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25 **UNITED STATES DISTRICT COURT**
26 **FOR THE CENTRAL DISTRICT OF CALIFORNIA**

27 CORRINO HOLDINGS LLC,

28 Plaintiff,

v.

INSTAGRAM, INC. and
INSTAGRAM, LLC

Defendants.

Case No. 2:18-cv-8546

**COMPLAINT FOR PATENT
INFRINGEMENT**

JURY TRIAL DEMANDED

1 **COMPLAINT FOR PATENT INFRINGEMENT**

2 1. Plaintiff Corrino Holdings LLC (“Corrino” or “Plaintiff”) hereby
3 asserts the following claims for patent infringement against Defendants Instagram,
4 Inc. and Instagram, LLC (collectively, “Instagram” or “Defendants”), and alleges
5 as follows:

6 **SUMMARY**

7 2. Corrino owns United States Patent Nos. 6,353,398, 7,843,331,
8 7,982,599, 7,525,450, and 7,716,149 (collectively, the “Patents-in-Suit”).

9 3. Instagram infringes the Corrino Patents-in-Suit by implementing,
10 without authorization, Corrino’s proprietary technologies in a number of its
11 commercial products and services, including, *inter alia*, the Instagram mobile
12 application and www.instagram.com website, which are marketed, offered and
13 distributed to users of mobile and other devices throughout the United States,
14 including in this District.

15 4. By this action, Corrino seeks to obtain compensation for the harm
16 Corrino has suffered as a result of Instagram’s unauthorized implementation of
17 Corrino’s patented technologies.

18 **NATURE OF THE ACTION**

19 5. This is a civil action for patent infringement arising under the patent
20 laws of the United States, 35 U.S.C. § 1 *et seq.*

21 6. Instagram has infringed and continues to infringe, has induced and
22 continues to induce infringement of, and has contributed to and continues to
23 contribute to infringement of at least one or more claims of Corrino’s Patents-in-
24 Suit at least by making, using, selling, and/or offering to sell its products and
25 services for mobile and other devices in the United States, including in this District.

26 7. Corrino is the legal owner by assignment of the Patents-in-Suit, which
27 were duly and legally issued by the United States Patent and Trademark Office
28 (“USPTO”). Corrino seeks monetary damages for Instagram’s infringement of the

1 Patents-in-Suit.

2 **THE PARTIES**

3 8. Plaintiff Corrino Holdings LLC is a Texas limited liability company
4 with its principal place of business at 17330 Preston Road, Suite 200, Dallas, Texas
5 75252. Corrino is the owner of intellectual property rights at issue in this action.

6 9. On information and belief, Defendants Instagram, Inc. and Instagram,
7 LLC (collectively, “Instagram”) are a Delaware corporation and limited liability
8 company, respectively, and wholly owned subsidiaries of Facebook, Inc. with a
9 principal place of business at 1601 Willow Road, Menlo Park, California 94025.
10 On information and belief, Instagram operates and owns the website located at
11 www.instagram.com, and markets, offers, and distributes its website services and
12 applications such as the Instagram application throughout the United States,
13 including in this District.

14 10. On information and belief, Instagram directly and/or indirectly
15 develops, designs, manufactures, distributes, markets, offers to sell and/or sells
16 infringing products and services in the United States, including in the Central
17 District of California, and otherwise purposefully directs infringing activities to this
18 District in connection with its products and services.

19 **JURISDICTION AND VENUE**

20 11. As this is a civil action for patent infringement arising under the patent
21 laws of the United States, 35 U.S.C. § 1 *et seq.*, this Court has subject matter
22 jurisdiction over the matters asserted herein under 28 U.S.C. §§ 1331 and 1338(a).

23 12. This Court has personal jurisdiction over Instagram, in part because
24 Instagram does continuous and systematic business in this District, including by
25 providing infringing products and services to the residents of the Central District of
26 California that Instagram knew would be used within this District, and by soliciting
27 business from the residents of the Central District of California. For example,
28 Instagram is subject to personal jurisdiction in this Court because, *inter alia*, and

1 on information and belief, Instagram has a regular and established place of business
2 at its offices in the Central District of California (and elsewhere in the State of
3 California), and directly and through agents regularly does, solicits, and transacts
4 business in the Central District of California (and elsewhere in the State of
5 California), including, for example, through the www.instagram.com website and
6 the Instagram application, which are marketed, offered, and distributed to and
7 utilized by users of mobile and other devices in this District and throughout the
8 State of California.

9 13. In particular, Instagram has committed and continues to commit acts
10 of infringement in violation of 35 U.S.C. § 271, and has made, used, marketed,
11 distributed, offered for sale, sold, and/or imported infringing products in the State
12 of California, including in this District, and engaged in infringing conduct within
13 and directed at or from this District. For example, Instagram has purposefully and
14 voluntarily placed its website and mobile applications into the stream of commerce
15 with the expectation that such an infringing website and mobile applications will
16 be used in this District. Instagram’s infringing website and mobile application have
17 been and continue to be distributed to and used in this District. Instagram’s acts
18 cause and have caused injury to Corrino, including within this District.

19 14. Venue is proper in this District under the provisions of 28 U.S.C. §§
20 1391 and 1400(b) at least because a substantial part of the events or omissions
21 giving rise to the claims occurred in this District, and because Instagram has
22 committed acts of infringement in this District and has a regular and established
23 place of business in this District.

24 PATENTS-IN-SUIT

25 The ‘398 Patent

26 15. U.S. Patent No. 6,353,398 (“the ‘398 Patent”) is entitled “System for
27 dynamically pushing information to a user utilizing global positioning system,” and
28 was issued on March 5, 2002. A true and correct copy of the ‘398 Patent is attached

1 as Exhibit A.

2 16. The '398 Patent was filed on October 22, 1999 as U.S. Patent
3 Application No. 09/426,065.

4 17. Corrino is the owner of all rights, title, and interest in and to the '398
5 Patent, with the full and exclusive right to bring suit to enforce the '398 Patent,
6 including the right to recover for past infringement.

7 18. The '398 Patent is valid and enforceable under United States Patent
8 Laws.

9 19. The '398 Patent recognized problems with conventional global
10 positioning system ("GPS") technology. For instance, the '398 Patent recognized
11 that, while conventional GPS technology could provide users with "location and
12 directional information, more specific and detailed information related to the
13 location is often needed." Exhibit A at 1:21-24.

14 20. In this regard, the '398 Patent discloses, among other things, that "[a]
15 more powerful system is therefore necessary to provide mobile users with specific
16 information relating to the point in time the user is at a specific location." *Id.* at
17 1:34-37. In other words, the '398 Patent recognized that, because of the
18 shortcomings of conventional GPS technology, "it would be desirable for a system
19 which can provide relevant information to location-specific users at relevant points
20 in time." *Id.* at 1:39-41. The claimed inventions of the '398 Patent involve such a
21 system. The '398 Patent also discloses that "[t]his type of system is currently not
22 provided for with conventional systems." *Id.* at 1:37-38.

23 **The Inventions Claimed in the '398 Patent Improved Technology &**
24 **Were Not Well-Understood, Routine, or Conventional**

25 21. Given the state of the art at the time of the inventions of the '398
26 Patent, including the deficiencies in global positioning systems of the time, the
27 inventive concepts of the '398 Patent cannot be considered to be conventional, well-
28 understood, or routine. *See, e.g.*, Exhibit A at 1:15-41. The '398 Patent discloses,

1 among other things, an unconventional solution to problems arising in the context
2 of GPS-based information delivery systems, namely, that such systems did not
3 provide specific and detailed information relating to the point in time that a user
4 was at a particular geographic location. *See, e.g., id.* at 1:34-41 (“A more powerful
5 system is . . . necessary to provide mobile users with specific information relating
6 to the point in time the user is at a specific location. This type of system is currently
7 not provided for with conventional systems.”).

8 22. The ‘398 Patent offered an unconventional, technological solution to
9 such problems resulting in a more powerful location-based information delivery
10 system than existing GPS-based information delivery systems. *See, e.g., id.* In
11 particular, the ‘398 Patent provided an unconventional architecture comprising an
12 information delivery system located remotely from users’ hand-held mobile
13 devices, in which the information delivery system comprised a system for
14 monitoring the geographic position of such mobile devices and a directed
15 information system for linking relevant information to mobile devices associated
16 with a particular geographic region and facilitating the delivery of the relevant
17 information to devices when located in the particular geographic region. *See, e.g.,*
18 Exhibit A at 2:53-3:33; Claims 1, 7, 8.

19 23. Indeed, it was not well-understood, routine, or conventional at the time
20 of the invention of the ‘398 Patent to have a “directed information system”
21 configured to (i) link information related to specific location of users’ mobile
22 devices, (ii) access a database comprising region-specific information, and (iii)
23 employ push technology to deliver region-specific information to users’ mobile
24 devices. *See* Claims 1, 7, 8. Moreover, it was not well-understood, routine, or
25 conventional at the time of the invention of the ‘398 Patent to have a “directed
26 information system” configured to employ push technology to deliver information
27 at points in time when users’ mobile devices are located within a specific region
28 related to that information. *See* Claims 7, 8. Further yet, it was not well-

1 understood, routine, or conventional at the time of the invention of the ‘398 Patent
2 to have a system configured to (i) detect movement of users’ mobile devices and
3 (ii) employ push technology to deliver information to users’ mobile devices, such
4 that (a) information is pushed to a user’s mobile device in a first geographical region
5 associated with a first storage data section as the user moves within a predetermined
6 distance of the first geographical region, and (b) information is pushed to the user’s
7 mobile device in a second geographical region associated with a second storage
8 data section as the user moves from the first geographical region to within a
9 predetermined distance of the second geographical region. *See* Claim 10. These
10 are just exemplary reasons why the inventions claimed in the ‘398 Patent were not
11 well-understood, routine, or conventional at the time of the invention of the ‘398
12 Patent.

13 24. Additionally, the ‘398 Patent’s more powerful location-based
14 information delivery system improved the user interface of electronics devices
15 (*e.g.*, mobile devices) in that a user would be presented with “relevant visual
16 information related to a particular region at a particular point in time.” Exhibit A
17 at 3:20-22. In other words, the ‘398 Patent’s specific improvement over existing
18 technology resulted in a user’s electronics device displaying particular information
19 that is most relevant to a user at a given point in time.

