that is scanned by a Target employee for in-store check-out. The consumer must associate a RedCard account or other payment method with the barcode in order to pay via the barcode at the Target store during checkout. Target establishes the manner and timing in which these features may be used, for example, when during in-store check-out that barcode scanning is available.

111. Target also conditions the benefit of using Target Circle Offers via the Target App to conveniently obtain discounts or promotions on the consumer's use of the Target App checkout feature, including, for in-store checkout, displaying the barcode via the Target App. The consumer must use the Target App features in the way designed by Target in order to pay via the Target App. The consumer may not leave the Target store with goods unless the consumer purchases the goods, and the consumer must use one of the processes that Target provides for checkout and purchase of goods sold in Target stores.

112. Alternative or additionally, Target forms a joint enterprise with its customers (the "Target-Consumer Joint Enterprise"). Target and consumers (who have installed the Target App, are Target Circle members, and shop in Target stores) have an agreement, express or implied, that Target will sell and consumers will purchase goods in Target's stores. Target and these consumers have a common purpose to provide consumers with goods for purchase. Target and these consumers have a community of pecuniary interest for that purpose, in that Target profits from the sale of goods, and consumers purchase Target's goods at reasonable prices, including via Target Circle Offers which provide discounts and promotions that encourage consumers to shop at Target. Target and these consumers have an equal right to a voice in the direction of the enterprise which gives an equal right of control. Both Target and consumers must continue to participate (Target

by offering goods, and consumers by shopping for and purchasing goods) in order for the joint enterprise to continue. Target considers the input its consumers in determining its store location, layout, inventory, and sales and promotions practices, in order to provide desirable goods at prices at which consumers are willing to purchase. Consumers provide feedback and input to Target, including via the manner in which consumers shop and purchase from Target.

113. Once a consumer has installed the Target App (which includes associated software) and activates Bluetooth on their device, the consumer's device interacts with the Target Bluetooth beacons without further action by the consumer.

114. The Target Bluetooth beacons that are installed in the light fixtures in Target's stores transmit beacon identifiers via Bluetooth protocol and interact with devices (for example, consumer's iPhones) on which the Target App is installed in an infringing manner.

115. Target also maintains, owns, operates or controls one or more servers that Target configures to interact with devices on which the Target App is installed (the "Target Server(s)"). Alternatively, on information and belief, Target is responsible for the operation and actions of the Target Server(s) because Target directs or controls their operation (for example, by employing an agent to configure and operate the Target Server(s) on Target's behalf). Alternatively, or additionally, Target forms a joint enterprise with an entity that operates the Target servers, including, but not limited to, an entity associated with Acuity Brands (further information regarding such a joint enterprise alternative is provided at the end of this section in Paragraphs 132-134) (the "Server Joint Enterprise"). For example, software designed and distributed by Target causes devices on which the Target App has been installed to communicate with Server(s) operated by Acuity Brands (or its agent) on behalf of Target, and Target is responsible for the

operation and actions of these servers. "Target Server(s)" include these server(s) that are operated by Acuity Brands or its agent on behalf of Target.

116. Software (including libraries) associated with the Target App is triggered by receipt of beacon identifier information received from Target Bluetooth beacons to cause the device on which the Target App is installed to communicate with the Target Server(s). As a result of receiving signals from Target Bluetooth beacons, devices on which the Target App is installed communicate with Target Server(s)., e.g., servers operated by Acuity Brands on behalf of Target. In response, Target Server(s) provide information to the devices on which the Target App is installed.

117. As a result of the interaction (in accordance with Target's design and implementation) among the Target Bluetooth beacons, Target Server(s), and the consumer's device on which the Target App is installed, Target Servers and also the consumer's device are provided with a real-time in-store location of the consumer's device. For example, at least when a consumer brings their device (e.g., iPhone) with Bluetooth services enabled and the Target App installed into a Target store, the consumer's device provides Target Beacon identifier information to Target Server(s) and, as a result, the consumer's device is provided with information related to the Target store, including location information and, on information and belief, a listing of beacon identifiers for the Target Bluetooth beacons for that Target store.

118. Target uses the information provided by Target Server(s) to consumer devices on which the Target App and associated software is installed to provide consumers in its stores with cutting-edge features increase Target's sales and profits. Target also uses consumer location information to improve its marketing and sales efforts.

119. More specifically, for instance, Target provides live maps showing the consumer's in-store location via the Target App. The Target App displays the consumer's current location as a blue dot on a map of the Target store in which the consumer is shopping. Target causes its Bluetooth beacons to broadcast signals to a consumer's device that cause the blue dot representing the consumer's location to move in real time as the consumer moves throughout the Target store. Target uses this real-time indoor location functionality is in various ways.

120. For example, the Target App includes a list feature that allows the consumer to add products to a shopping list. The Target App will display the physical location of the items on the consumer's shopping list in the store, as well as the consumer's current in-store location, to guide the consumer to the items. Target's release notes for version 9.43.0 (Apr. 26, 2019) of the Target App explains that Target uses the in-store location of the consumer's device to present the list in the most efficient manner for the consumer:

> By popular demand, you can now sort your shopping list by aisle. Smart Sort will give you the most efficient route through the store, ***even reordering based on your location***. Get in, out and on with your day.

Exhibit 14 at 4 (available at https://apps.apple.com/us/app/target/id297430070, select "version history", scroll to text for version 9.43.0, April 26, 2019) (emphasis added).

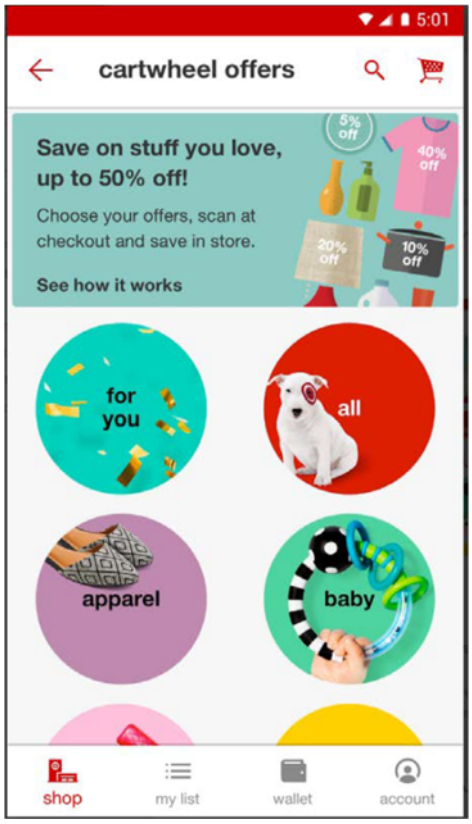
121. The screenshot below, taken from the Apple App Store preview for the Target App, illustrates this feature:

https://apps.apple.com/us/app/target/id297430070 (Target App Version 9.54.1) (last visited Oct. 2, 2019).

122. As another example, Target offered a "Cartwheel Offers Near You" feature via its Target App (and currently offers a similar "Target Circle Near You" feature). In contrast to a "Cartwheel Offers" / "Target Circle Offers" feature that is available at all times regardless of a consumer's location, the "Cartwheel Offers Near You" / "Target Circle Near You" feature only becomes available when the consumer's device is at a Target store. The Offers Near You feature displays special discounts available on products that are currently physically near the consumer within the Target store. The consumer may, e.g., select one or more of these products, scan the products, or purchase the products either by using the Target App in-store as part of checkout, or entirely online via the Target App.

123. As yet another example, if the consumer searches for a product using the Target App while in a Target store, the Target App can display an in-store map showing the consumer's location (as a blue dot) and the product that the consumer has selected as a red dot to assist the consumer in locating the item in the Target store.

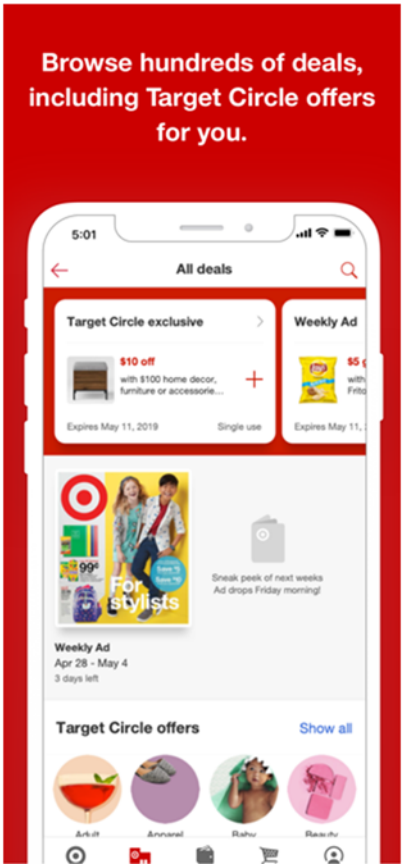
124. Target provides personalized offers to consumers via the Target App. For instance, Target provided Cartwheel offers "For You" via the Target App (and currently provides Target Circle offers "For You") that are, at least when the consumer has logged into the Target App, personalized offers. Such offers appear directly on the consumer's device on which the Target App is installed, as in the screenshot below taken from the Google Play Store for the Target App:



125. Target offers personalized offers via Target Circle through the Target App. Target reported its plan to incorporate Cartwheel offers into Target Circle in October 2019. *See*, *e.g.*, https://corporate.target.com/article/2019/09/target-circle-nationwide (last visited Oct. 2, 2019).

Target currently provides Target Circle offers to consumers at its Target stores. The Target Circle program includes "all kinds of personalized offers, fun surprises and amazing savings." *Id*. Target reports that Target Circle provides "personalized perks," and that Target will "serve up special surprises and savings, tailored just for you" including "big savings on the categories you shop most often." *Id.* Target further explains that "[y]ou never know what rewards are in store." *Id*.

126. For example, a screenshot of the Target App posted by Target on the Apple App Store shows offers "for you," and also an exclusive Target Circle offer:



See https://apps.apple.com/us/app/target/id297430070#?platform=iphone.

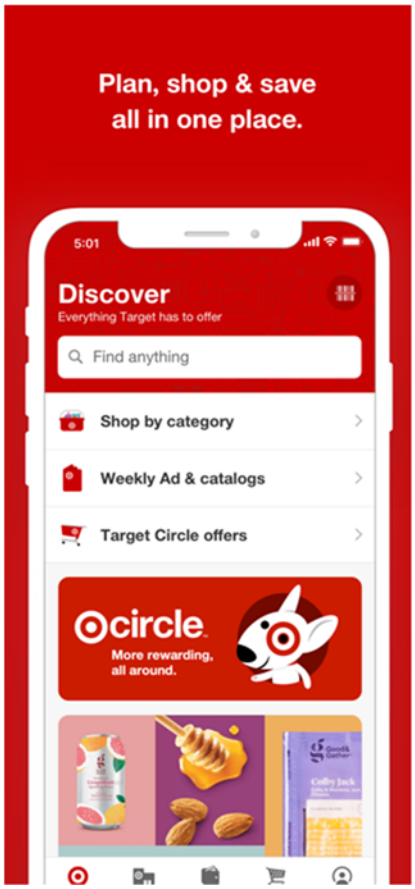
127. Target's website explained "Cartwheel deals" (now branded as Target Circle deals) are targeted "just for you":

Get personalized perks.