20 25. Consistent with the problems addressed being rooted in GPS-based
21 information delivery systems, the ‘398 Patent’s solutions naturally are also rooted
22 in that same technology that cannot be performed solely with pen and paper or in
23 the human mind. Indeed, using pen and paper or a human mind would ignore the
24 stated purpose of the ‘398 Patent and the problem it was specifically designed to
25 address. Doing so would also run counter to the inventors’ detailed description of
26 the inventions and the language of the claims and be a practical impossibility.
27 Likewise, at least because the ‘398 Patent’s claimed solutions address problems
28 rooted in GPS-based information delivery systems, these solutions are not merely

1 drawn to longstanding human activities.

2 **The ‘331 Patent**

3 26. U.S. Patent No. 7,843,331 (“the ‘331 Patent”) is entitled “System for
4 dynamically pushing information to a user utilizing global positioning system,” and
5 was issued on November 30, 2010. A true and correct copy of the ‘331 Patent is
6 attached as Exhibit B.

7 27. The ‘331 Patent was filed on April 15, 2004 as U.S. Patent Application
8 No. 10/824,962, which is a continuation of U.S. Patent Application No. 09/523,022,
9 filed on March 10, 2000, and now U.S. Patent No. 6,741,188, which is a
10 continuation-in-part of U.S. Patent Application No. 09/426,065, filed October 22,
11 1999, and now the ‘398 Patent.

12 28. Corrino is the owner of all rights, title, and interest in and to the ‘331
13 Patent, with the full and exclusive right to bring suit to enforce the ‘331 Patent,
14 including the right to recover for past infringement.

15 29. The ‘331 Patent is valid and enforceable under United States Patent
16 Laws.

17 30. Corrino incorporates by reference and re-alleges the foregoing
18 paragraph numbers 19-25 of this Complaint as if fully set forth herein.

19 31. Like the inventions claimed in the ‘398 Patent—a parent to the ‘331
20 Patent—the inventions claimed in the ‘331 Patent were not well-understood,
21 routine, or conventional.

22 32. Indeed, it was not well-understood, routine, or conventional at the time
23 of the invention of the ‘331 Patent to have a system configured to initiate the
24 transmission of information to a user’s communications device if the
25 communications device’s indicated geographic position changes from a first
26 position that is greater than a predefined distance from a geographic region
27 associated with an information source to a second position that is within a
28 predefined distance from a geographic region associated with the information

1 source. *See* Claims 1, 11, 21. Moreover, it was not well-understood, routine, or
2 conventional at the time of the invention of the ‘331 Patent to have a system
3 configured to (i) maintain an index of information sources, each of which is
4 associated with at least one geographic region and a demographic code, and (ii)
5 initiate the transmission of the information to the user’s communications device in
6 which the source of that information is associated with a demographic code
7 associated with the communications device. *See* Claims 7, 17. Further yet, it was
8 not well-understood, routine, or conventional at the time of the invention of the
9 ‘331 Patent to have a system configured to initiate the transmission of the
10 information to the user’s communications device in which the information is based
11 on the day and time that the communications device’s geographic position changes
12 from the first position to the second position. *See* Claims 9, 19. These are just
13 exemplary reasons why the inventions claimed in the ‘331 Patent were not well-
14 understood, routine, or conventional at the time of the invention of the ‘331 Patent.

15 **The ‘599 Patent**

16 33. U.S. Patent No. 7,982,599 (“the ‘599 Patent”) is entitled “System for
17 dynamically pushing information to a user utilizing global positioning system,” and
18 was issued on July 19, 2011. A true and correct copy of the ‘599 Patent is attached
19 as Exhibit C.

20 34. The ‘599 Patent was filed on March 10, 2008 as U.S. Patent
21 Application No. 12/045,601, which is a continuation of U.S. Patent Application No.
22 10/824,962, filed on April 15, 2004, and now the ‘331 Patent, which is a
23 continuation of U.S. Patent Application No. 09/523,022, filed on March 10, 2000,
24 and now U.S. Patent No. 6,741,188, which is a continuation-in-part of U.S. Patent
25 Application No. 09/426,065, filed October 22, 1999, and now the ‘398 Patent.

26 35. Corrino is the owner of all rights, title, and interest in and to the ‘599
27 Patent, with the full and exclusive right to bring suit to enforce the ‘599 Patent,
28 including the right to recover for past infringement.

1 36. The '599 Patent is valid and enforceable under United States Patent
2 Laws.

3 37. Corrino incorporates by reference and re-alleges the foregoing
4 paragraph numbers 19-25 of this Complaint as if fully set forth herein.

5 38. Like the inventions claimed in the '398 and '331 Patents—parents to
6 the '599 Patent—the inventions claimed in the '599 Patent were not well-
7 understood, routine, or conventional.

8 39. Indeed, it was not well-understood, routine, or conventional at the time
9 of the invention of the '599 Patent to have an apparatus configured to initiate
10 transmission of digital content to a user's wireless communications device in
11 response to determining that the geographic position of the wireless
12 communications device has changed to be within a predefined distance of a
13 geographic area associated with the digital content during a predefined timeframe
14 associated with the digital content. *See* Claims 1, 10, 19. Moreover, it was not
15 well-understood, routine, or conventional at the time of the invention of the '599
16 Patent (i) for a user's wireless communications device to be associated with one or
17 more demographic criteria and (ii) to have an apparatus configured to initiate the
18 transmission of the digital content to the user's wireless communications device in
19 which the digital content is associated with at least one demographic criterion of
20 the one or more demographic criteria associated with the wireless communications
21 device. *See* Claims 2, 11, 20. Further yet, it was not well-understood, routine, or
22 conventional at the time of the invention of the '599 Patent to have an apparatus
23 that is further configured to determine whether a received geographic position of a
24 user's wireless communications device is within a predetermined distance from one
25 or more physical commercial establishments associated with digital content. *See*
26 Claim 8, 17, 26. These are just exemplary reasons why the inventions claimed in
27 the '599 Patent were not well-understood, routine, or conventional at the time of
28 the invention of the '599 Patent.

The ‘450 Patent

1
2 40. U.S. Patent No. 7,525,450 (“the ‘450 Patent”) is entitled “System for
3 dynamically pushing information to a user utilizing global positioning system,” and
4 was issued on April 28, 2009. A true and correct copy of the ‘450 Patent is attached
5 as Exhibit D.

6 41. The ‘450 Patent was filed on August 3, 2005 as U.S. Patent
7 Application No. 11/196,206, which is a continuation of U.S. Patent Application No.
8 10/824,962, filed on April 15, 2004, and now the ‘331 Patent, which is a
9 continuation of U.S. Patent Application No. 09/523,022, filed on March 10, 2000,
10 and now U.S. Patent No. 6,741,188, which is a continuation-in-part of U.S. Patent
11 Application No. 09/426,065, filed October 22, 1999, and now the ‘398 Patent.

12 42. Corrino is the owner of all rights, title, and interest in and to the ‘450
13 Patent, with the full and exclusive right to bring suit to enforce the ‘450 Patent,
14 including the right to recover for past infringement.

15 43. The ‘450 Patent is valid and enforceable under United States Patent
16 Laws.

17 44. Corrino incorporates by reference and re-alleges the foregoing
18 paragraph numbers 19-25 of this Complaint as if fully set forth herein.

19 45. Like the inventions claimed in the ‘398 and ‘331 Patents—parents to
20 the ‘450 Patent—the inventions claimed in the ‘450 Patent were not well-
21 understood, routine, or conventional.

22 46. Indeed, it was not well-understood, routine, or conventional at the time
23 of the invention of the ‘450 Patent to have a system configured to maintain (i) an
24 index of information sources, each of which is associated with (a) a demographic
25 code and (b) one or more location codes, each corresponding to a geographic region
26 and (ii) an index of users’ communications devices, each communications device
27 being associated with a demographic code. *See* Claims 1, 11, 21. Moreover, it was
28 not well-understood, routine, or conventional at the time of the invention of the

1 ‘450 Patent to have a system configured to initiate the transmission of relevant
2 information to a user’s communications device in response to receiving (i) an
3 identifier corresponding to the communications device and (ii) an indication of the
4 geographic position of the communications device, where the relevant information
5 originates from an information source that is associated with both (i) a location code
6 corresponding to a geographic region within a defined distance from the geographic
7 position specified in the received indication, and (ii) a demographic code associated
8 with the communications device specified in the received indication. *See* Claims
9 1, 11, 21. Further yet, it was not well-understood, routine, or conventional at the
10 time of the invention of the ‘450 Patent to have a system configured to initiate the
11 transmission of the relevant information to the user’s communications device in
12 which the relevant information is based on the time and day that the indication of
13 the geographic position of the communications device is received. *See* Claims 2,
14 12. These are just exemplary reasons why the inventions claimed in the ‘450 Patent
15 were not well-understood, routine, or conventional at the time of the invention of
16 the ‘450 Patent.

17 **The ‘149 Patent**

18 47. U.S. Patent No. 7,716,149 (“the ‘149 Patent”) is entitled “Method,
19 device, and program product for a social dashboard associated with a persistent
20 virtual environment,” and was issued on May 11, 2010. A true and correct copy of
21 the ‘149 Patent is attached as Exhibit E.

22 48. The ‘149 Patent was filed on April 11, 2006 as U.S. Patent Application
23 No. 11/402,399.

24 49. Corrino is the owner of all rights, title, and interest in and to the ‘149
25 Patent, with the full and exclusive right to bring suit to enforce the ‘149 Patent,
26 including the right to recover for past infringement.

27 50. The ‘149 Patent is valid and enforceable under United States Patent
28 Laws.

1 51. The ‘149 Patent discloses, among other things, “a user interface for
2 monitoring the social health of a persistent virtual environment.” Exhibit E at
3 Abstract. The ‘149 Patent also states that “no diagnostic tools are available to
4 timely measure the social aspects of player interactions in [a] persistent virtual
5 environment or to measure or monitor the health of the online player community in
6 a persistent virtual environment.” *Id.* at 1:48-52. In other words, as described in
7 the ‘149 Patent, the conventional “analysis results only reflect the state of the
8 persistent virtual environment at the time the data was collected,” and therefore,
9 “the analysis is not timely, has no capability to forecast problems, and only operates
10 from single source of information.” *Id.* at 1:58-61.

11 52. In discussing the shortcomings of the prior art, the ‘149 Patent
12 recognizes that “it would be advantageous to provide a way to timely monitor
13 persistent virtual environments and to measure, monitor, and treat the health of
14 online player communities within persistent virtual environments.” Exhibit E at
15 2:19-22. The claimed invention of the ‘149 Patent provides such a mechanism.

16 **The Inventions Claimed in the ‘149 Patent Improved Technology & Were**
17 **Not Well-Understood, Routine, or Conventional**

18 53. Given the state of the art at the time of the inventions of the ‘149
19 Patent, including the deficiencies in monitoring technology for virtual persistent
20 environments, the inventive concepts of the ‘149 Patent cannot be considered to be
21 conventional, well-understood, or routine. *See, e.g.*, Exhibit E at 1:48-52, 1:58-61,
22 2:19-22. The ‘149 Patent discloses, among other things, an unconventional solution
23 to problems arising in the context of monitoring virtual persistent environments,
24 namely, that existing monitoring tools were untimely, only monitoring certain
25 aspects, and operating on a narrow source of information. *See, e.g., id.* at 1:48-52,
26 1:58-61.

27 54. The ‘149 Patent offered a technological solution to such problems
28 resulting in monitoring technology for virtual persistent environments that

1 addressed these problems and also facilitated providing an improved user interface
2 for electronics devices. In particular, the ‘149 Patent provided a specific,
3 unconventional solution for monitoring a state of a virtual persistent environment
4 and displaying a limited set of information related to that monitoring to the user
5 which involved “displaying, at a computer system, a visualization that represents a
6 social aspect of said persistent virtual environment,” the “visualization responsive
7 to a metric” and “represents an overall interactivity level,” and “displaying, at the
8 computer system, responsive to [a] selection command, a second visualization that
9 represents drill-down information associated with said metric.” *See, e.g.*, Exhibit
10 E at Claims 1, 8, 15.

11 55. Indeed, it was not well-understood, routine, or conventional at the time
12 of the invention of the ‘149 Patent for a computer system to display a visualization
13 that represents a social aspect of a persistent virtual environment, where the
14 visualization is responsive to a metric and represents an overall interactivity level
15 within the persistent virtual environment. *See* Claims 1, 8, 15. Moreover, it was
16 not well-understood, routine, or conventional at the time of the invention of the
17 ‘149 Patent for a computer system to (i) display the visualization that represents the
18 social aspect of the persistent virtual environment and (ii) responsive to a selection
19 command, display a second visualization that represents drill-down information
20 associated with the metric. *See* Claims 1, 8, 15. These are just exemplary reasons
21 why the inventions claimed in the ‘149 Patent were not well-understood, routine,
22 or conventional at the time of the invention of the ‘149 Patent.

23 56. Indeed, the ‘149 Patent’s virtual persistent environment monitoring
24 system improved the user interface of electronics devices by allowing the user to
25 see the most relevant information related to a particular metric representing an
26 interactivity level within the virtual environment. In this respect, the ‘149 Patent
27 claims recite a particular manner of summarizing and presenting specific, virtual-
28 environment metric related information in electronic devices.

1 57. Consistent with the problems addressed being rooted in monitoring
2 technology for virtual persistent environments – that, by virtue of the monitored
3 environment being virtual, requires computer network technology – the ‘149
4 Patent’s solutions naturally are also rooted in that same technology that cannot be
5 performed solely with pen and paper or in the human mind. Indeed, using pen and
6 paper or a human mind would ignore the stated purpose of the ‘149 Patent and the
7 problem it was specifically designed to address. As such, using pen and paper or a
8 human mind would not provide a solution to the problem addressed by the ‘149
9 Patent and run counter to the inventors’ detailed description of the inventions and
10 the language of the claims and be a practical impossibility. Likewise, at least
11 because the ‘149 Patent’s claimed solutions address problems rooted in monitoring
12 technology for virtual persistent environments, these solutions are not merely
13 drawn to longstanding human activities.

14 **COUNT I: INFRINGEMENT OF U.S. PATENT NO. 6,353,398**

15 58. Corrino incorporates by reference and re-alleges all the foregoing
16 paragraphs of this Complaint as if fully set forth herein.

17 59. Instagram has infringed and is infringing, either literally or under the
18 doctrine of equivalents, the ‘398 Patent in violation of 35 U.S.C. § 271 *et seq.*,
19 directly and/or indirectly, by making, using, offering for sale, or selling in the
20 United States, and/or importing into the United States without authority or license,
21 products and services that direct location-based information to location-specific
22 users, including the www.instagram.com website and Instagram mobile application
23 (hereinafter “the Accused Products”), that infringe at least one or more claims of
24 the ‘398 Patent.

25 60. As just one non-limiting example, set forth below (with claim
26 language in bold and italics) is a description of infringement of exemplary claim 1
27 of the ‘398 Patent in connection with the Accused Products. This description is
28 based on publicly available information. Corrino reserves the right to modify this

1 description, including, for example, on the basis of information about the Accused
2 Products that it obtains during discovery.

3 ***1(a): A system for directing region-specific information; comprising—***
4 Instagram is a social networking platform that provides services by which
5 certain Instagram users (*e.g.*, Instagram advertisers) can target other
6 Instagram users such that those users' communications devices receive the
7 advertisers' advertisements when certain predefined conditions are met. An
8 example of such a service is Instagram's location targeting service.
9 Instagram at least uses a system configured in accordance with claim 1 to
10 facilitate providing the location targeting service for one or more Instagram
11 advertisers.

12 Indeed, Instagram encourages Instagram advertisers to “[m]ake your
13 ads reach the exact audience you want using our precise targeting options.”
14 <https://business.instagram.com/advertising/#precise-targeting>. One such
15 targeting option allows Instagram advertisers to “[t]arget people based in
16 specific locations like states, provinces, cities or countries.” *Id.* Instagram
17 advertisers “can create ads for Instagram . . . by using ad creation in Facebook
18 Ads Manager or the ads API.” [https://help.instagram.com/15542450148](https://help.instagram.com/1554245014870700/?helpref=hc_fnav&bc[0]=Instagram%20Help&bc[1]=Instagram%20for%20Businesses)
19 [70700/?helpref=hc_fnav&bc\[0\]=Instagram%20Help&bc\[1\]=Instagram%20](https://help.instagram.com/1554245014870700/?helpref=hc_fnav&bc[0]=Instagram%20Help&bc[1]=Instagram%20for%20Businesses)
20 [for%20Businesses](https://business.instagram.com/advertising); *see also, e.g.*, <https://business.instagram.com/advertising>
21 (“Instagram uses the same powerful advertising tools as Facebook. That way,
22 you can set up, run and track campaigns the same way you do with Facebook
23 ads. If you're new to advertising on Instagram or even Facebook, here's how
24 to get started.”).

25 ***1(b): a system for locating and transmitting information to location-***
26 ***specific users; and—***Instagram at least uses a system (*e.g.*, one or more
27 servers) comprising a system for locating and transmitting information to
28 location-specific users.

1 For instance, on information and belief, when an Instagram user's
2 wireless communications device has Instagram's location services enabled,
3 one or more servers monitor (*i.e.*, locate) the geographic position of the
4 wireless communications device and transmit information (*e.g.*,
5 advertisements) to the user's wireless communications device to facilitate
6 Instagram's location targeting service. *See, e.g.*, [https://help.instagram.com/
7 171821142968851?helpref=search&sr=1&query=%20location%20services](https://help.instagram.com/171821142968851?helpref=search&sr=1&query=%20location%20services)
8 (explaining how an Instagram user can enable or disable Instagram's location
9 services using an iPhone). In this respect, the one or more servers are
10 configured to receive geographic position data for the wireless
11 communications devices of Instagram users that have not opted out of
12 allowing Instagram to use location services. *See, e.g.*, [https://www.facebook
13 .com/business/a/location-targeting](https://www.facebook.com/business/a/location-targeting) ("Location targeting [available through
14 Facebook's Ads Manager] helps you find people where you do business,
15 helping you create ads that are relevant to people based on their location.").
16 Indeed, Facebook explains that "[t]he choices for audiences within a location
17 are: [1] (Default) Everyone in this location. People whose current city on
18 their Instagram profile is that location, as well as anyone determined to be in
19 that location via mobile device. [2] People who live in this location. People
20 whose current city from their Instagram profile is within that location. This
21 is also validated by IP address and their Instagram friends' stated locations.
22 [3] Recently in this location. People whose most recent location is the
23 selected area, as determined only via mobile device. This includes people
24 who live there or who may be traveling there. [4] People traveling in this
25 location. People whose most recent location is the selected area, as
26 determined via mobile device, and are greater than 100 miles from their
27 stated home location from their Instagram profiles." [https://www.face
28 book.com/business/a/location-targeting](https://www.facebook.com/business/a/location-targeting).

1 *1(c): a directed information system for linking information related to the*
 2 *location specific users, the directed information system having access to a*
 3 *regionally defined data base for directing region-specific information to*
 4 *location-specific users, and employing push technology to push*
 5 *information to the location-specific users.*—Instagram at least uses a system
 6 (e.g., one or more servers) comprising a directed information system for
 7 linking information related to the location specific users, the directed
 8 information system having access to a regionally defined data base for
 9 directing region-specific information to location-specific users, and
 10 employing push technology to push information to the location-specific
 11 users.

The screenshot displays the Facebook Ads targeting interface titled "Who do you want your ads to reach?". The "NEW AUDIENCE" section is highlighted with a red box. Within this section, the "Locations" dropdown is set to "Everyone in this location", and the "United States" is selected. Below this, there are fields for "Age" (18-65+), "Gender" (All, Men, Women), and "Languages". To the right, the "Audience Definition" section shows a gauge indicating the audience selection is "fairly broad". Below the gauge, the "Audience Details" section is also highlighted with a red box, showing "Location: United States" and "Age: 18-65+". The "Potential Reach" is listed as 186,000,000 people. Other targeting options like "Interests", "Behaviors", and "More Categories" are visible at the bottom.