This part's extra fun! We'll serve up special surprises and savings, tailored just for you. Think all the Cartwheel deals you love (more on that below), big savings on the categories you shop most often and a special birthday treat. You never know what rewards are in store.

See Exhibit 15 (web page entitled *Target Circle's Rolling Out Nationwide, Making Your Target Run Even More Rewarding for You AND Your Community*, dated Sept 9, 2019).

Target Circle offers are prominently featured in Target's advertising and communications to consumers. For example, as shown on the Apple App store preview for the Target App, "Target Circle offers" are one of the three main options available, and the first advertisement is for Target Circle:



See Exhibit 16, available at https://apps.apple.com/us/app/target/id297430070#?platform=iphone.

128. Target's privacy policy also explains how Target uses its Bluetooth beacons to provide benefits to consumers in its stores: "Mobile Location Information[:] If you use a mobile device, your device may share location information (when you enable location services) with our websites, mobile applications, services, or our service providers. We use this information to improve our services, and provide you more relevant and personalized advertisements, services, and promotions.…in-store location through the use of our phone's blue tooth signal, LED light chip technologies or other technologies will permit Target to find nearby products for you, get you real-time deals, auto-sort your shopping list and more.") *See* https://www.target.com/c/target-privacy-policy/-/N-4sr7p.

129. Target's light fixtures that are provided by Acuity Brands, for example, include not only Bluetooth beacons, but LED light beacons that can operate in an equivalent manner to Bluetooth beacons. LED light beacons can transmit light pluses to communicate with smartphone cameras that detect the light pulses. Target's use of these LED light beacons would infringe in essentially the same manner as Target's use of Target Bluetooth beacons.

130. Target's use of Proxicom's patented technology has improved the customer experience within Target stores, provided Target with useful information regarding consumer behavior in its stores, and has increased Target's sales and profits.

131. Target's infringement has continued unabated since the filing of this suit. Target has had knowledge of U.S. Patent Nos. 8,090,359; 8,116,749; 8,374,592; 8,385,896; 8,385,913; 8,369,842; 9,038,129 and 7,936,736 since at least the date the original Complaint was served on October 4, 2019. Despite Target's knowledge of these patents and its constructive knowledge of its infringing actions, Target thereafter continued to infringe these patents. Defendant's infringement as to each of these eight patents has been and continues to be willful since at least service of the original Complaint.

132. To the extent Target's Server(s) are, alternatively, operated through a joint enterprise, on information and belief, Target forms a joint enterprise with the entity that operates the Target Server(s) because Target and the entity (e.g., Acuity Brands or a related entity and/or other Bluetooth beacon/server providers) have an agreement, express or implied, regarding the purchase, installation, configuration, and operation of a system including Target Bluetooth beacons (e.g., provided by Acuity Brands to Target) and devices on which the Target App and related software (e.g., libraries) is installed and configured to cause the devices to communicate with the Target Bluetooth beacons and Target Server(s) in order to provide information and

services to Target's consumers. Further, Target and the entity share a common purpose of operating this system and its components in order to, among other things: provide consumers with information related to Target and Target stores; gather information regarding consumer shopping patterns; and increase the sales and profits of Target and its vendor(s) and partners.

133. Further, on information and belief, Target and Acuity Brands and/or other Bluetooth beacon/server providers share a community of pecuniary interests in their common purposes in that, for example, the greater the utility of the system to Target and consumers, the greater the sales and profit to both Target and the entity that operates Target Server(s), including through increased server activity and business.

134. Further, on information and belief, Target and Acuity Brands and/or other Bluetooth beacon/server providers have an equal right to a voice in the direction of the enterprise and an equal right of control. For example, the Target Bluetooth beacons (installed in Target stores and controlled and configured by Target), the Target App (and associated software such as libraries) and Target Server(s) are all necessary for the operation of a system that provides benefits to Target and consumers, such as by providing location-based information via the Target App. While Target configures the Target Bluetooth beacons and the Target App to communicate with the Target Server(s), the entity that operates the Target Server(s) configures them to accept messages from devices on which the Target App is installed. As each version of software (e.g., Target App versions such as android app version 6.52.1 that is listed as updated on Sept. 6, 2019) is developed and released, Target and the entity cooperate to ensure that the Target Server(s) continue to work with the Target Bluetooth beacons and devices on which the Target App is installed. Further, either Target or the entity operating the Target Server(s) may cause, if they

wish, the Target Server(s) to not receive or send messages to the devices on which the Target App is installed.

COUNT I

(Infringement of the ’359 Patent)

135. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 48 and 97 through 134 as though fully set forth herein.

136. Target directly infringes at least claims 1-5, 9, 14-18, 22, 27-28, 31, 35-43, 48-49 and 51-55 of the ’359 Patent, literally and/or under the doctrine of equivalents. As a non-limiting example, Target directly infringes claim 1 because all the steps of method claim 1 are performed by or attributable to Target.

137. Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the ’359 Patent since at least service of the original Complaint.

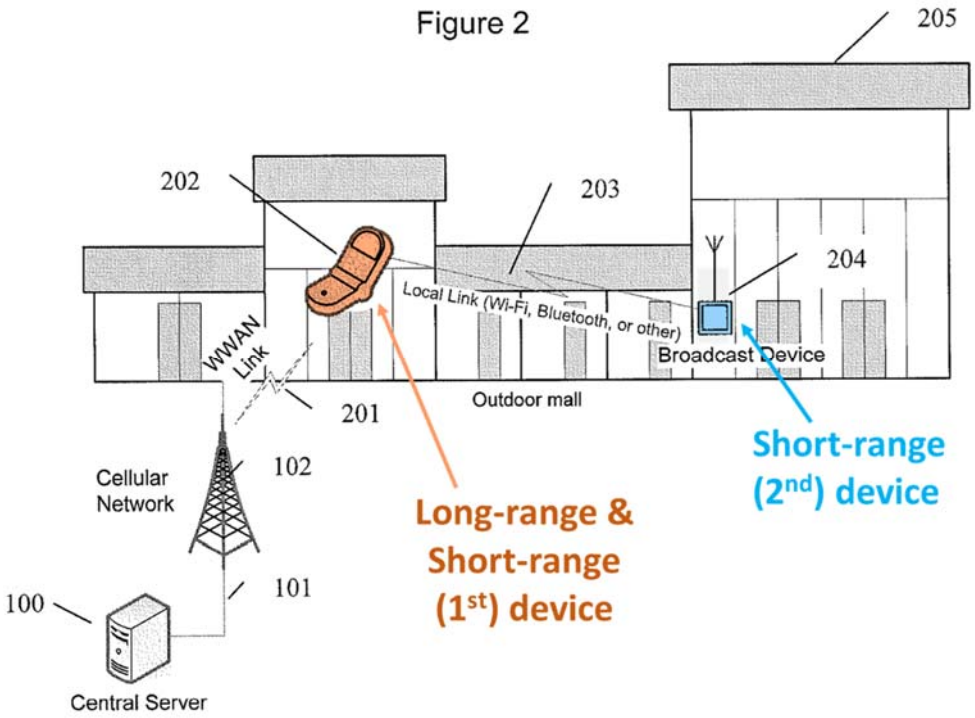
138. Target maintains and controls lighting fixtures in its stores within the Middle District of Florida that include Bluetooth beacons (the “Target Bluetooth beacons”). Target maintains and controls these Target Bluetooth beacons at its retail stores, including stores within the Middle District of Florida. Target configures and controls the Target Bluetooth beacons and causes these beacons to transmit signals to devices on which the Target App is installed. Target also causes the devices on which the Target App is installed to communicate with Target Server(s), based on instructions and/or control signals by software related to the Target App that is provided by Target when consumers download the Target App.

SCT Exhibit 2022
IPR2026-00098

139. Target thereby causes the Target Bluetooth beacon(s), Target Server(s), and devices on which the Target App is installed to perform all of the steps of method claim 1. Target therefore directly infringes claim 1.

140. To the extent the preamble of claim 1 of the ’359 Patent is limiting, Target maintains and/or controls a central server—i.e., the Target Server(s)—to exchange information between one or more wireless devices.

141. A device on which the Target app is installed is the “first wireless device” of claim 1. A Target Bluetooth beacon is the “second device” of the claim. Using the annotated version of Figure 2 of the ’359 Patent as an illustration, the device on which the Target App is installed is like the orange-colored device (202) on the left-hand side of the diagram, which can communicate by long range (e.g., cellular) and a short-range, (e.g., Bluetooth). The Target Bluetooth beacon is like the blue-colored device (204) on the right-hand side of the diagram that is a broadcast device that broadcasts a Bluetooth signal. The Target Server(s) are like the Central Server (100) of Figure 2 of the ’359 Patent.



142. The Target Server(s) receive second device (Target Bluetooth beacon) identifier information from a first wireless device (the device on which the Target App is installed). Devices on which the Target App is installed, for example consumers' mobile devices (e.g., iOS devices such as iPhones), are specifically designed and configured by Target (via the software provided with the Target App) to send, and do send, second identifier information to the central server (i.e., Target Server(s)). For example, when a consumer first brings their device on which the Target App is installed into a Target Store, the device, in accordance with instructions and control signals generated by software provided with the Target App, sends Target Bluetooth beacon identifier information to Target Server(s) without additional intervention by the consumer.

143. The second device identifier information is collected by the first wireless device (device on which the Target App is installed) from a second device (Target Bluetooth beacon). The Target Bluetooth beacon provides its identifier information to the first wireless device using Bluetooth, which is short range communication without the use of wires.

144. Mobile devices on which the Target App is installed, as a result of instructions from Target via the software provided with the Target App, collect the second device identifier information from Target Bluetooth beacons. The Target Bluetooth beacons transmit the second device identifier information using Bluetooth signals. Mobile devices on which the Target App is installed receive the second device identifier information via Bluetooth signals and, as a result of instructions performed by the software related to the Target App that is resident on the devices, transmit the second device identifier to the central server (i.e., Target Server(s)).

145. The central server (i.e., Target Server(s)) uses the second device identifier information to determine information concerning an entity or object located in proximity to the second device. The central server uses the second device identifier information to determine, for example, information about the Target store in which the consumer's device is currently present. Alternatively, the Target Server(s) use the second device identifier information to determine information about products in proximity to the Target Bluetooth beacon that provided the second device identifier information.

146. After receiving the Target Bluetooth beacon identifier information from the device on which the Target App is installed, the Target Server(s) take action to deliver information or a service to the first wireless device based at least in part upon the second device identifier information. For example, the central server may deliver information regarding the identifiers and in-store locations of Target Bluetooth beacons within the Target store. As another example, the Target Server(s) send the consumer's location in the Target store and information related to products near the consumer's location to the consumer's mobile device on which the Target App is installed in response to the information received from the consumer's mobile device.