23 For instance, the one or more servers are configured to facilitate
 24 providing Instagram’s location targeting services that enable an Instagram
 25 advertiser’s information (e.g., an advertisement) to be provided to a
 26 particular “audience” (i.e., wireless communications devices of particular
 27 Instagram users). Instagram allows an Instagram advertiser to define the
 28 particular “audience” based on a variety of factors (e.g., geographic regions),

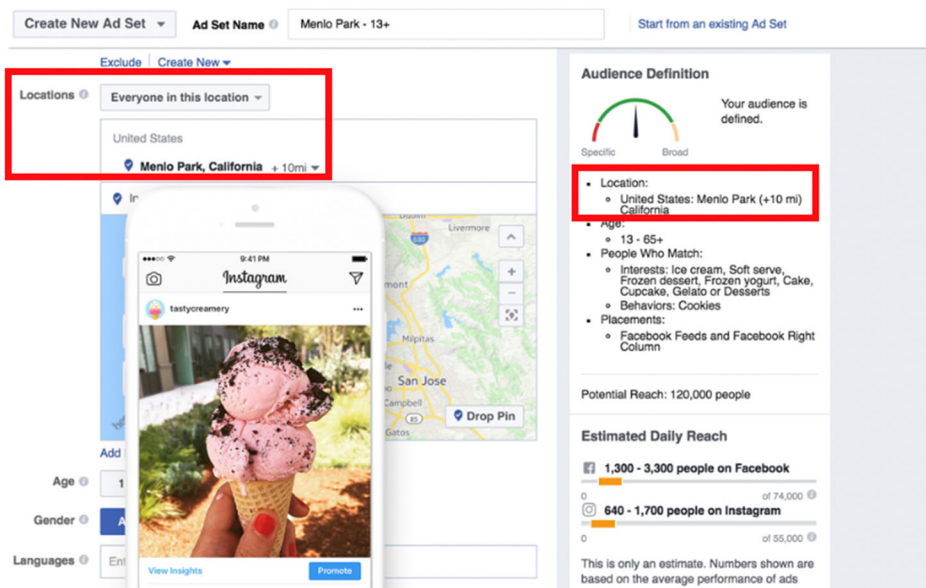
1 and by doing so, associates the advertiser (and its information) with the
2 factors that define its particular audience. *See, e.g.*, https://www.facebook.com/business/help/1634705703469129?helpref=faq_content (“The following
3 is a step-by-step guide for creating Instagram ads in ad creation. . . . In the
4 Audience section, create an audience for your ad. You can choose audience
5 characteristics such as age, gender, interests and more.”) (geographic region
6 emphasized in red in above screenshot). In this respect, the one or more
7 servers maintain and have access to a database of Instagram advertisers and
8 their respective associations (*e.g.*, geographic-region associations) that
9 facilitates directing region-specific information (*e.g.*, advertisements) to
10 certain Instagram users’ wireless communications devices.
11

12 An example of a factor by which an Instagram advertiser can define
13 its “audience” is one or more geographic regions. <https://business.instagram.com/advertising/#precise-targeting> (“Target people based in specific
14 locations like states, provinces, cities or countries.”). An Instagram
15 advertiser (and its information) can be associated with one or more
16 geographic regions in a variety of manners.
17

18 As one possibility, any Instagram advertiser that utilizes Instagram’s
19 “radius targeting” feature is associated with at least one geographic region
20 and defines a corresponding distance around that at least one geographic
21 region. As explained by Facebook, “[l]ocation targeting lets you select your
22 audience within a custom radius from the following locations: [1] Country
23 [2] State or region [3] City [4] DMA®* [(Designated Market Area) regions
24 are the geographic areas in the United States in which local television
25 viewing is measured by Nielsen.] [5] Zip or post code[.]” <https://www.facebook.com/business/a/location-targeting>.
26

27 Instagram provides an example illustration in which an Instagram
28 advertiser becomes associated with a geographic region (*e.g.*, Menlo Park,

1 California) and in which the advertiser defines a corresponding distance
 2 around the region (*e.g.*, 10-mile radius around Menlo Park):



13 <https://business.instagram.com/advertising/#precise-targeting>.

14 On information and belief, to facilitate providing Instagram’s location
 15 targeting services, the one or more servers are configured to employ push
 16 technology to push information (*e.g.*, advertisements) to Instagram users’
 17 wireless communications devices that the one or more servers have matched
 18 (*i.e.*, linked) to the information of one or more Instagram Advertisers. As
 19 one example, when the one or more servers are monitoring the geographic
 20 position of a particular communications device of an Instagram user, the one
 21 or more servers will link and then push to the particular communications
 22 device an Instagram advertiser’s advertisement that is associated with the
 23 particular geographic region in which the particular communications device
 24 is located. *See, e.g.*, <https://help.instagram.com/162672033874406> (“When
 25 does Instagram send push notifications to my device? We may send
 26 notifications for several reasons”); <https://help.instagram.com/155833707900388> (“A device identifier may deliver information to us or to
 27 a third party partner about how you browse and use the Service and may help
 28

1 us or others provide reports or personalized content and ads.”);
2 https://www.facebook.com/ads/about/?entry_product=ad_preferences (“We
3 use location data to show you ads from advertisers trying to reach people in
4 or near a specific place. We get this information from sources such as: [1]
5 Where you connect to the internet [and 2] Where you use your phone[.]”).

6 61. Additionally, Instagram has been, and currently is, an active inducer
7 of infringement of the ‘398 Patent under 35 U.S.C. § 271(b) and contributory
8 infringer of the ‘398 Patent under 35 U.S.C. § 271(c).

9 62. Instagram knew of the ‘398 Patent, or at least should have known of
10 the ‘398 Patent, but was willfully blind to its existence. On information and belief,
11 Instagram has had actual knowledge of the ‘398 Patent since at least as early as the
12 filing and/or service of this Complaint.

13 63. Instagram has provided the Accused Products to its customers and, on
14 information and belief, instructions to use the Accused Products in an infringing
15 manner while being on notice of (or willfully blind to) the ‘398 Patent and
16 Instagram’s infringement. Therefore, on information and belief, Instagram knew
17 or should have known of the ‘398 Patent and of its own infringing acts, or
18 deliberately took steps to avoid learning of those facts.

19 64. Instagram knowingly and intentionally encourages and aids at least its
20 end-user customers to directly infringe the ‘398 Patent.

21 65. On information and belief, Instagram provides the Accused Products
22 to customers through various third-party application stores (*e.g.*, the Apple iTunes
23 App Store) and instructions to end-user customers so that such customers will use
24 the Accused Products in an infringing manner.

25 66. Instagram’s end-user customers directly infringe at least one or more
26 claims of the ‘398 Patent by using the Accused Products in their intended manner
27 to infringe. Instagram induces such infringement by providing the Accused
28 Products and instructions to enable and facilitate infringement, knowing of, or

1 being willfully blind to the existence of, the '398 Patent. On information and belief,
2 Instagram specifically intends that its actions will result in infringement of one or
3 more claims of the '398 Patent, or subjectively believe that their actions will result
4 in infringement of the '398 Patent, but took deliberate actions to avoid learning of
5 those facts, as set forth above.

6 67. Additionally, Instagram contributorily infringes at least one or more
7 claims of the '398 Patent by providing the Accused Products and/or software
8 components thereof, that embody a material part of the claimed inventions of the
9 '398 Patent, that are known by Instagram to be specially made or adapted for use
10 in an infringing manner, and are not staple articles with substantial non-infringing
11 uses. The Accused Products are specially designed to infringe at least one or more
12 claims of the '398 Patent, and their accused components have no substantial non-
13 infringing uses. In particular, on information and belief, the software modules and
14 code that implement and perform the infringing functionalities identified above are
15 specially made and adapted to carry out said functionality and do not have any
16 substantial non-infringing uses.

17 68. Instagram's infringement of the '398 Patent was and continues to be
18 willful and deliberate, entitling Corrino to enhanced damages.

19 69. Additional allegations regarding Instagram's knowledge of the '398
20 Patent and willful infringement will likely have evidentiary support after a
21 reasonable opportunity for discovery.

22 70. Instagram's infringement of the '398 Patent is exceptional and entitles
23 Corrino to attorneys' fees and costs incurred in prosecuting this action under 35
24 U.S.C. § 285.

25 71. Corrino is in compliance with any applicable marking and/or notice
26 provisions of 35 U.S.C. § 287 with respect to the '398 Patent.

27 72. Corrino is entitled to recover from Instagram all damages that Corrino
28 has sustained as a result of Instagram's infringement of the '398 Patent, including,

1 without limitation, a reasonable royalty.

2 **COUNT II: INFRINGEMENT OF U.S. PATENT NO. 7,843,331**

3 73. Corrino incorporates by reference and re-alleges all the foregoing
4 paragraphs of this Complaint as if fully set forth herein.

5 74. Instagram has infringed and is infringing, either literally or under the
6 doctrine of equivalents, the '331 Patent in violation of 35 U.S.C. § 271 *et seq.*,
7 directly and/or indirectly, by making, using, offering for sale, or selling in the
8 United States, and/or importing into the United States without authority or license,
9 products and services that direct location-based information to location-specific
10 users, including the Accused Products, that infringe at least one or more claims of
11 the '331 Patent.

12 75. As just one non-limiting example, set forth below is a description of
13 infringement of exemplary claim 11 of the '331 Patent in connection with the
14 Accused Products. This description is based on publicly available information.
15 Corrino reserves the right to modify this description, including, for example, on the
16 basis of information about the Accused Products that it obtains during discovery.

17 ***11(a): A system comprising***—As noted above, Instagram is a social
18 networking platform that provides services by which certain Instagram users
19 (*e.g.*, Instagram advertisers) can target other Instagram users such that those
20 users' communications devices receive the advertisers' advertisements when
21 certain predefined conditions are met. An example of such a service is
22 Instagram's location targeting service. Instagram at least uses a system in
23 accordance with claim 11 to facilitate providing the location targeting service
24 for one or more Instagram advertisers.