147. The Target Server(s) deliver information based at least in part on Target Bluetooth beacon identifier and information representing a reward for an entity associated with the first wireless device's participation in a loyalty program. For example, Target provides its consumers with (i) location information for the Target store, including the location of the consumers' devices; (ii) information about "Cartwheel Near You" (or "Target Circle Near You") offers that are available near the consumer, and/or (iii) information regarding the products that are sold in the particular store that the consumer is visiting, including the location of certain products in relation to the current location of the consumers, because consumers have installed and logged into the Target App.

148. As another non-limiting example, Target directly infringes claim 2 because the information or service delivered to the first wireless device is associated with a Target store that is located in proximity to the second device (the Target Bluetooth beacon).

149. As another non-limiting example, Target directly infringes claim 3. The Target Server(s) send information related to product or services, and/or information related to e-coupons, to the first wireless device, for example a product associated with a Target Circle offer.

150. As another non-limiting example, Target directly infringes claim 4. The Target Circle offers are customized based on the identity of the consumer (Target Circle account holder).

151. As another non-limiting example, Target directly infringes claim 5. The Target Server(s), upon detecting the proximity of at least some Target Bluetooth beacons, reports the identifier of the Target Bluetooth beacon to the Central Server(s) using WiFi or cellular, which is a wide area wireless network. The Target Server(s) provide current content, such as information regarding products near the Target Bluetooth beacon, to the device on which the Target App is installed.

152. As another non-limiting example, Target directly infringes claim 9. The consumer may purchase a product that is the subject of a Target Circle offer using the Target App.

153. As another non-limiting example, Target directly infringes claim 14 because Target makes, uses or puts into service the claimed apparatus.

154. To the extent the preamble is limiting, Target Server(s) are a server for exchanging information between one or more wireless devices.

155. The Target Server(s) must include a receiver to receive information from the first wireless device. The Target Server(s) receive a Target Bluetooth beacon identifier information from the device on which the Target App is installed. The Target Bluetooth beacon sends identifier information via Bluetooth, which is a short range link.

156. Further, the Target Server(s) include a storage device for storing the Target Beacon identifier information and identity or related information concerning an entity (e.g., Target) located in proximity to the Target Bluetooth beacon.

157. The Target Server(s) include a transmitter for delivering at least information to the device on which the Target App is installed, for example, Target Server(s) may deliver information regarding the location of Target Bluetooth beacons within the Target store. As another example, the Target Server(s) send the consumer's location in the Target store and information related to products near the consumer's location to the consumer's device on which the Target App is installed in response to the information received from the consumer's mobile device.

158. Target Server(s) transmit information to the device on which the Target App is installed based at least on part on the Target Bluetooth beacon identifier information because the information is related to the in-store location of the Target Bluetooth beacon that is derived from its identifier. The information provided by the Target Server(s) also represents a reward for the

consumer's participation in the Target Cartwheel or Target circle program. And the consumer is associated with the consumer's device on which the Target App is installed. For example, Target provides its consumers with (i) location information for the Target store, including the location of the consumers' devices; (ii) information about "Cartwheel Near You" (or "Target Circle Near You") offers that are available near the consumer, and/or (iii) information regarding particular products that are sold in the store that the consumer is visiting, including the location of certain products in relation to the current location of the consumers, because consumers have installed and logged into the Target App.

159. As another non-limiting example, Target directly infringes claim 15. The information delivered to the device on which the Target App is installed is associated with, e.g., other Target Bluetooth beacons, or alternatively products, that are located in proximity to the Target Bluetooth beacon.

160. As another non-limiting example, Target directly infringes claim 16. The Target Sever(s) deliver information relating to products in the Target store and/or information related to Target Circle offers, to the device on which the Target App is installed.

161. As another non-limiting example, Target directly infringes claim 17. The Target Server(s) deliver information to the device on which the Target App is installed that comprises Target Circle offers that are customized based on the identity of the user (Target Circle account holder) and/or the past purchasing practices or previous requests of that user.

162. As another non-limiting example, Target directly infringes claim 18. The Target Server(s), upon detecting the proximity of at least some Target Bluetooth beacons, reports the identifier of the Target Bluetooth beacon to the Central Server(s) using WiFi or Cellular, which is a wide area wireless network. The Target Server(s) provide current content, such as information

regarding products near the Target Bluetooth beacon, to the device on which the Target App is installed.

163. As another non-limiting example, Target directly infringes claim 22. The Target Circle account holder may purchase a good that is the subject of a Target Circle offer using the Target App. The merchant account is a Target account, which is associated with the Target Bluetooth beacon that is installed in the Target store. The consumer account is associated with the consumer's device on which the Target App is installed. The Target Server(s) provide a confirmation to, for example, the consumer's Target Circle account, and also to the Target merchant account whereby Target maintains records of its sales activity. The Target App includes functionality whereby the Target App displays a barcode that is scanned at the Target store as part of the checkout process. The consumer may pay Target (including via a Target RedCard account) via presenting the barcode via the Target App. Unless the consumer pays for the goods, the consumer may not leave the Target store with the goods. The Target Server(s) receive customer confirmation of receipt of good(s) via the Target App barcode scan (which may also provide payment if the consumer has configured that option), thereby completing a transaction.

164. Alternatively, the consumer may purchase goods (including goods for which Target has made a Target Circle Offer available) via the Drive Up feature, whereby the consumer receives the goods at their vehicle and acknowledges receipt of the goods via the Target App—at which point the Target Server(s) receive confirmation of receipt of goods, thereby completing a transaction.

165. As another non-limiting example, Target directly infringes claim 27. Target Circle offers are customized based on the identity of the Target Circle account holder and their past

interactions with Target, including, on information and belief, a history of past detections of device identifier information.

166. As another non-limiting example, Target directly infringes claim 28. Target Circle offers are customized based on the identity of the Target Circle account holder and their past interactions with Target, including past purchasing behavior.

167. As another non-limiting example, Target directly infringes claim 31. Target Circle offers are customized based on the identity of the Target Circle account holder and their past interactions with Target, including, on information and belief, a history of past detections of device identifier information. The Target Server(s), on information and belief, maintain a list associated with the user's Target Circle Account that includes past detections of device identifier information.

168. As another non-limiting example, Target directly infringes claim 35. Target Server(s) transmit images of products, and images related to Target, to the device on which the Target App is installed.

169. As another non-limiting example, Target directly infringes claim 36. The Target Server(s) provide Target Circle offers, which can be saved by the user using the Target App to the user's electronic wallet in the Target App.

170. As another non-limiting example, Target directly infringes claim 37. The Target Server(s) provide a list of goods that comprises goods for which Target Circle offers are available. The user may select a particular good from the list and purchase the good using the Target App.

171. As another non-limiting example, Target directly infringes claim 38. The Target Server(s) request payment information when the user uses the Target App to purchase a good.

172. As another non-limiting example, Target directly infringes claim 39. The Target Server(s) deliver confirmation of payment when the user uses the Target App to purchase a good.

173. As another non-limiting example, Target directly infringes claim 40. The Target Server(s) deliver an electronic receipt when the user uses the Target App to purchase a good.

174. As another non-limiting example, Target directly infringes claim 41. The Target Server(s) deliver confirmation of payment when the user uses the Target App to purchase a good.

175. As another non-limiting example, Target directly infringes claim 42. The Target Server(s) verify the authenticity or identify of the user when the user logs into the Target App.

176. As another non-limiting example, Target directly infringes claim 43. The Target Server(s) deliver to the device on which the Target App is installed a list of goods (goods that have a Target Circle offer available for the user). The user can select and purchase one of those goods.

177. As another non-limiting example, Target directly infringes claim 48. The central server (e.g., Target server) notifies the first wireless device of the presence of at least an object associated with or in proximity to the second wireless device, e.g., a product for which a Target Circle offer is available.

178. As another non-limiting example, Target directly infringes claim 49. The device on which the Target App is installed communicates with the Target Server(s) via WiFi or cellular.

179. As another non-limiting example, Target directly infringes claim 51. The Target Server(s) associate a unique account (e.g., Target account) or record identifier (e.g., for the particular Target Bluetooth beacon) with the Target Bluetooth beacon identifier. For example, for the alternative in which Acuity Brands or its agents operates Target Server(s) on behalf of Target, Acuity Brands will maintain an account for Target to distinguish Target information from other companies' information.

180. As another non-limiting example, Target directly infringes claim 52. Target employs Target Bluetooth beacons that are broadcast-only Bluetooth beacon devices that transmit a Bluetooth signal, but do not receive signals from the first wireless device.

181. As another non-limiting example, Target directly infringes claim 53. If the first wireless device (the device on which the Target App is installed) has already received the second wireless device identifier (the Target Bluetooth beacon identifier) and then requested and received list of Target Bluetooth beacon identifiers for the associated Target store, the device on which the Target App is installed will not repeat the process when it next receives the same Target Bluetooth beacon identifier.

182. As another non-limiting example, Target directly infringes claim 54. The device on which the Target App is installed communicates with the Central Server(s) via wide area cellular technology. The Target Bluetooth beacon, when operating as configured by Target, is a broadcast-only device. The Target Bluetooth beacon need not receive or interpret signals from the device on which the Target App is installed.

183. As another non-limiting example, Target directly infringes claim 55. The Target Circle offer(s) are customized based at least in part on the user's identity, and which Target Circle offers are provided is also based in part on which goods are in proximity to the Target Bluetooth beacon.

184. Target has therefore infringed and is liable to Proxicom for directly infringing one or more claims of the '359 Patent pursuant to 35 U.S.C. § 271(a).

185. As a result of Target's infringement of the '359 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for

Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

COUNT II

(Infringement of the '749 Patent)

186. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 30, 50 through 54, and 97 through 134 as though fully set forth herein.

187. Target directly infringes at least claims 1-3, 13-14 and 17-18 of the '749 Patent, literally and/or under the doctrine of equivalents. As a non-limiting example, Target configures and controls the Target Bluetooth beacons and causes the Target Bluetooth beacons (including those at its stores located within the Middle District of Florida), in conjunction with devices on which the Target App has been installed (which are under the control of software related to the Target App) and Target Server(s), to perform all the steps of method claim 1 of the '749 Patent. Target therefore directly infringes at least claim 1 of the '749 Patent because all the steps of method claim 1 are performed by or attributable to Target.

188. Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the '749 Patent since at least service of the original Complaint.

189. To the extent the preamble of claim 1 of the '749 Patent is limiting, Target employs, by configuring and controlling the Target Bluetooth beacons to communicate with devices on which the Target App has been installed, a method for exchanging information between one or more applications executed on at least a first wireless device and a second wireless device. Target Bluetooth beacon signals cause devices on which the Target App is installed to communicate with Target Server(s), without intervention by the user.

SCT Exhibit 2022
IPR2026-00098

190. A first wireless device (e.g., the consumer's device such as an iPhone on which the Target App is installed) provides initial identification information to Target Server(s). The Target App or related software installed on the consumer's mobile device causes the device to provide initial identification information to Target Server(s) without user intervention.