25 Indeed, Instagram encourages Instagram advertisers to “[m]ake your
26 ads reach the exact audience you want using our precise targeting options.”
27 <https://business.instagram.com/advertising/#precise-targeting>. One such
28 targeting option allows Instagram advertisers to “[t]arget people based in

1 specific locations like states, provinces, cities or countries.” *Id.* Instagram
2 advertisers “can create ads for Instagram . . . by using ad creation in Facebook
3 Ads Manager or the ads API.” [https://help.instagram.com/15542450148](https://help.instagram.com/1554245014870700/?helpref=hc_fnav&bc[0]=Instagram%20Help&bc[1]=Instagram%20for%20Businesses)
4 [70700/?helpref=hc_fnav&bc\[0\]=Instagram%20Help&bc\[1\]=Instagram%20](https://help.instagram.com/1554245014870700/?helpref=hc_fnav&bc[0]=Instagram%20Help&bc[1]=Instagram%20for%20Businesses)
5 [for%20Businesses; see also, e.g., https://business.instagram.com/advertising](https://business.instagram.com/advertising)
6 (“Instagram uses the same powerful advertising tools as Facebook. That way,
7 you can set up, run and track campaigns the same way you do with Facebook
8 ads. If you're new to advertising on Instagram or even Facebook, here's how
9 to get started.”).

10 ***11(b): an information source database comprising an index of information***
11 ***sources, wherein each information source in the index is associated with***
12 ***at least one geographic region; and***—Instagram at least uses a system (*e.g.*,
13 one or more servers) comprising an information source database comprising
14 an index of information sources, wherein each information source in the
15 index is associated with at least one geographic region.

16 For instance, the one or more servers are configured to facilitate
17 providing Instagram’s location targeting services that enable an Instagram
18 advertiser’s data (*e.g.*, an advertisement) to be provided to a particular
19 “audience” (*i.e.*, wireless communications devices of particular Instagram
20 users). Instagram allows an Instagram advertiser to define the particular
21 “audience” based on a variety of factors (*e.g.*, geographic regions), and by
22 doing so, associates the advertiser (and its data) with the factors that define
23 its particular audience. *See, e.g.,* [https://www.facebook.c](https://www.facebook.com/business/help/1634705703469129?helpref=faq_content)
24 [om/business/help/1634705703469129?helpref=faq_content](https://www.facebook.com/business/help/1634705703469129?helpref=faq_content) (“The following
25 is a step-by-step guide for creating Instagram ads in ad creation. . . . In the
26 Audience section, create an audience for your ad. You can choose audience
27 characteristics such as age, gender, interests and more.”) (geographic region
28 outlined in red below):

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The screenshot displays the 'Who do you want your ads to reach?' interface. The 'NEW AUDIENCE' section is highlighted with a red box. It includes a 'Locations' dropdown menu set to 'Everyone in this location', with a search bar containing 'United States' and a selection of 'United States'. Below this are fields for 'Age' (18-65+), 'Gender' (All, Men, Women), 'Languages', and 'More Demographics'. Other sections include 'Interests', 'Behaviors', 'More Categories', and 'Connections'. On the right, the 'Audience Definition' section shows a gauge indicating the audience is 'fairly broad' and lists 'Audience Details' with 'Location: United States' and 'Age: 18-65+'. The 'Potential Reach' is listed as 186,000,000 people.

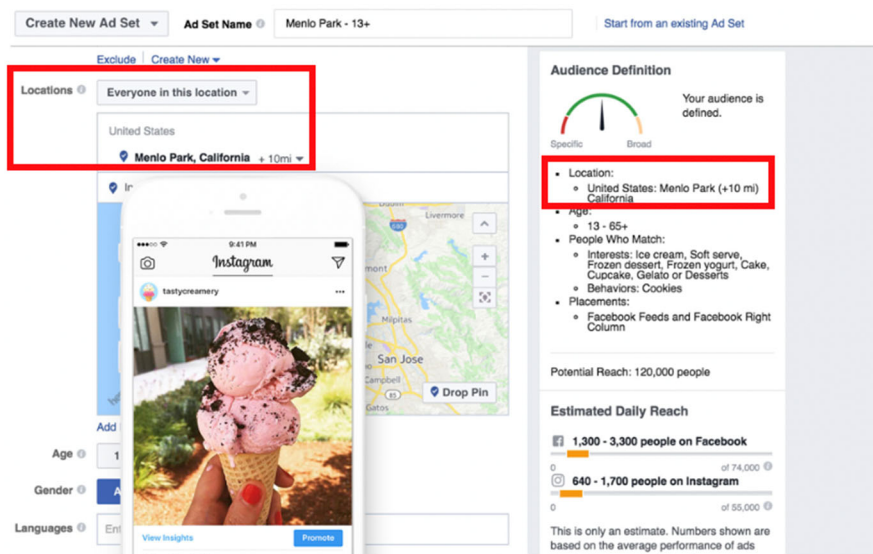
13 In this respect, the one or more servers are configured to maintain an
14 index of Instagram advertisers and their respective associations (e.g., one or
15 more associated geographic regions).

16 As noted above, an example of a factor by which an Instagram
17 advertiser can define its “audience” is one or more geographic regions.
18 <https://business.instagram.com/advertising/#precise-targeting> (“Target
19 people based in specific locations like states, provinces, cities or countries.”).
20 An Instagram advertiser (and its information) can be associated with one or
21 more geographic regions in a variety of manners.

22 As one possibility, any Instagram advertiser that utilizes Instagram’s
23 “radius targeting” feature is associated with at least one geographic region
24 and defines a corresponding distance around that at least one geographic
25 region. As explained by Facebook, “[l]ocation targeting lets you select your
26 audience within a custom radius from the following locations: [1] Country
27 [2] State or region [3] City [4] DMA®* [(Designated Market Area) regions
28 are the geographic areas in the United States in which local television

1 viewing is measured by Nielsen.] [5] Zip or post code[.]” <https://www.facebook.com/business/a/location-targeting>.

2
3 Instagram provides an example illustration in which an Instagram
4 advertiser becomes associated with a geographic region (e.g., Menlo Park,
5 California) and in which the advertiser defines a corresponding distance
6 around the region (e.g., 10-mile radius around Menlo Park):



<https://business.instagram.com/advertising/#precise-targeting>.

11(c): one or more processors configured to initiate the transmission of data to a communications device if the communications device’s indicated geographic position changes from a first position that is greater than a predefined distance from a geographic region associated with the at least one information source to a second position that is within a predefined distance from a geographic region associated with the at least one information source.—Instagram at least uses a system (e.g., one or more servers) comprising one or more processors configured to initiate the transmission of data from at least one of the information sources to a communications device if the communications device’s indicated geographic position changes from a first position that is greater than a predefined

1 distance from a geographic region associated with the at least one
2 information source to a second position that is within a predefined distance
3 from a geographic region associated with the at least one information source.

4 For example, the one or more servers initiate the transmission of an
5 advertisement of an advertiser that utilizes Instagram's location targeting
6 service to an Instagram user's communication device if the communication
7 device's indicated geographic position changes from being outside of the
8 predefined radius around one of the advertiser's associated geographic
9 regions to being inside of the predefined radius.

10 For instance, on information and belief, when an Instagram user's
11 wireless communications device has Instagram's location services enabled,
12 one or more servers monitor the geographic position of the wireless
13 communications device and transmit data (*e.g.*, advertisements) to the user's
14 wireless communications device to facilitate Instagram's location targeting
15 service. *See, e.g.*, <https://help.instagram.com/171821142968851?helpref=search&sr=1&query=%20location%20services> (explaining how an
16 Instagram user can enable or disable Instagram's location services using an
17 iPhone). In this respect, the one or more servers are configured to receive
18 geographic position data for the wireless communications devices of
19 Instagram users that have not opted out of allowing Instagram to use location
20 services. *See, e.g.*, <https://www.facebook.com/business/a/location-targeting>
21 (“Location targeting [available through Facebook’s Ads Manager] helps you
22 find people where you do business, helping you create ads that are relevant
23 to people based on their location.”). Indeed, Facebook explains that “[t]he
24 choices for audiences within a location are: [1] (Default) Everyone in this
25 location. People whose current city on their Instagram profile is that location,
26 as well as anyone determined to be in that location via mobile device. [2]
27 People who live in this location. People whose current city from their
28

1 Instagram profile is within that location. This is also validated by IP address
2 and their Instagram friends' stated locations. [3] Recently in this location.
3 People whose most recent location is the selected area, as determined only
4 via mobile device. This includes people who live there or who may be
5 traveling there. [4] People traveling in this location. People whose most
6 recent location is the selected area, as determined via mobile device, and are
7 greater than 100 miles from their stated home location from their Instagram
8 profiles.” <https://www.facebook.com/business/a/location-targeting>.

9 When the one or more servers are monitoring the geographic position
10 of a particular communications device of an Instagram user, the one or more
11 servers will initiate the transmission of an advertisement for an Instagram
12 advertiser to the particular communications device if the particular
13 communication device's geographic position changes from being outside of
14 the predefined radius around one of the advertiser's associated geographic
15 regions to being inside of the predefined radius. *See, e.g.*,
16 <https://help.instagram.com/162672033874406> (“When does Instagram send
17 push notifications to my device? We may send notifications for several
18 reasons”); <https://help.instagram.com/155833707900388> (“A device
19 identifier may deliver information to us or to a third party partner about how
20 you browse and use the Service and may help us or others provide reports or
21 personalized content and ads.”); https://www.facebook.com/ads/about/?entry_product=ad_preferences (“We use location data to
22 show you ads from advertisers trying to reach people in or near a specific
23 place. We get this information from sources such as: [1] Where you connect
24 to the internet [and 2] Where you use your phone[.]”).
25 <https://www.facebook.com/business/a/location-targeting> (“Location
26 targeting lets you select your audience within a custom radius from the
27 following locations: [1] Country [2] State or region [3] City [4] DMA®*
28

1 [(Designated Market Area) regions are the geographic areas in the United
2 States in which local television viewing is measured by Nielsen.] [5] Zip or
3 post code[.]”).

4 76. Additionally, Instagram has been, and currently is, an active inducer
5 of infringement of the ‘331 Patent under 35 U.S.C. § 271(b) and contributory
6 infringer of the ‘331 Patent under 35 U.S.C. § 271(c).

7 77. Instagram knew of the ‘331 Patent, or at least should have known of
8 the ‘331 Patent, but was willfully blind to its existence. On information and belief,
9 Instagram has had actual knowledge of the ‘331 Patent since at least as early as the
10 filing and/or service of this Complaint.

11 78. Instagram has provided the Accused Products to its customers and, on
12 information and belief, instructions to use the Accused Products in an infringing
13 manner while being on notice of (or willfully blind to) the ‘331 Patent and
14 Instagram’s infringement. Therefore, on information and belief, Instagram knew or
15 should have known of the ‘331 Patent and of its own infringing acts, or deliberately
16 took steps to avoid learning of those facts.

17 79. Instagram knowingly and intentionally encourages and aids at least its
18 end-user customers to directly infringe the ‘331 Patent.

19 80. On information and belief, Instagram provides the Accused Products
20 to customers through various third-party application stores (*e.g.*, the Apple iTunes
21 App Store) and instructions to end-user customers so that such customers will use
22 the Accused Products in an infringing manner.

23 81. Instagram’s end-user customers directly infringe at least one or more
24 claims of the ‘331 Patent by using the Accused Products in their intended manner
25 to infringe. Instagram induces such infringement by providing the Accused
26 Products and instructions to enable and facilitate infringement, knowing of, or
27 being willfully blind to the existence of, the ‘331 Patent. On information and belief,
28 Instagram specifically intends that its actions will result in infringement of at least

1 one or more claims of the ‘331 Patent, or subjectively believe that their actions will
2 result in infringement of the ‘331 Patent, but took deliberate actions to avoid
3 learning of those facts, as set forth above.

4 82. Additionally, Instagram contributorily infringes at least one or more
5 claims of the ‘331 Patent by providing the Accused Products and/or software
6 components thereof, that embody a material part of the claimed inventions of the
7 ‘331 Patent, that are known by Instagram to be specially made or adapted for use
8 in an infringing manner, and are not staple articles with substantial non-infringing
9 uses. The Accused Products are specially designed to infringe at least one or more
10 claims of the ‘331 Patent, and their accused components have no substantial non-
11 infringing uses. In particular, on information and belief, the software modules and
12 code that implement and perform the infringing functionalities identified above are
13 specially made and adapted to carry out said functionality and do not have any
14 substantial non-infringing uses.

15 83. Instagram’s infringement of the ‘331 Patent was and continues to be
16 willful and deliberate, entitling Corrino to enhanced damages.

17 84. Additional allegations regarding Instagram’s knowledge of the ‘331
18 Patent and willful infringement will likely have evidentiary support after a
19 reasonable opportunity for discovery.

20 85. Instagram’s infringement of the ‘331 Patent is exceptional and entitles
21 Corrino to attorneys’ fees and costs incurred in prosecuting this action under 35
22 U.S.C. § 285.

23 86. Corrino is in compliance with any applicable marking and/or notice
24 provisions of 35 U.S.C. § 287 with respect to the ‘331 Patent.

25 87. Corrino is entitled to recover from Instagram all damages that Corrino
26 has sustained as a result of Instagram’s infringement of the ‘331 Patent, including,
27 without limitation, a reasonable royalty.

28 **COUNT III: INFRINGEMENT OF U.S. PATENT NO. 7,982,599**

1 88. Corrino incorporates by reference and re-alleges all the foregoing
2 paragraphs of this Complaint as if fully set forth herein.

3 89. Instagram has infringed and is infringing, either literally or under the
4 doctrine of equivalents, the ‘599 Patent in violation of 35 U.S.C. § 271 *et seq.*,
5 directly and/or indirectly, by making, using, offering for sale, or selling in the
6 United States, and/or importing into the United States without authority or license,
7 products and services that direct location-based information to location-specific
8 users, including the Accused Products, that infringe at least one or more claims of
9 the ‘599 Patent.

10 90. As just one non-limiting example, set forth below is a description of
11 infringement of exemplary claim 10 of the ‘599 Patent in connection with the
12 Accused Products. This description is based on publicly available information.
13 Corrino reserves the right to modify this description, including, for example, on the
14 basis of information about the Accused Products that it obtains during discovery.

15 ***10(a): An apparatus comprising:***—As noted above, Instagram is a social
16 networking platform that provides services by which certain Instagram users
17 (*e.g.*, Instagram advertisers) can target other Instagram users such that those
18 users’ communications devices receive the advertisers’ advertisements when
19 certain predefined conditions are met. An example of such a service is
20 Instagram’s location targeting service. Instagram at least uses an apparatus
21 (*e.g.*, a server) configured in accordance with claim 10 to facilitate providing
22 the location targeting service for one or more Instagram advertisers.

23 Indeed, Instagram encourages Instagram advertisers to “[m]ake your
24 ads reach the exact audience you want using our precise targeting options.”
25 <https://business.instagram.com/advertising/#precise-targeting>. One such
26 targeting option allows Instagram advertisers to “[t]arget people based in
27 specific locations like states, provinces, cities or countries.” *Id.* Instagram
28 advertisers “can create ads for Instagram . . . by using ad creation in Facebook

1 Ads Manager or the ads API.” <https://help.instagram.com/15542450148>
2 [70700/?helpref=hc_fnav&bc\[0\]=Instagram%20Help&bc\[1\]=Instagram%20](https://help.instagram.com/15542450148/70700/?helpref=hc_fnav&bc[0]=Instagram%20Help&bc[1]=Instagram%20for%20Businesses)
3 [for%20Businesses](https://help.instagram.com/15542450148/70700/?helpref=hc_fnav&bc[0]=Instagram%20Help&bc[1]=Instagram%20for%20Businesses); *see also, e.g.*, <https://business.instagram.com/advertising>
4 (“Instagram uses the same powerful advertising tools as Facebook. That way,
5 you can set up, run and track campaigns the same way you do with Facebook
6 ads. If you're new to advertising on Instagram or even Facebook, here's how
7 to get started.”).

8 ***10(b): one or more processors configured to receive geographic position***
9 ***data associated with a wireless communications device, and***—Instagram at
10 least uses an apparatus (*e.g.*, a server) comprising one or more processors
11 configured to receive geographic position data associated with a wireless
12 communications device.

13 For instance, on information and belief, when an Instagram user’s
14 wireless communications device has Instagram’s location services enabled,
15 a server monitors the geographic position of the wireless communications
16 device to facilitate Instagram’s location targeting service. *See, e.g.*,
17 [https://help.instagram.com/171821142968851?helpref=search&sr=1&query](https://help.instagram.com/171821142968851?helpref=search&sr=1&query=%20location%20services)
18 [=%20location%20services](https://help.instagram.com/171821142968851?helpref=search&sr=1&query=%20location%20services) (explaining how an Instagram user can enable or
19 disable Instagram’s location services using an iPhone). In this respect, the
20 server is configured to receive geographic position data for the wireless
21 communications devices of Instagram users that have not opted out of
22 allowing Instagram to use location services. *See, e.g.*, [https://www.](https://www.facebook.com/business/a/location-targeting)
23 [facebook.com/business/a/location-targeting](https://www.facebook.com/business/a/location-targeting) (“Location targeting [available
24 through Facebook’s Ads Manager] helps you find people where you do
25 business, helping you create ads that are relevant to people based on their
26 location.”). Indeed, Facebook explains that “[t]he choices for audiences
27 within a location are: [1] (Default) Everyone in this location. People whose
28 current city on their Instagram profile is that location, as well as anyone

1 determined to be in that location via mobile device. [2] People who live in
2 this location. People whose current city from their Instagram profile is within
3 that location. This is also validated by IP address and their Instagram friends'
4 stated locations. [3] Recently in this location. People whose most recent
5 location is the selected area, as determined only via mobile device. This
6 includes people who live there or who may be traveling there. [4] People
7 traveling in this location. People whose most recent location is the selected
8 area, as determined via mobile device, and are greater than 100 miles from
9 their stated home location from their Instagram profiles.”
10 <https://www.facebook.com/business/a/location-targeting>.

11 ***10(c): configured to initiate transmission of digital content to the wireless***
12 ***communications device in response to determining that the geographic***
13 ***position of the wireless communications device has changed to be within a***
14 ***predefined distance of a geographic area associated with the digital content***
15 ***during a predefined timeframe associated with the digital content.—***

16 Instagram at least uses an apparatus (*e.g.*, a server) comprising one or more
17 processors configured to initiate transmission of digital content to the
18 wireless communications device in response to determining that the
19 geographic position of the wireless communications device has changed to
20 be within a predefined distance of a geographic area associated with the
21 digital content during a predefined timeframe associated with the digital
22 content.

23 For instance, a server that is configured to facilitate providing
24 Instagram's location targeting services enables an Instagram advertiser's
25 digital content (*e.g.*, an advertisement) to be provided to a particular
26 “audience” (*i.e.*, wireless communications devices of particular Instagram
27 users). Instagram allows an Instagram advertiser to define the particular
28 “audience” based on a variety of factors (*e.g.*, geographic areas), and by

1 doing so, associates the advertiser (and its digital content) with the factors
 2 that define its particular audience. *See, e.g.,*
 3 [https://www.facebook.com/business/help/1634705703469129?helpref=faq_](https://www.facebook.com/business/help/1634705703469129?helpref=faq_content)
 4 content (“The following is a step-by-step guide for creating Instagram ads in
 5 ad creation. . . . In the Audience section, create an audience for your ad. You
 6 can choose audience characteristics such as age, gender, interests and more.”)
 7 (geographic area emphasized in red below):

The screenshot displays the Facebook 'Who do you want your ads to reach?' interface. The 'Locations' section is highlighted with a red box, showing 'Everyone in this location' selected, with 'United States' listed below. The 'Audience Definition' sidebar on the right shows a gauge indicating 'fairly broad' selection, and the 'Audience Details' section is also highlighted with a red box, showing 'Location: United States' and 'Age: 18 - 65+'. The potential reach is listed as 186,000,000 people.

19 An example of a factor by which an Instagram advertiser can define
 20 its “audience” is one or more geographic areas. <https://business.instagram.com/advertising/#precise-targeting>
 21 (“Target people based in specific
 22 locations like states, provinces, cities or countries.”). An Instagram
 23 advertiser can be associated with one or more geographic areas in a variety
 24 of manners.

25 As one possibility, any Instagram advertiser that utilizes a “radius
 26 targeting” feature is associated with at least one geographic area and defines
 27 a corresponding distance around that at least one geographic area. As
 28 explained by Facebook, “[l]ocation targeting lets you select your audience

1 within a custom radius from the following locations: [1] Country [2] State or
 2 region [3] City [4] DMA®* [(Designated Market Area) regions are the
 3 geographic areas in the United States in which local television viewing is
 4 measured by Nielsen.] [5] Zip or post code[.]” [https://www.facebook.com/
 5 business/a/location-targeting](https://www.facebook.com/business/a/location-targeting).