191. The initial identification information is collected by the first wireless device from a second wireless device (e.g., Target Bluetooth beacon) via a first, direct, short-range local wireless link (e.g., Bluetooth signals) between the second and first wireless device. The initial identification information is collected by the device on which the Target App is installed from a Target beacon using Bluetooth signals.

192. The initial identification information is associated at the central server (i.e., Target Server(s)) with the identity of a user or entity associated with the second wireless device. The central server associates the initial identification information with, e.g., a particular Target store.

193. The initial identification information is provided to the Target Server(s) by the first wireless device over a second wireless link. The consumer's mobile device on which the Target App is installed transmits the initial identification information to the Target Server(s) using a Wi-Fi network or a cellular wireless network.

194. The second wireless device (i.e., Target Bluetooth beacon), upon an occurrence of a predetermined event coordinated with the central server, within a specific application on the second wireless device, provides modified identification information over the first, direct, short-range local wireless link in place of the initial identification information, such that the modified identification information is associated at the central server with the identity of a user or entity associated with the second device. On information and belief, from time to time the identifier information transmitted by Target Bluetooth beacons is changed in a manner the Target Server(s)

continue to associate the changed identifier information with Target. For example, Target Server(s) continue to associate indoor locations for particular Target Bluetooth beacons within Target Stores(s) with Target (and with a particular Target store).

195. The modified identification information is collected at the first wireless device. After the Target Bluetooth beacon identification information is changed, the changed identification information is collected by the first wireless device as a result of instructions provided by the Target App or related software installed on consumers' mobile devices.

196. As another non-limiting example, Target directly infringes claim 2. The identifier that is broadcast by the Target Bluetooth beacons changes, on information on belief, based on elapsed time.

197. As another non-limiting example, Target directly infringes claim 3. The change of identifier that is broadcast by the Target Bluetooth beacon is affected by a rule-based generation local to the application. The Target Bluetooth beacon employs a rule in order to change the beacon identifier.

198. As another non-limiting example, Target directly infringes claim 13. The Target beacon identifier is changed to protect the privacy of the identity of the Target store that is associated with the Target beacon. If the Target beacon identifier were not changed, third parties, for example, could scan the beacon identifiers and learn which Target beacon identifiers are associated with which Target stores.

199. As another non-limiting example, Target directly infringes claim 14. If the central server receives a Target Bluetooth beacon identifier that is not current, the central server rejects and/or does not process the request.

200. As another non-limiting example, Target directly infringes claim 17. For example, if a user re-visits the same Target store after the Target beacon identifiers have changed, the user's device on which the Target App is installed will receive Target beacon identifiers that do not match its list of previously-received Target beacon identifiers. The device will then send a newly-received Target beacon identifier to the Target Server(s).

201. As another non-limiting example, Target directly infringes claim 18. If an "old" Target Bluetooth beacon identifier is sent to the Target Server(s), it will be handled differently, e.g., rejected or ignored.

202. Target has therefore infringed and is liable to Proxicom for directly infringing one or more claims of the '749 Patent pursuant to 35 U.S.C. § 271(a).

203. As a result of Target's infringement of the '749 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

COUNT III

(Infringement of the '592 Patent)

204. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 30, 55 through 60, and 97 through 134 as though fully set forth herein.

205. Target directly infringes at least claims 19-20, 22-23, 25-26, and 28 of the '592 Patent, literally and/or under the doctrine of equivalents. As a non-limiting example, Target directly infringes claim 19 because all the steps of method claim 19 are performed by or attributable to Target.

SCT Exhibit 2022
IPR2026-00098

206. Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the '592 Patent since at least service of the original Complaint.

207. To the extent the preamble of claim 19 of the ’592 Patent is limiting, Target employs a method for a server to exchange information with one or more wireless devices. Through the Target Server(s), Target performs a method of communicating information from Target Bluetooth beacons to consumers’ mobile devices on which the Target App is installed.

208. The Target Server(s) receive identifier information from a first wireless device (e.g., a consumer’s iPhone on which the Target App has been installed) using a wide area wireless network, the identifier information having been provided to the first wireless device from a second wireless device (e.g., Target Bluetooth beacons) using short range wireless communication. The Target Server(s) receive identifier information from Target consumers’ mobile devices over a Wi-Fi network or a wireless cellular network, the identifier information having been provided to the consumers’ mobile devices from a Target Bluetooth beacon using, e.g., Bluetooth. Receipt of the identifier information and communication to the Target Server(s) is mediated by the Target App or related software installed on consumers’ mobile devices.

209. The Target Server(s) use the identifier information to determine information concerning an entity or object located in proximity to the second wireless device. The Target Server(s) uses the identifier information to identify the Target Bluetooth beacon as, e.g., within a particular Target store or at a particular location within a Target store.

210. The Target Server(s) deliver information to the first wireless device based at least in part upon the identifier information and information representing a reward for an entity associated with the first wireless device’s participation in a loyalty program.

211. For example, the Target Server(s) deliver information regarding a particular location within the Target store, such as the location of the consumer within the Target store. As another example, the Target Server(s) deliver information about product(s) on the consumer's shopping list or with respect to a product for which the consumer is searching. As yet another example, the Target Server(s) deliver information about Cartwheel offers (or Target Circle offers) available for products that are near the consumer's current location within the Target store.

212. The information delivered by the server is based at least in part on the Target Bluetooth beacon identifier information because it is based on the Target store or location within the Target store identified from the Target beacon information, and the information relates to the particular Target store or to a particular location within the store.

213. The information delivered by the server is also based at least in part on information representing a reward for an entity associated with the first wireless device's participation in a loyalty program, because the information is made available to a consumer's device once the consumer has installed, logged into, and is using the Target App. See http://help.target.com/help/subcategoryarticle?childcat=Join+Target+Circle&parentcat=Target+Circle%E2%84%A2&searchQuery=search+help ("Join Target Circle" web page) ("All guests who have a Target.com, Cartwheel or RedCard account will automatically become Target Circle members. Target app guests will be enrolled when first opening the app….")

214. The information delivered to the first wireless device includes a name associated with the entity or object located in proximity to the second wireless device or a name associated with the loyalty program as determined by the server utilizing the identifier information. The information Target sends to consumers' mobile devices includes, for example, the "Target" brand name, the Target store name, or the name of product(s) near the consumer within the Target store.

215. As another non-limiting example, Target directly infringes claim 20. If the device on which the Target App is installed has previously detected a particular Target Bluetooth identifier, the Target App and associated software/libraries, and thus the Target Server(s), will not repeat the same exchange of information.

216. As another non-limiting example, Target directly infringes claim 22. For example, if the device on which the Target App is installed has already received a list of Target Bluetooth identifiers (that includes, e.g., a Target store name (which may be a designation or store number), the Target Server(s) will not normally provide a duplicate of this same information.

217. As another non-limiting example, Target directly infringes claim 23. Target maintains an account for each user that has joined Target Circle that includes information about that user's past purchasing behavior. Target Circle offers are customized for particular users, including based on past purchasing behavior.

218. As another non-limiting example, Target directly infringes claim 25. The Target Server(s) determine the names of goods that are in proximity to the Target Bluetooth beacon. The Target Server(s) deliver information about these products to the device on which the Target App is installed, including "5 star" ratings and feedback regarding particular products.

219. As another non-limiting example, Target directly infringes claim 26. The Target Server(s) provide Cartwheel offers (now Target Circle offers) to the device on which the Target App is installed.

220. As another non-limiting example, Target directly infringes claim 28. The device on which the Target App is installed is mobile; the Target Bluetooth beacon is not mobile.

221. Target has therefore infringed and is liable to Proxicom for directly infringing one or more claims of the '592 Patent pursuant to 35 U.S.C. § 271(a).

222. As a result of Target's infringement of the '592 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

COUNT IV

(Infringement of the '896 Patent)

223. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 30, 61 through 66, and 97 through 134 as though fully set forth herein.

224. Target directly infringes at least claims 1-2, 5-6, 8-9, 13, 18, 24, 40-41, 44, 48-53, 56 of the '896 patent, literally and/or under the doctrine of equivalents. As a non-limiting example, Target directly infringes method claim 1 of the '896 Patent because all the steps of method claim 1 are performed by or attributable to Target.

225. Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the '896 Patent since at least service of the original Complaint.

226. To the extent the preamble of claim 1 of the '896 Patent is limiting, Target employs a method for a server to exchange information with one or more wireless devices. The Target Server(s) perform a method of communicating information from Target Bluetooth beacons to consumers' mobile devices on which the Target App is installed.

227. The Target Server(s) receive identifier information from a first wireless device (e.g., a consumer's iPhone on which the Target App is installed) using a wide area wireless network, the identifier information having been provided to the first wireless device from a second wireless device (e.g., Target Bluetooth beacons) using short range wireless communication. The

SCT Exhibit 2022
IPR2026-00098

Target Server(s) receive identifier information from Target consumers' mobile devices over a Wi-Fi network or a wireless cellular network, the identifier information having been provided to the consumers' mobile devices from a Target Bluetooth beacon using, e.g., Bluetooth. Receipt of the identifier information and communication to the Target Server(s) is mediated by the Target App or related software that Target provides with the Target App that is installed on consumers' mobile devices as part of the process of downloading and installing the Target App.

228. The Target Server(s) use the identifier information to determine information concerning an entity or object located in proximity to the second wireless device. The Target Server(s) use the identifier information to identify the Target Bluetooth beacon as within a particular Target store or particular location within a Target store.

229. The Target Server(s) deliver first information to the first wireless device based at least in part upon the identifier information related to the second wireless device (i.e., the Target Bluetooth beacon). For example, the Target Server(s) deliver information concerning other Target Bluetooth beacons that are present in the Target store in which the Target Bluetooth beacon is located.

230. The Target Server(s) receive second information from the first wireless device (e.g., the consumer's iPhone) indicating the selection of one or more goods for purchase. For example, if a consumer selects good(s) for purchase by placing the good(s) into the Target App Cart and checks out using the Target App (e.g., using the "Checkout" button that is provided by the Target App), software associated with the Target App that is resident on the consumer's device sends information indicating the selection of good(s) to the Target Server(s).

231. The Target Server(s) transmit a request to the first wireless device for confirmation of said purchase. For example, in response to the consumer pressing the "Checkout" button,

software associated with the Target App provided by Target provides an order summary including a total cost of the good(s).

232. The Target Server(s) receive confirmation that the consumer wishes to complete the purchase. For example, if the consumer presses the "Place my order" button, software associated with the Target App sends a confirmation to the Target Server(s) indicating that the consumer wishes to complete the purchase.

233. The Target Server(s) transmit a receipt to the first wireless device. For example, the Target App displays payment details and a number associated with the order that the device on which the Target App and associated software is installed receives from the Target Server(s).

234. As another non-limiting example, Target directly infringes claim 2. The Target Bluetooth beacon broadcasts using Bluetooth protocol.

235. As another non-limiting example, Target directly infringes claim 5. Target configures the Target Bluetooth beacons to broadcast and thereby initiate communication with devices on which the Target App is installed.

236. As another non-limiting example, Target directly infringes claim 6. The Target Server(s) transmits a receipt to the first wireless device that includes a list of goods being purchased. A list of goods purchased for a particular order are provided by Target via e-mail and via the Target App, for example, under the "account," "purchases" option.