6 Instagram provides an example illustration in which an Instagram
 7 advertiser becomes associated with a geographic area (e.g., Menlo Park,
 8 California) and in which the advertiser defines a corresponding distance
 9 around the area (e.g., 10-mile radius around Menlo Park):

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21 <https://business.instagram.com/advertising/#precise-targeting>.

22 In addition to targeting a particular “audience,” Instagram allows an
 23 Instagram advertiser to define a particular timeframe during which the
 24 advertiser’s digital content is to be provided to the particular “audience.” For
 25 instance, an Instagram advertiser can select particular days and times during
 26 which the server is to transmit advertisements to the advertiser’s particular
 27 “audience,” assuming all other conditions are satisfied. See, e.g., https://www.facebook.com/business/help/1634705703469129?helpref=faq_conte
 28

1 nt (“The following is a step-by-step guide for creating Instagram ads in ad
 2 creation. . . . In the Budget & Schedule section, you can choose a budget and
 3 set your ad’s schedule.”) (red outline boxes original):

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Budget ⓘ Lifetime Budget ▼ \$350.00 USD

Schedule ⓘ

Start 4/10/2015 11:50 PM

End 5/10/2015 11:50 PM
(Pacific Time)

Your ad will run until **Sunday, May 10, 2015.**

You'll spend up to **\$350.00** total.

10 Optimize For ⓘ Clicks to Website ▼

11 Pricing ⓘ Your bid will be optimized to get more clicks to your website. You'll be charged each time
 12 your ad is served.

- 13
- 14 Get the most website clicks at the best price - You'll be charged for impressions
 - Set the amount a click to your website is worth to you

14 Ad Scheduling ⓘ

- Run ads all the time
- Run ads on a schedule

15 Ad scheduling only works with lifetime budgets.

16

17 <https://www.facebook.com/business/help/1037425549606837> (“You can
 18 control both what dates and what times we show your ads. . . . To set start
 19 and end dates/times, select Set a start and end date in the ‘Schedule’ section
 20 of ad set creation and choose the start and end dates/times.”).

21 Thus, as one example, the server that facilitates providing Instagram’s
 22 location targeting service is configured to initiate transmission of an
 23 Instagram advertiser’s digital content (e.g., advertisement) to the wireless
 24 communications device of one of the advertiser’s “audience” members in
 25 response to determining that the geographic position of the wireless
 26 communications device has changed to be within a predefined distance (e.g.,
 27 radius) of a geographic area associated with the digital content during a
 28 predefined timeframe associated with the digital content, in accordance with

1 the Instagram location targeting service. *See, e.g.*, [https://help.instagram](https://help.instagram.com/162672033874406)
2 [.com/162672033874406](https://help.instagram.com/162672033874406) (“When does Instagram send push notifications to
3 my device? We may send notifications for several reasons”);
4 <https://help.instagram.com/155833707900388> (“A device identifier may
5 deliver information to us or to a third party partner about how you browse
6 and use the Service and may help us or others provide reports or personalized
7 content and ads.”); [https://www.facebook.com/ads/about/?entry_product](https://www.facebook.com/ads/about/?entry_product=ad_preferences)
8 [=ad_preferences](https://www.facebook.com/ads/about/?entry_product=ad_preferences) (“We use location data to show you ads from advertisers
9 trying to reach people in or near a specific place. We get this information
10 from sources such as: [1] Where you connect to the internet [and 2] Where
11 you use your phone[.]”). [https://www.facebook.com/business/a/location-](https://www.facebook.com/business/a/location-targeting)
12 [targeting](https://www.facebook.com/business/a/location-targeting) (“Location targeting lets you select your audience within a custom
13 radius from the following locations: [1] Country [2] State or region [3] City
14 [4] DMA®* [(Designated Market Area) regions are the geographic areas in
15 the United States in which local television viewing is measured by Nielsen.]
16 [5] Zip or post code[.]”).

17 91. Additionally, Instagram has been, and currently is, an active inducer
18 of infringement of the ‘599 Patent under 35 U.S.C. § 271(b) and contributory
19 infringer of the ‘599 Patent under 35 U.S.C. § 271(c).

20 92. Instagram knew of the ‘599 Patent, or at least should have known of
21 the ‘599 Patent, but was willfully blind to its existence. On information and belief,
22 Instagram has had actual knowledge of the ‘599 Patent since at least as early as the
23 filing and/or service of this Complaint.

24 93. Instagram has provided the Accused Products to its customers and, on
25 information and belief, instructions to use the Accused Products in an infringing
26 manner while being on notice of (or willfully blind to) the ‘599 Patent and
27 Instagram’s infringement. Therefore, on information and belief, Instagram knew or
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1 should have known of the '599 Patent and of its own infringing acts, or deliberately
2 took steps to avoid learning of those facts.

3 94. Instagram knowingly and intentionally encourages and aids at least its
4 end-user customers to directly infringe the '599 Patent.

5 95. On information and belief, Instagram provides the Accused Products
6 to customers through various third-party application stores (*e.g.*, the Apple iTunes
7 App Store) and instructions to end-user customers so that such customers will use
8 the Accused Products in an infringing manner.

9 96. Instagram's end-user customers directly infringe at least one or more
10 claims of the '599 Patent by using the Accused Products in their intended manner
11 to infringe. Instagram induces such infringement by providing the Accused
12 Products and instructions to enable and facilitate infringement, knowing of, or
13 being willfully blind to the existence of, the '599 Patent. On information and belief,
14 Instagram specifically intends that its actions will result in infringement of at least
15 one or more claims of the '599 Patent, or subjectively believe that their actions will
16 result in infringement of the '599 Patent, but took deliberate actions to avoid
17 learning of those facts, as set forth above.

18 97. Additionally, Instagram contributorily infringes at least one or more
19 claims of the '599 Patent by providing the Accused Products and/or software
20 components thereof, that embody a material part of the claimed inventions of the
21 '599 Patent, that are known by Instagram to be specially made or adapted for use
22 in an infringing manner, and are not staple articles with substantial non-infringing
23 uses. The Accused Products are specially designed to infringe at least one or more
24 claims of the '599 Patent, and their accused components have no substantial non-
25 infringing uses. In particular, on information and belief, the software modules and
26 code that implement and perform the infringing functionalities identified above are
27 specially made and adapted to carry out said functionality and do not have any
28 substantial non-infringing uses.

1 98. Instagram's infringement of the '599 Patent was and continues to be
2 willful and deliberate, entitling Corrino to enhanced damages.

3 99. Additional allegations regarding Instagram's knowledge of the '599
4 Patent and willful infringement will likely have evidentiary support after a
5 reasonable opportunity for discovery.

6 100. Instagram's infringement of the '599 Patent is exceptional and entitles
7 Corrino to attorneys' fees and costs incurred in prosecuting this action under 35
8 U.S.C. § 285.

9 101. Corrino is in compliance with any applicable marking and/or notice
10 provisions of 35 U.S.C. § 287 with respect to the '599 Patent.

11 102. Corrino is entitled to recover from Instagram all damages that Corrino
12 has sustained as a result of Instagram's infringement of the '599 Patent, including,
13 without limitation, a reasonable royalty.

14 **COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 7,525,450**

15 103. Corrino incorporates by reference and re-alleges all the foregoing
16 paragraphs of this Complaint as if fully set forth herein.

17 104. Instagram has infringed and is infringing, either literally or under the
18 doctrine of equivalents, the '450 Patent in violation of 35 U.S.C. § 271 *et seq.*,
19 directly and/or indirectly, by making, using, offering for sale, or selling in the
20 United States, and/or importing into the United States without authority or license,
21 products and services that direct location-based information to location-specific
22 users, including the Accused Products, that infringe at least one or more claims of
23 the '450 Patent.

24 105. As just one non-limiting example, set forth below is a description of
25 infringement of exemplary claim 11 of the '450 Patent in connection with the
26 Accused Products. This description is based on publicly available information.
27 Corrino reserves the right to modify this description, including, for example, on the
28 basis of information about the Accused Products that it obtains during discovery.

1 **11(a): A system comprising:**—As noted above, Instagram is a social
2 networking platform that provides services by which certain Instagram users
3 (*e.g.*, Instagram advertisers) can target other Instagram users such that those
4 users’ communications devices receive the advertisers’ advertisements when
5 certain predefined conditions are met. An example of such a service is
6 Instagram’s location targeting service. Instagram at least uses a system
7 configured in accordance with claim 11 to facilitate providing the location
8 targeting service for one or more Instagram advertisers.

9 Indeed, Instagram encourages Instagram advertisers to “[m]ake your
10 ads reach the exact audience you want using our precise targeting options.”
11 <https://business.instagram.com/advertising/#precise-targeting>. One such
12 targeting option allows Instagram advertisers to “[t]arget people based in
13 specific locations like states, provinces, cities or countries.” *Id.* Instagram
14 advertisers “can create ads for Instagram . . . by using ad creation in Facebook
15 Ads Manager or the ads API.” [https://help.instagram.com/1554245014870700/?helpref=hc_fnav&bc\[0\]=Instagram%20Help&bc\[1\]=Instagram%20for%20Businesses](https://help.instagram.com/1554245014870700/?helpref=hc_fnav&bc[0]=Instagram%20Help&bc[1]=Instagram%20for%20Businesses); see also, *e.g.*, <https://business.instagram.com/advertising>
16 (“Instagram uses the same powerful advertising tools as Facebook. That way,
17 you can set up, run and track campaigns the same way you do with Facebook
18 ads. If you're new to advertising on Instagram or even Facebook, here's how
19 to get started.”).

20 **11(b): an information source database comprising an index of information**
21 **sources, wherein each information source is associated with (i) a**
22 **demographic code and (ii) one or more location codes, wherein each**
23 **location code corresponds to a geographic region;**—Instagram at least uses
24 a system (*e.g.*, one or more servers) comprising an information source
25 database comprising an index of information sources, wherein each
26 information source is associated with (i) a demographic code and (ii) one or
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1 more location codes, wherein each location code corresponds to a geographic
2 region.