237. As another non-limiting example, Target directly infringes claim 8. Some goods sold in Target stores are available to be purchased for in-store pick-up, drive-up pick-up, or delivery to a location selected by the user (such as home delivery).

238. As another non-limiting example, Target directly infringes claim 9. Purchases are credited in Cartwheel or Target Circle.

239. As another non-limiting example, Target directly infringes claim 13. For example, the Target App may display a bar code from Target on the screen of the first wireless device, and that bar code is scanned at the Target store.

240. As another non-limiting example, Target directly infringes claim 18. The Target Server(s) transmit images of particular goods.

241. As another non-limiting example, Target directly infringes claim 24. Target Server(s) enable access to a map of the Target store, and to promotional weekly ads (including imagery and graphics) for the Target store.

242. Additionally, as another non-limiting example, Target uses, makes, or puts into service the apparatus of claim 40 of the ’896 Patent.

243. The Target Server(s), for example, is a server apparatus for exchanging information with one or more wireless devices.

244. The Target Server(s) comprise (i) a receiver for receiving information from, and (ii) a transmitter for delivering information to, a first wireless device—e.g., a consumer’s iPhone—and a second wireless device—e.g., a Target Bluetooth beacon.

245. The Target Server(s) further comprises a processor for cooperating with the receiver and transmitter to do the following:

a. The processor cooperates with the receiver and transmitter to receive identifier information from a first wireless device (e.g., a consumer’s iPhone on which the Target App is installed) using a wide area wireless network, the identifier information having been provided to the first wireless device from a second wireless device (e.g., Target Bluetooth beacons) using short range wireless communication. The Target Server(s) receive identifier information from Target consumers’ mobile devices over a Wi-Fi network or a wireless cellular network, the identifier information

having been provided to the consumers' mobile devices from a Target Bluetooth beacon using, e.g., Bluetooth. Receipt of the identifier information and communication to the Target Server(s) is mediated by the Target App or related software installed on consumers' mobile devices.

b. The processor cooperates with the receiver and transmitter to use the identifier information to determine information concerning an entity or object located in proximity to the second wireless device. The processor uses the identifier information to identify the Target Bluetooth beacon as within a particular Target store or particular location within a Target store.

c. The processor cooperates with the transmitter to deliver first information to the first wireless device based at least in part upon the identifier information related to the second wireless device (i.e., the Target Bluetooth beacon). For example, the Target Server(s) deliver information concerning other Target Bluetooth beacons that are present in the Target store in which the Target Bluetooth beacon is located.

d. The processor cooperates with the receiver to receive second information from the first wireless device (e.g., the consumer's iPhone) indicating the selection of one or more goods for purchase. For example, if a consumer selects good(s) for purchase by placing the good(s) into the Target App Cart and checks out using the Target App (e.g., using the "Checkout" button that is provided by the Target App), software associated with the Target App that is resident on the consumer's device sends information indicating the selection of good(s) to the Target Server(s).

e. The processor cooperates with the transmitter to transmit a request to the first wireless device for confirmation of the purchase. For example, in response to the consumer pressing the "Checkout" button, software associated with the Target App provided by Target provides an order summary including a total cost of the good(s).

f. The processor cooperates with the receiver to receive confirmation that the consumer wishes to complete said purchase. For example, if the consumer presses the "Place my order" button, software associated with the Target

App sends a confirmation to the Target Server(s) indicating that the consumer wishes to complete the purchase.

g. The processor cooperates with the transmitter to transmit a receipt to the first wireless device. For example, Target App displays payment details and a number associated with the order that the device on which the Target App and associated software is installed receives from the Target Server(s).

246. As another non-limiting example, Target directly infringes claim 41. Target Bluetooth beacons broadcast via Bluetooth.

247. As another non-limiting example, Target directly infringes claim 44. Target Server(s) enable access to a map of the Target store, and to promotional weekly ads for the Target store.

248. As another non-limiting example, Target directly infringes claim 48. Target Server(s) enable access to Target Circle offers.

249. As another non-limiting example, Target directly infringes claim 49. Target Server(s) provide, for example, a list of goods for which Target Circle offers are available.

250. As another non-limiting example, Target directly infringes claim 50. The user of the device on which the Target App is installed may select one of the goods for which a Target Circle offer is available.

251. As another non-limiting example, Target directly infringes claim 51. The user may select a list of goods to be purchased, said list then being provided by the device on which the Target App is installed to the Target Server(s).

252. As another non-limiting example, Target directly infringes claim 52. The user may select, for example, a "Place my order" button.

253. As another non-limiting example, Target directly infringes claim 53. The Target Server(s) use a Target Circle username and password and/or a Target RedCard username and password in performing payment processing.

254. As another non-limiting example, Target directly infringes claim 56. For example, Target Server(s) provide for release of Target Circle benefits (of a particular dollar amount) for redemption for a particular purchase.

255. Target has therefore infringed and is liable to Proxicom for directly infringing one or more claims of the ’896 Patent pursuant to 35 U.S.C. § 271(a).

256. As a result of Target’s infringement of the ’896 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for Target’s infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

COUNT V

(Infringement of the ’913 Patent)

257. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 30, 67 through 72, and 97 through 134 as though fully set forth herein.

258. Target directly infringes at least claims 1-4, 6-10, 12, 15, 17, 19, 21, 32-34, 39 of the ’913 patent, literally and/or under the doctrine of equivalents.

259. As a non-limiting example, Target directly infringes method claim 1 of the ’913 Patent because all the steps of method claim 1 are performed by or attributable to Target.

260. Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the '913 Patent since at least service of the original Complaint.

SCT Exhibit 2022
IPR2026-00098

261. To the extent the preamble of claim 1 of the ’913 Patent is limiting, Target employs a method for operating a first wireless communication device (e.g., a consumer’s iPhone). For example, Target provides or causes to be provided the Target App and associated software to consumers, including via the Apple App Store and Google Play Store. The Target App, once installed on a consumer’s device, operates in conjunction with the Target Bluetooth beacon(s) and the Target Server(s) to perform the claimed method. More specifically, for instance, when a consumer brings their device with the Target App installed and Bluetooth functionality enabled into a Target store in which Target Bluetooth beacons have been installed, instructions provided by the Target App and associated software cause the consumer’s device to receive identifiers from the Target Bluetooth beacons via Bluetooth signals.

262. The consumer’s device (e.g., iPhone) on which the Target App is installed receives a first unique identifier (e.g., beacon identifier) from a second wireless device (e.g., a Target Bluetooth beacon) using a peer-to-peer protocol over a short range wireless communication link (e.g., Bluetooth).

263. The consumer’s device connects to a server (i.e., Target Server(s)) over a second communication link using a protocol different from the peer-to-peer protocol used on the short range wireless communication link (e.g., WiFi (also known as Wi-Fi) or cellular).

264. The consumer’s device receives further information from the server over the second communication link; the further information related to an entity or object associated with the second wireless device, such further information depending upon information parameters for a service account associated with the first unique identifier. For example, the Target Server(s) provides information related to the Target store in which the Target Bluetooth beacon is located, such as information related to the Target Bluetooth beacons that are located in that Target store.

265. The consumer's device receives a second unique identifier from, for example, a third wireless device using the peer-to-peer protocol over the short range wireless communication link, wherein the first unique identifier received in the first receiving step and the second unique identifier received in the second receiving step are not the same. For example, the consumer's device receives a beacon identifier from a different Target Bluetooth beacon that is located in the Target store and associated with one of the numerous LED light fixtures in the Target store.

266. The consumer's device comparing the first unique identifier received in the first receiving step and (b) said further information with (c) the second unique identifier received in the second receiving step, and as a result of such comparing, suppressing, in response to the second receiving step, a subsequent sending of the second unique identifier received in the second receiving step to the server over the second communication link. For example, the consumer's device compares the beacon identifier for a second Target Bluetooth beacon that is located in the Target store, and compares the beacon identifier with a listing of beacon identifiers for the Target store that was provided by the Target Server(s) in response to the consumer's device sending a Bluetooth beacon identifier for one of the Target Bluetooth beacons in that store; if the beacon identifier for the second Target Bluetooth beacon matches the listing of beacon identifiers for the Target store, the consumer's device suppresses the sending of that beacon identifier to the Target Server(s).

267. As another non-limiting example, Target directly infringes claim 2. If the Target Bluetooth beacon identifier that is sent to the Target Server(s) is not current, the Target Server(s) will reject the identifier or not respond.

268. As another non-limiting example, Target directly infringes claim 3. The wide area wireless network may be, e.g., CDMA or GSM.

269. As another non-limiting example, Target directly infringes claim 4. The Target Bluetooth beacon broadcasts using Bluetooth.

270. As another non-limiting example, Target directly infringes claim 6. The further information relates to transactions between the user of the device on which the Target App is installed and Target (which is associated with the Target Bluetooth beacon), for example the user may purchase a good from Target using the Target App.

271. As another non-limiting example, Target also uses, makes, or puts into service the device of claim 7 of the '913 Patent. For example, Target provides the Target App and associated software that causes a consumer's device, when configured with, e.g., Bluetooth enabled and the Target App installed, to receive beacon identifiers from Target Bluetooth beacons and communicate with the Target App. Alternatively, Target makes the device of claim 7 through the Target App and associated software and instructions and/or Target puts the device of claim 7 into service by its actions, including installing and configuring Target Bluetooth beacons in its stores.

272. The consumer's device comprises, when configured via installation of the Target App and associated software, a first receiver for communication over a short range wireless communication link, to receive a first unique wireless identifier from a second wireless device using a peer-to-peer protocol over the short range wireless communication link. For example, the consumer's device receives a beacon identifier from a Target Bluetooth beacon using Bluetooth.

273. The consumer's device further comprises a second receiver and transmitter, for communicating over a second communication link using a protocol different from the peer-to-peer protocol used on the short range wireless communication link and to send the first unique wireless identifier to a server over the second communication link. For example, the consumer's device comprises a Wi-Fi and/or cellular receiver and transmitter, and the consumer's device transmits

the beacon identifier received from the Target Bluetooth beacon to the Target Server(s) via Wi-Fi or cellular network(s).

274. The consumer's device further comprises a Wi-Fi and/or cellular receiver and transmitter to receive further information from the server over the second communication link, the further information related to an entity or object associated with the second wireless device, such further information depending upon information parameters for a service account associated with the second wireless device. For example, the consumer's device receives further information related to the Target store in which the Target Bluetooth beacon is present, such as a listing of the Target Bluetooth beacons present in that store.

275. The Target Server(s) maintain a service account associated with the Target Bluetooth beacons, for example, a service account associated with those beacons that are located within a particular Target store.

276. The consumer's device further comprises the first receiver receiving a second unique identifier from one of the second wireless device and a third wireless device using the peer-to-peer protocol over the short range wireless communication link. For example, the consumer's device receives a beacon identifier via Bluetooth from a second Target Bluetooth beacon that is present in the Target store.

277. The consumer's device further comprises a processor for comparing the first unique identifier and the further information to the second unique identifier, and in response to said comparing, suppressing, subsequent to the second receiving step, sending of the second unique identifier to the server. If, for example, the beacon identifier for the second Target Bluetooth beacon matches the listing of beacon identifiers for the Target store, the consumer's device suppresses the sending of that beacon identifier to the Target Server(s).

278. As another non-limiting example, Target directly infringes claim 8. If the Target Bluetooth beacon identifier that is sent to the Target Server(s) is not current, the Target Server(s) will reject the identifier or not respond.

279. As another non-limiting example, Target directly infringes claim 9. The wide area wireless network may be, e.g., CDMA or GSM.

280. As another non-limiting example, Target directly infringes claim 10. The Target Bluetooth beacon broadcasts using Bluetooth.

281. As another non-limiting example, Target directly infringes claim 12. The further information relates to an e-commerce transaction between the user of the device on which the Target App is installed and Target (which is associated with the Target Bluetooth beacon), for example the user may purchase a good from Target using the Target App.

282. As another non-limiting example, Target directly infringes claim 15. The Target Server(s) may have previously sent a list of Target Bluetooth beacon identifiers (and associated location information, for example, including two-dimensional location information such as x,y locations within the Target store) in response to the transmission of a detected Target Bluetooth beacon identifier for that store. The software on which the Target App is installed displays a map of that Target store with a blue dot on the map that represents the user's location within the Target store. The device on which the Target App is installed may display a particular x,y location for a particular detected Target Bluetooth beacon identifier, that x,y location having been previously determined as part of providing the list of Target Bluetooth beacon identifiers and x,y locations.

283. As another non-limiting example, Target directly infringes claim 17. For example, the Target Server(s) will not provide information related to the Target Bluetooth beacons within a

Target store if the Target Server(s) determine that the request is not sent by a device on which the Target App is installed.

284. As another non-limiting example, Target directly infringes claim 19. The further information includes a list of Target Bluetooth beacon identifiers and associated x,y positions within the Target store, including the second unique identifier (for a Target Bluetooth beacon within the Target store) and its associated x,y position. The list of identifiers and associated x,y locations is used to reduce the information needed from the server, e.g., to determine or display the user's location within the store based on the receipt of the second unique identifier.

285. As another non-limiting example, Target directly infringes claim 21. As explained above, the further information includes a list of Target Bluetooth beacon identifiers and associated x,y positions within the Target store.

286. As another non-limiting example, Target directly infringes claim 32. The device on which the Target App is installed detects a identifier that is broadcast via the Bluetooth protocol from a Target Bluetooth beacon without establishing a two-way connection.

287. As another non-limiting example, Target directly infringes claim 33. The Target Bluetooth beacons broadcast using Bluetooth, a wireless protocol, and no wired connection is used in the communication between the Target Bluetooth beacon and the device on which the Target App is installed.

288. As another non-limiting example, Target directly infringes claim 34. For example, the software associated with the Target App causes the device on which the Target App is installed to notify the user of particular goods that are available at the Target store that is associated with the Target Bluetooth beacon.

289. As another non-limiting example, Target directly infringes claim 39. The Target Server(s) sends a list of goods that are available for purchase at the Target store, including associated visual identification information. The device on which Target App is installed displays a listing or other description of one or more of these goods, and also the associated visual identification information. The Target App provides the option for the user to physically scan a good (e.g., scan the barcode label for a good), which will result in the Target Server(s) receiving input from the user via a message sent over the second wireless link to the Target Server(s) as a result of that scan, confirming that the displayed visual information matches the described object.

290. Target has therefore infringed and is liable to Proxicom for directly infringing one or more claims of the '913 Patent pursuant to 35 U.S.C. § 271(a).

291. As a result of Target's infringement of the '913 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

COUNT VI

(Infringement of the '842 Patent)

292. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 30, 73 through 78, and 97 through 134 as though fully set forth herein, literally and/or under the doctrine of equivalents.

293. Target directly infringes one or more claims of the '842 patent, including at least claims 1, 5, 9, 12-14, 22, 24. As a non-limiting example, Target directly infringes method claim 1 of the '842 Patent because all the steps of method claim 1 are performed by or attributable to Target.

294. Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the '842 Patent since at least service of the original Complaint.

295. To the extent the preamble of claim 1 of the ’842 Patent is limiting, Target employs a method for facilitating a transaction between a first wireless device and a second wireless device utilizing a server. For example, the first wireless device is the consumer’s device on which the Target App is installed, and the second wireless device is a device associated with Target, such as a Target Bluetooth beacon. For example, Target Server(s) facilitate a transaction in that a consumer may use the Target App installed on the consumer’s device (the first wireless device), in particular the “Cartwheel Near You” (or the “Target Circle Near You”) feature in which the consumer may receive information regarding a special offer regarding a particular product in the Target store that is near the consumer. The Cartwheel Near You (or the “Target Circle Near You”) feature is made available to the consumer based on the Target Server(s) receiving a Target Bluetooth beacon identifier via the consumer’s device. The Target App provides information regarding the product, and the consumer can also purchase that product using the consumer’s device on which the Target App is installed.

296. Alternatively or additionally, Target employs a method for facilitating a transaction between a first wireless device (e.g., consumer device on which the Target App is installed) and Target Server(s) associated with the second wireless device (e.g., Target Bluetooth beacon) that is insubstantially different than the method of claim 1 of the ’842 Patent such that Target infringes literally or under the doctrine of equivalents.

297. The second wireless device (e.g., Target Bluetooth beacon) communicates an identifier (e.g., beacon identifier) associated with said second wireless device to said first wireless device using a short range wireless connection (e.g., Bluetooth).

298. The first wireless device (e.g., consumer device on which the Target App is installed) provides the beacon identifier to Target Server(s). The Target Server(s) establish location information associated with said first and said second wireless devices. The Target Server(s) associate information regarding Target Bluetooth beacons with particular Target stores and locations within those Target stores.

299. Target Server(s) determine authentication information relating to said second wireless device or an entity associated with said second wireless device, in that the Target Server(s) determine if a particular beacon identifier is associated with a particular Target Store, and if so, determine a list (or equivalent) of Target Bluetooth beacons or associated information for that Target store.

300. The Target Server(s) transfer said authentication information between the server and the first wireless device. The Target Server(s) send information regarding beacon identifiers for the Target store to the device on which the Target App is installed.

301. The Target Server(s) provide authorization to said first wireless device to proceed with said transaction based at least in part upon said identifier, said authentication information, and the location information of said first and second wireless device. The Target Server(s) authorize the Target App to display the "Cartwheel Near You" (or "Target Circle Near You") feature and related information on the consumer's device. The Target Server(s) authorize this feature depending on the identifier (e.g., the beacon identifier) and upon determining that the device on which the Target App is installed is present in a Target store configured with Target

Bluetooth beacons. Once the "Cartwheel Near You" (or "Target Circle Near You") feature becomes available, the consumer may obtain information on special offers for products in proximity to the consumer's device on which the Target App is installed, and may purchase the product, for example, using the Target App.

302. Target has therefore infringed and is liable to Proxicom for directly infringing, literally or under the doctrine of equivalents, one or more claims of the '842 Patent, including at least claim 1, pursuant to 35 U.S.C. § 271(a).

303. As another non-limiting example, Target directly infringes claim 5. The server determines the Target store location (and associated list of Target Bluetooth beacon identifiers and locations) using the identifier that is associated with the Target Bluetooth beacon that is the second wireless device.

304. As another non-limiting example, Target directly infringes claim 9. If the user selects goods for purchase, the device on which the Target App is installed sends information to the server indicating selection of one or more goods for service.

305. As another non-limiting example, Target directly infringes claim 12. Some goods sold in Target stores are available to be purchased for in-store pick-up, drive-up pick-up, or delivery to a location selected by the user (such as home delivery).

306. As another non-limiting example, Target directly infringes claim 13. Purchases are credited in Cartwheel or Target Circle.

307. As another non-limiting example, Target directly infringes claim 14. In-store pick-up, drive-up pick-up, or home delivery are initiated after purchase through the Target App.

308. As another non-limiting example, Target directly infringes claim 22. If the Target Bluetooth beacon identifier has been previously used, the device on which the Target App is

installed will not need to immediately re-request the list of Target Bluetooth beacon identifiers and related information for the Target store.

309. As another non-limiting example, Target directly infringes method claim 24 of the ’842 Patent because all the steps of method claim 24 are performed by or attributable to Target. Target Bluetooth beacons send a device identifier via Bluetooth which is received by devices on which the Target App is installed. The device on which the Target App is installed sends the Target Bluetooth identifier to Target Server(s). The Target Server(s), knowing the registered location of the Target Bluetooth beacon, determine location information associated with the device on which the Target App is installed and the Target Bluetooth beacon.

310. The Target Server(s) authenticate the Target Bluetooth beacon. If, for example, the Target Bluetooth beacon is not registered with the Target Server(s) or an old or incorrect identifier is sent instead of a valid, current identifier, or if the device on which the Target App is installed does not provide identifying information in the proper format, the Target Server(s) will reject the identifier or not provide a response.

311. In response to a valid and registered Target Bluetooth beacon identifier, the Target Server(s) will provide authorization to the first wireless device (i.e., the device on which the Target App is installed) that is a list of Target Bluetooth beacon identifiers and associated x,y location information (among other information). The provision of this list and associated information depends on (i) the Target Bluetooth beacon identifier; (ii) the location information, i.e., the Target store that is associated with the Target Bluetooth beacon; and (iii) authentication information, e.g., the identifying information and properly-formatted request that is provided by the device on which the Target App is installed.

312. As a result of Target's infringement of the '842 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

COUNT VII

(Infringement of the '129 Patent)

313. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 30, 79 through 84, and 97 through 134 as though fully set forth herein.

314. Target directly infringes one or more claims of the '129 Patent, including at least claims 1-4, 7, 11, 16-19, 25-26, literally and/or under the doctrine of equivalents. As a non-limiting example, Target directly infringes method claim 1 of the '129 Patent because all the steps of method claim 1 are performed by or attributable to Target.

315. Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the '129 Patent since at least service of the original Complaint.

316. To the extent the preamble of claim 1 of the '129 Patent is limiting, Target employs a method for facilitating an exchange of information between first (e.g., a device on which the Target App is installed) and second (e.g., Target Bluetooth beacon) wireless devices or entities, the method utilizing a server (e.g., Target Server(s)).

317. Target Server(s) receive a first unique identifier communicated over a wide area link from the first wireless device. For example, in order for the consumer to receive customized special offers (e.g., Cartwheel offers or Target Circle offers), the Target Server(s) identify the device on which the Target App is installed as being associated with a particular unique consumer.

SCT Exhibit 2022
IPR2026-00098

318. Target Server(s) receive a second unique identifier associated with the second wireless device, the second unique identifier associated with the second wireless device being communicated to the first wireless device over a local wireless link, and then from the first wireless device to the server over the wide area link. The Target Bluetooth beacon transmits a beacon identifier to the device on which the Target App is installed via Bluetooth (the local wireless link). The device on which the Target App is installed, as a result of instructions provided by the Target App or associated software, transmits the beacon identifier to the Target Server(s) via, e.g., cellular (wide area link).

319. The Target Server(s) compare a disclosure policy associated with the second unique identifier with the first unique identifier from the first wireless device or with an identifier or other data derived from the first unique identifier, wherein the disclosure policy specifies data representing one or more rules for privacy of information concerning the second wireless device or privacy of information concerning an entity (e.g., Target) associated with the second wireless device. The Target Server(s) compare a disclosure policy that is associated with Target with the identifier (or other information) associated with the device on which the Target App is installed. The disclosure policy that is associated with Target is also associated with the second unique identifier, because the second unique identifier is for a Target Bluetooth beacon that is installed in a Target store by Target. The disclosure policy specifies data representing one or more rules for privacy of Target information. For example, Target employs a disclosure policy in order to provide personalized offers and has explained that it will "serve up special surprises and savings, tailored just for you," and that "[y]ou never know what rewards are in store."

320. The Target Server(s) communicate further information to the first wireless device as permitted by a result of comparing the disclosure policy, and wherein said further information

is based, at least in part, upon a stored state resulting from previous interactions utilizing said server between the entities associated with the first and second unique identifiers (e.g., the consumer and Target). For example, Target offers personalized offers (e.g., Cartwheel offers or Target Circle offers) via the Target App that are based on Target's previous interactions with the consumer.

321. The further information additionally comprises content relating to at least a reward for participation in a loyalty program, wherein said reward is dependent upon said stored state and related to past purchasing behavior of an entity associated with the first wireless device (e.g., the consumer). For example, Target offers personalized offers via the Target App (e.g., Cartwheel offers or Target Circle offers) that are based in part on the product categories in which a consumer shops most often. *See*, *e.g.*, Exhibit 15 (available at https://corporate.target.com/article/2019/09/target-circle-nationwide) (last visited Oct. 2, 2019). In order to receive such personalized offers via the Target App, a consumer logs into the Target App.

322. As another non-limiting example, Target directly infringes claim 2. The first identifier is associated with the user of the device on which the Target App is installed; the second identifier is associated with Target, which is a business.

323. As another non-limiting example, Target directly infringes claim 3. Target Bluetooth beacons transmit using Bluetooth.

324. As another non-limiting example, Target directly infringes claim 4. For example, information will not be disclosed by the Target Server(s) if the device on which the Target App is installed is not authorized.

325. As another non-limiting example, Target directly infringes claim 7. Target or an associated entity set data in the disclosure policy, prior to the Target Server(s) receiving a second identifier. For example, in one alternative servers operated by Acuity Brands on behalf of Target are configured in accordance with Target's request.

326. As another non-limiting example, Target directly infringes claim 11. Information about "Cartwheel Near You" or "Target Circle Near You" is provided to the device on which the Target App is installed.

327. Additionally, as another non-limiting example, Target uses, makes, or puts into service the apparatus of claim 16 of the '129 Patent.

328. The Target Server(s) comprise a server apparatus for facilitating an exchange of information between first (e.g., device on which the Target App has been installed) and second (e.g., Target Bluetooth beacons) wireless devices or entities.

329. The Target Server(s) comprise:

a. A receiver, for receiving a first unique identifier communicated over a wide area network from the first wireless device, and for receiving a second unique identifier associated with the second wireless device, the second unique identifier associated with the second wireless device having been prior communicated to the first wireless device over a local wireless link, and then received from the first wireless device by the server over the wide area network. For example, in order for the consumer to receive customized special offers (e.g., Cartwheel offers or Target Circle offers), the Target Server(s) identify the device on which the Target App is installed as being associated with a particular unique consumer. Further, the Target Bluetooth beacon transmits a beacon identifier to the device on which the Target App is installed via Bluetooth (the local wireless link). The device on which the Target App is installed, as a result of instructions provided by the Target

App or associated software, transmits the beacon identifier to the Target Server(s) via, e.g., cellular (wide area link).

b. A data processor, for locating a disclosure policy associated with the second unique identifier and comparing the disclosure policy to the first unique identifier received from the first wireless device or with an identifier or other data derived from the first unique identifier, wherein the disclosure policy specifies data representing one or more rules for privacy of information concerning the first and second wireless devices. The Target Server(s) compare a disclosure policy that is associated with Target with the identifier (or other information) associated with the device on which the Target App is installed. The disclosure policy that is associated with Target is also associated with the second unique identifier, because the second unique identifier is for a Target Bluetooth beacon that is installed in a Target store by Target. The disclosure policy specifies data representing one or more rules for privacy of Target information. For example, Target employs a disclosure policy in order to provide personalized offers and has explained that it will "serve up special surprises and savings, tailored just for you," and that "[y]ou never know what rewards are in store." As another example, the "Cartwheel Near You" feature is made available to the consumer when the device on which the Target App is installed is located in a Target Store (which is determined via receipt of a Target Bluetooth beacon identifier).

c. A transmitter, for communicating further information to the first wireless device as permitted by the disclosure policy, and wherein said further information is based, at least in part, upon a stored state resulting from previous interactions between the entities associated with the first and second unique identifiers (e.g., the consumer and Target). For example, Target offers personalized offers via the Target App (e.g., Cartwheel offers or Target Circle offers) that are based on Target's previous interactions with the consumer.

d. The further information additionally comprises content relating to at least a reward for participation in a loyalty program, wherein said reward is

dependent upon said stored state and related to past purchasing behavior of an entity associated with the first wireless device (e.g., the consumer). For example, Target offers personalized offers via the Target App (e.g., Cartwheel offers or Target Circle offers) that are based in part on the product categories in which a consumer shops most often. *See*, *e.g.*, https://corporate.target.com/article/2019/09/target-circle-nationwide (last visited Oct. 2, 2019). In order to receive such personalized offers via the Target App, a consumer logs into the Target App.

330. As another non-limiting example, Target directly infringes claim 17. The first identifier is associated with the user of the device on which the Target App is installed; the second identifier is associated with Target, which is a business.

331. As another non-limiting example, Target directly infringes claim 18. Target Bluetooth beacons transmit using Bluetooth.

332. As another non-limiting example, Target directly infringes claim 19. For example, information will not be disclosed by the Target Server(s) if the device on which the Target App is installed is not authorized.

333. As another non-limiting example, Target directly infringes claim 25. Further information provided to the device on which the Target App is installed depends on the Target Bluetooth beacons being on a list associated with a particular Target store.

334. As another non-limiting example, Target directly infringes claim 26. Information about "Cartwheel Near You" or "Target Circle Near You" is provided to the device on which the Target App is installed.

335. Target has therefore infringed and is liable to Proxicom for directly infringing one or more claims of the '129 Patent pursuant to 35 U.S.C. § 271(a).

336. As a result of Target's infringement of the '129 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

COUNT VIII

(Infringement of the '736 Patent)

337. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 30, 85 through 89, and 97 through 134 as though fully set forth herein.

338. Target directly infringes one or more claims of the '736 patent, including at least claims 1, 7-8, 10, 12, 14-15, 21-22, literally and/or under the doctrine of equivalents. As a non-limiting example, Target directly infringes method claim 1 of the '736 Patent because all the steps of method claim 1 are performed by or attributable to Target.

339. Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the '736 Patent since at least service of the original Complaint.

340. To the extent the preamble of claim 1 of the '736 Patent is limiting, Target employs a method for a central server (e.g., Target Server(s)) utilizing one or more wireless Wide Area Network connections to exchange information between one or more applications executing on first (e.g., device on which the Target App is installed) and second (e.g., Target Bluetooth beacons) wireless devices.

341. Target Server(s) receive first identification information from the first wireless device, the first identification information communicated from the first wireless device to the server via the wireless Wide Area Network (e.g., cellular). The first identification information is associated with one or more of an identifier of the first wireless device or an entity associated with

SCT Exhibit 2022
IPR2026-00098

the first wireless device (e.g., the consumer). For example, in order for the consumer to receive customized special offers (e.g., Cartwheel offers or Target Circle offers), the Target Server(s) identify the device on which the Target App is installed as being associated with a particular unique consumer.

342. Target Server(s) receive second identification information, as collected by the first wireless device from the second wireless device via a separate local wireless link between the first and second wireless devices, and wherein the second identification information is communicated from the first wireless device to the server via the wireless Wide Area Network connection. The Target Bluetooth beacon transmits a beacon identifier to the device on which the Target App is installed via Bluetooth (the local wireless link). The device on which the Target App is installed, as a result of instructions provided by the Target App or associated software, transmits the beacon identifier to the Target Server(s) via, e.g., cellular (Wide Area Network).

343. The second identification information is associated with one or more of an identifier of the second wireless device or an identifier of an entity associated with the second wireless device (e.g., Target). The Target Server(s) associate the Target Bluetooth beacon identifier with Target.

344. The Target Server(s) retrieve disclosure policy data associated with the second identification information, the disclosure policy data representing rules for privacy of information concerning the second wireless device or privacy of information concerning an entity (e.g., Target) associated with the second wireless device. The Target Server(s) compare the information disclosure policy data and the first identification information. For example, Target employs a disclosure policy in order to provide personalized offers and has explained that it will "serve up special surprises and savings, tailored just for you," and that "[y]ou never know what rewards are in store." As another example, the "Cartwheel Near You" (or "Target Circle Near You") feature

is made available to the consumer when the device on which the Target App is installed is located in a Target Store (which is determined via receipt of a Target Bluetooth beacon identifier). (The disclosure policy that is associated with Target is also associated with the second unique identifier, because the second unique identifier is for a Target Bluetooth beacon that is installed in a Target store by Target.)

345. The Target Server(s) provide further information to the first wireless device concerning the entity (e.g., Target) associated with second wireless device, but only to the extent consistent with the step of comparing the information disclosure policy data. For example, in order to receive personalized offers via the Target App, a consumer logs into the Target App, and the Target Server(s) will provide personalized offers to a particular consumer to the extent consistent with particular policy rules (e.g., for Cartwheel offers or for Target Circle offers).

346. As another non-limiting example, Target directly infringes claim 7. Further information provided to the device on which the Target App is installed depends on the Target Bluetooth beacons being on a list associated with a particular Target store.

347. As another non-limiting example, Target directly infringes claim 8. The Target Server(s) provide a list of Target Bluetooth beacon identifiers and related information to the device on which the Target App is installed, which causes that device to limit re-sending of identifiers that have already been reported, because the device on which the Target App is installed already has some information once it has this list.

348. As another non-limiting example, Target directly infringes claim 10. Target Bluetooth beacon identifiers and associated information for a particular Target store (as opposed to all Target stores) are disclosed to the device on which the Target App is installed.

349. As another non-limiting example, Target directly infringes claim 12. The Target Bluetooth beacon identifier is received to, in part, detecting proximity to the Target Bluetooth beacon.

350. As another non-limiting example, Target directly infringes claim 14. The Target Server(s) provide a list of Target Bluetooth beacon identifiers and related information to the device on which the Target App is installed, which causes that device to limit sending of identifiers for which the first wireless device has information that can be referenced via the list rather than via a request to the Target Server(s).

351. Additionally, as another non-limiting example, Target uses, makes, or puts into service the apparatus of claim 15 of the ’736 Patent.

352. The Target Server(s) comprise a central server utilizing one or more wireless Wide Area Network connections to exchange information between one or more applications executing on first (e.g., device on which the Target App is installed) and second (e.g., Target Bluetooth beacons) wireless devices. Target Server(s) comprise:

a. A first receiver, for receiving first identification information from the first wireless device, the first identification information communicated from the first wireless device to the server via the wireless Wide Area Network (e.g., cellular). The first identification information is associated with one or more of an identifier of the first wireless device or an entity associated with the first wireless device. For example, in order for the Target Server(s) to effectively communicate and provide information (e.g., location information) to the device on which the Target App is installed, the device on which the Target App is installed provides (and the Target Server(s) receive) identification information associated with that device or the consumer using that device. As another example, in order for the consumer to receive customized special offers (e.g., Cartwheel offers or Target Circle

offers), the Target Server(s) identify the device on which the Target App is installed as being associated with a particular unique consumer. Further, the consumer logs into the Target App in order to receive personalized offers via the Target App.

b. A second receiver, for receiving second identification information, as collected by the first wireless device from the second wireless device via a separate local wireless link between the first and second wireless devices, and the second identification information communicated from the first wireless device to the server via the wireless Wide Area Network connection. The Target Bluetooth beacon transmits a beacon identifier to the device on which the Target App is installed via Bluetooth (the local wireless link). The device on which the Target App is installed, as a result of instructions provided by the Target App or associated software, transmits the beacon identifier to the Target Server(s) via, e.g., cellular (Wide Area Network).

c. The second identification information is associated with one or more of an identifier of the second wireless device or an identifier of an entity associated with the second wireless device. The Target Bluetooth beacon identifier is associated with Target.

d. A data processor for:

   i. Storing and retrieving disclosure policy data associated with the second identification information, the disclosure policy data representing rules for privacy of information concerning the second wireless device or privacy of an entity (e.g., Target) associated with the second wireless device; and comparing the information disclosure policy data and the first identification information. (The disclosure policy that is associated with Target is also associated with the second unique identifier, because the second unique identifier is for a Target Bluetooth beacon that is installed in a Target store by Target.) The Target Server(s) compare the information disclosure policy data and the first identification information. For

example, Target employs a disclosure policy in order to provide personalized offers and has explained that it will "serve up special surprises and savings, tailored just for you," and that "[y]ou never know what rewards are in store." As another example, the "Cartwheel Near You" feature is made available to the consumer when the device on which the Target App is installed is located in a Target Store (which is determined via receipt of a Target Bluetooth beacon identifier).

ii. Providing further information to the first wireless device concerning the entity associated with second wireless device, but only to the extent consistent with the step of comparing the information disclosure policy data. For example, in order to receive personalized offers via the Target App, a consumer logs into the Target App, and the Target Server(s) will provide personalized offers to a particular consumer to the extent consistent with particular policy rules (e.g., for Cartwheel or for Target Circle).

353. As another non-limiting example, Target directly infringes claim 21. Further information provided to the device on which the Target App is installed depends on the Target Bluetooth beacons being on a list associated with a particular Target store.

354. As another non-limiting example, Target directly infringes claim 22. The Target Server(s) provide a list of Target Bluetooth beacon identifiers and related information to the device on which the Target App is installed, which causes that device to limit re-sending of identifiers that have already been reported, because the device on which the Target App is installed already has some information once it has this list.

355. Target has therefore infringed and is liable to Proxicom for directly infringing one or more claims of the '736 Patent pursuant to 35 U.S.C. § 271(a).

356. As a result of Target's infringement of the '736 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

COUNT IX

(Infringement of the '164 Patent)

357. Proxicom re-alleges and incorporates the allegations set forth above in Paragraphs 2 through 30 and 90 through 134 as though fully set forth herein.

358. Target directly infringes one or more claims of the '164 Patent, including at least claims 1-6 and 8, literally and/or under the doctrine of equivalents. As a non-limiting example, Target directly infringes claim 1 because Target makes, uses or puts into service the claimed system.

359. To the extent the preamble of claim 1 of the '164 Patent is limiting, Target makes, uses or puts into service a system for facilitating use of proximity beacons for the exchange of information between a first wireless device or a first entity associated with the first wireless device and a second wireless device or a second entity associated with the second wireless device. Target operates Target Bluetooth beacons (proximity beacons) in its stores for exchange of information between a first wireless device (e.g., mobile device on which the Target App is installed) or associated entity (mobile device user) and a second wireless device or a second entity associated with the second wireless device (e.g., Target Bluetooth beacons and/or Target).

360. The system comprises at least one server (e.g., Target server) for providing a second unique identifier (e.g., Target Bluetooth beacon identifier) associated with an account associated with the second entity (e.g., Target), comprising:

SCT Exhibit 2022
IPR2026-00098

a. a server data processor, for locating a disclosure policy associated with the second unique identifier (e.g., Target Bluetooth beacon identifier) or associated with the account associated with the second entity (e.g., Acuity Brands account associated with Target), and for comparing the disclosure policy to a first unique identifier associated with the first wireless device or other data associated with an account associated with the first entity associated with the first wireless device, wherein the disclosure policy specifies data representing one or more rules for privacy of information concerning the first wireless device or the entity associated with the first wireless device and the second wireless device or the entity associated with the second wireless device. The at least one server (e.g., Target Server(s) associated with Acuity Brands) will not provide information to the first wireless device unless the first wireless device provides expected preliminary identifier information to the at least one server.

b. a network interface, for communicating first information to the first wireless device as permitted by the disclosure policy, wherein at least a portion of the first information includes the second unique identifier. The at least one server provides a list of Target Bluetooth beacon identifiers and associated information.

361. The system comprises a mobile device (e.g., the consumer's smartphone, smartwatch, Apple Watch, iPhone or iPad) for operating as the first wireless device and for receiving information related to the second wireless device or the entity associated with the second wireless device further comprising:

a. a first radio for communicating with the server and receiving the first information including the second unique identifier. The device on which the Target App is installed communicates with the one or more server via cellular or WiFi.

b. a second radio for receiving proximity beacon transmissions utilizing a local or personal area wireless protocol, and for providing received proximity beacon information derived from the proximity beacon transmissions. The device on which the Target App is installed receives transmissions that are broadcast by Target Bluetooth beacons that are installed by Target in its stores. These transmissions include proximity beacon information, e.g., Target beacon identifiers.

c. a mobile device data processor for receiving the proximity beacon information from the second radio and performing an action function to detect the proximity of a device associated with the second unique identifier, wherein the action function compares the proximity beacon information (e.g., Target beacon identifier) with the second unique identifier (list of beacon identifiers received from the one or more servers) to determine if the proximity beacon information corresponds to the second unique identifier to determine said proximity of the device associated with the second unique identifier.

362. As another non-limiting example, Target directly infringes claim 2. Target Bluetooth beacons transmit using Bluetooth, which is a local wireless protocol. The Target Bluetooth beacons broadcast information corresponding to a second unique identifier.

363. As another non-limiting example, Target directly infringes claim 3. The disclosure policy associated with Target Bluetooth beacons and/or the Target account allows for secure and fraud resistant application of policies for the disclosure of information and content, in that the Target Server(s) will not provide information if a request is not verified based on format and content of the request as originating from a device on which the Target App is installed.

364. As another non-limiting example, Target directly infringes claim 4. Target Bluetooth beacon identifiers are changed from time to time.

365. As another non-limiting example, Target directly infringes claim 5. Target Bluetooth beacons transmit using Bluetooth. The Target Bluetooth beacons use a Bluetooth transmitter to broadcast.

366. As another non-limiting example, Target directly infringes claim 6. The device on which the Target App is installed, provides at least x,y location information that is based on the second unique identifier to the Target Server(s), which, if the Target Circle Near Me option is selected, provides a list of nearby products for which Target Circle offers are available. Target Server(s) store information regarding previous interactions between the user and Target, and Target Circle offers are customized for individual users.

367. As another non-limiting example, Target directly infringes claim 8. Target Bluetooth beacons transmit both a MAC address and a Target Bluetooth beacon identifier.

368. Target has therefore infringed and is liable to Proxicom for directly infringing one or more claims of the ’164 Patent pursuant to 35 U.S.C. § 271(a).

369. As a result of Target’s infringement of the ’164 Patent, Proxicom has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxicom for

Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

Prayer for Relief

WHEREFORE, Plaintiff Proxicom Wireless, LLC respectfully demands the following relief against Defendant Target Corporation:

(a) A declaration or final judgment finding that claims of the patents-in-suit have been and/or continue to be infringed by Target;

(b) A declaration or final judgment finding that Target's infringement of one or more of the claims of U.S. Patent Nos. 8,090,359; 8,116,749; 8,374,592; 8,385,896; 8,385,913; 8,369,842; 9,038,129 and 7,936,736 has been (at least as of the date of the service of the original Complaint) and continues to be willful;

(c) An accounting of all damages sustained by Proxicom as the result of Target's infringement;

(d) Enhanced damages pursuant to 35 U.S.C. § 284;

(e) A mandatory future royalty payable going forward for Target's use of Proxicom's technology and infringement of one or more of the patents-in-suit;

(f) An award of attorneys' fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law;

(g) Costs of suit and interest; and

(h) Such other and further relief as the Court may deem just and proper.

Demand for Jury Trial

Pursuant to Rule 38(b), Federal Rules of Civil Procedure, Plaintiff Proxicom Wireless, LLC respectfully demands a trial by jury as to all matters so triable.

SCT Exhibit 2022
IPR2026-00098

Dated: December 27, 2019.

Respectfully submitted,

/s/ Denise M. De Mory

Taylor F. Ford
Florida Bar No.: 0041008
Dustin Mauser-Claassen
Florida Bar No.: 0119289
KING, BLACKWELL, ZEHNDER & WERMUTH, P.A.
25 E. Pine St.
P.O. Box 1631
Orlando, FL 32802-1631
Telephone: (407) 422-2472
Facsimile: (407) 648-0161
Email: tford@kbzwlaw.com
Email: dmauser@kbzwlaw.com

Denise M. De Mory (admitted *pro hac vice*)
BUNSOW DE MORY LLP
701 El Camino Real
Redwood City, CA 94063
Telephone: (650) 351-7248
Facsimile: (650) 351-7253
Email: ddemory@bdiplaw.com

Chris J. Coulson (admitted *pro hac vice*)
BUNSOW DE MORY LLP
101 Brambach Rd.
Scarsdale, NY 10583
Telephone: (646) 502-6973
Facsimile: (415) 426-4744
Email: ccoulson@bdiplaw.com

Counsel for Plaintiff Proxicom Wireless, LLC

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that, on December 27, 2019, I electronically filed the foregoing with the Clerk of the Court by using the CM/ECF system, which will send a notice of electronic filing to all counsel of record.

/s/ Denise M. De Mory
Denise M. De Mory (*Pro Hac Vice*)