3 For instance, the one or more servers that are configured to facilitate
4 providing Instagram's location targeting services enable an Instagram
5 advertiser's relevant data (e.g., an advertisement) to be provided to a
6 particular "audience" (i.e., communications devices of particular Instagram
7 users). Instagram allows an Instagram advertiser to define the particular
8 "audience" based on a variety of factors (e.g., geographic regions and
9 demographics), and by doing so, associates the advertiser (and its
10 advertisements) with the factors that define its particular audience. See, e.g.,
11 [https://www.facebook.com/business/help/1634705703469129?helpref=faq_](https://www.facebook.com/business/help/1634705703469129?helpref=faq_content)
12 [content](https://www.facebook.com/business/help/1634705703469129?helpref=faq_content) ("The following is a step-by-step guide for creating Instagram ads in
13 ad creation. . . . In the Audience section, create an audience for your ad. You
14 can choose audience characteristics such as age, gender, interests and more.")
15 (geographic region outlined in red below and example demographic options
16 outlined in yellow below):

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Who do you want your ads to reach? Help: Choose Your Audience

NEW AUDIENCE ▾

Locations

United States

United States

Include ▾ Add a country, state/province, city, ZIP, DMA or address

Age -

Gender All Men Women

Languages

More Demographics ▾

Interests Suggestions | Browse

Behaviors Browse

More Categories Browse

Connections

Save this audience

Audience Definition

Your audience selection is fairly broad.

Specific Broad

Audience Details:

- Location:
 - United States
- Age:
 - 18 - 65+

Potential Reach: 186,000,000 people

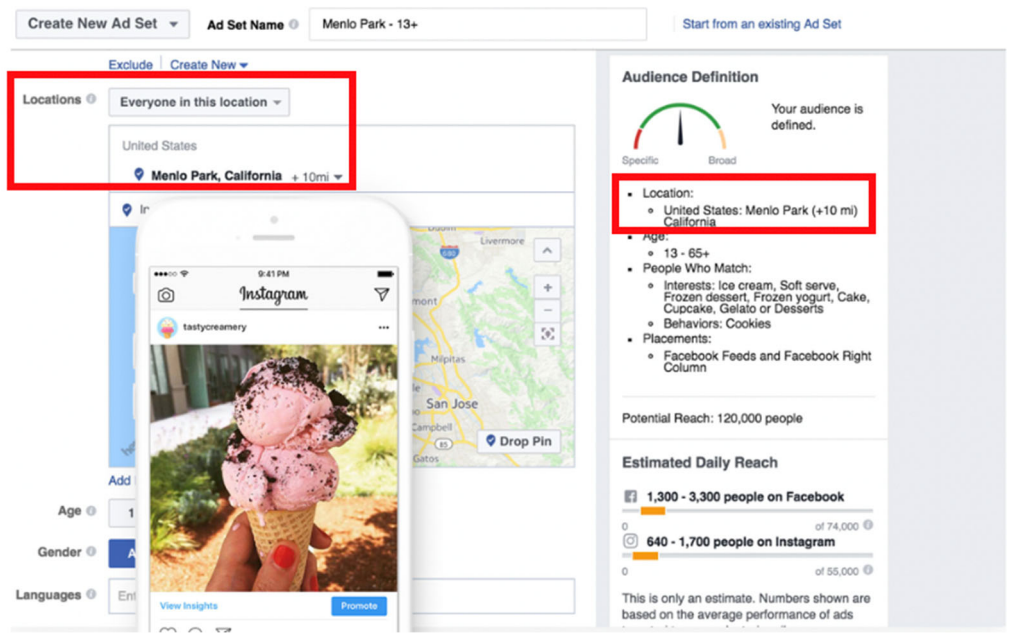
1 In this respect, the one or more servers are configured to maintain an
2 index of Instagram advertisers and their respective associations (*e.g.*, one or
3 more associated geographic regions and one or more associated
4 demographics).

5 An example of a factor by which an Instagram advertiser can define
6 its “audience” is one or more demographic criterion. For instance, Instagram
7 explains that its “precise targeting options” include “demographics,”
8 “interests,” and “behaviors,” among other options.
9 <https://business.instagram.com/advertising/#precise-targeting>. In particular,
10 the demographics option “[n]arrow[s] your audience based on information
11 like age, gender and languages,” the interests option “[r]each[es] people
12 based on interests like apps they use, ads they click and accounts they
13 follow,” and the behaviors option “[d]efine[s] your audience by activities
14 they do on and off of Instagram and Facebook.” *Id.* An example graphical
15 user interface through which an advertiser is associated with one or more
16 demographic criterion is shown above. The yellow-box annotation identifies
17 where an advertiser searches/browses and selects particular demographic
18 criteria to be associated with. On information and belief, each of Instagram’s
19 demographic criterion (discussed above) corresponds to a respective
20 demographic code that is utilized to associate the particular demographic
21 criteria with a given Instagram advertiser. For example, on information and
22 belief, each of the selectable demographic criterion that appear in the yellow-
23 box annotation in the above illustration when the advertiser searches/browses
24 has a corresponding demographic code that becomes associated with the
25 Instagram advertiser when selected. *See, e.g.*, [https://developers.facebook](https://developers.facebook.com/docs/marketing-api/guides/instagramads/ads_management)
26 [.com/docs/marketing-api/guides/instagramads/ads_management](https://developers.facebook.com/docs/marketing-api/guides/instagramads/ads_management) (“You can
27 use all Facebook targeting options for Instagram campaigns, including:
28 Facebook native basic targeting including interest, behavior, location,

demographic, connections”); <https://developers.facebook.com/docs/marketing-api/targeting-search> (explaining that each particular demographic criteria has a corresponding “Facebook ID of demographic targeting”).

Another example of a factor by which an Instagram advertiser can define its “audience” is one or more geographic regions. <https://business.instagram.com/advertising/#precise-targeting> (“Target people based in specific locations like states, provinces, cities or countries.”). An Instagram advertiser (and its relevant data) can be associated with one or more geographic regions in a variety of manners.

As one possibility, any Instagram advertiser that utilizes a “radius targeting” feature is associated with at least one geographic region and defines a corresponding distance around that at least one geographic region. As explained by Facebook, “[l]ocation targeting lets you select your audience within a custom radius from the following locations: [1] Country [2] State or region [3] City [4] DMA®* [(Designated Market Area) regions are the geographic areas in the United States in which local television viewing is measured by Nielsen.] [5] Zip or post code[.]” <https://www.facebook.com/business/a/location-targeting>.



1 As shown above, Instagram provides an example illustration in which
2 an Instagram advertiser becomes associated with a geographic region (e.g.,
3 Menlo Park, California) and in which the advertiser defines a corresponding
4 distance around the region (e.g., 10-mile radius around Menlo Park).
5 <https://business.instagram.com/advertising/#precise-targeting>.

6 On information and belief, Instagram’s geographic regions (discussed
7 above) correspond to respective location codes that are utilized to associate
8 particular geographic regions with Instagram advertisers. See, e.g.,
9 <https://developers.facebook.com/docs/marketing-api/targeting-search>
10 (describing various location codes utilized by Instagram and Facebook,
11 including “region codes” for countries, “city codes” for cities, “locale codes”
12 for locales, etc.).

13 ***11(c): a communications device database comprising an index of***
14 ***communications devices, wherein each communications device is***
15 ***associated with a demographic code; and***—Instagram at least uses a system
16 (e.g., one or more servers) comprising a communications device database
17 comprising an index of communications devices, wherein each
18 communications device is associated with a demographic code.

19 For example, Instagram associates users and their respective
20 communications devices with a variety of demographic information, which
21 it uses to personalize Instagram’s services for the users, such as by
22 customizing the advertisements provided to the users’ communications
23 devices. See, e.g., <https://help.instagram.com/155833707900388> (“We
24 collect the following types of information. . . [1] Your username, password
25 and e-mail address when you register for an Instagram account, [2] Profile
26 information that you provide for your user profile (e.g., first and last name,
27 picture, phone number), . . . [3] When you use a mobile device like a tablet
28 or phone to access our Service, we may access, collect, monitor, store on

1 your device, and/or remotely store one or more ‘device identifiers.’ . . . A
2 device identifier may deliver information to us or to a third party partner
3 about how you browse and use the Service and may help us or others provide
4 reports or personalized content and ads. . . . In addition to some of the specific
5 uses of information we describe in this Privacy Policy, we may use
6 information that we receive to . . . provide personalized content and
7 information to you and others, which could include online ads or other forms
8 of marketing[.]”); [https://www.facebook.com/ads/about/?entry_product=
9 ad_preferences](https://www.facebook.com/ads/about/?entry_product=ad_preferences) (“Ads are shown to you based on your activity across
10 Facebook companies and products - such as . . . Information from your
11 Facebook and Instagram profile,” “Websites you visit or apps you use can
12 send Facebook data directly . . . to help us show you ads based on products
13 or services you've looked at, such as a shirt on a clothing retailer’s website.
14 Examples of this include . . . Adding a product to a shopping cart or making
15 a purchase,” “Our ad system prioritizes what ad to show you based on what
16 advertisers tell us their desired audience is, and we then match it to people
17 who might be interested in that ad. This means we can show you relevant and
18 useful ads without advertisers learning who you are.”).

19 On information and belief, the various demographic information
20 collected by Instagram on its users to personalize advertisements correspond
21 to respective demographic codes that are utilized to associate particular
22 demographic information with Instagram users and their respective
23 communications devices. *See, e.g.*, [https://developers.facebook.com/docs/
24 marketing-api/guides/instagramads/ads_management](https://developers.facebook.com/docs/marketing-api/guides/instagramads/ads_management) (“You can use all
25 Facebook targeting options for Instagram campaigns, including: Facebook
26 native basic targeting including interest, behavior, location, demographic,
27 connections”); [https://developers.facebook.com/docs/marketing-api/
28 targeting-search](https://developers.facebook.com/docs/marketing-api/targeting-search) (explaining that each particular demographic criteria has a

1 corresponding “Facebook ID of demographic targeting”). In this respect, the
2 one or more servers that facilitate Instagram’s location targeting service are
3 configured to maintain an index of Instagram users’ communications devices
4 and their respective associations.

5 ***11(d): a processor for initiating the transmission of relevant data to a***
6 ***communications device in response to receiving (i) an identifier***
7 ***corresponding to the communications device and (ii) an indication of the***
8 ***geographic position of the communications device, wherein the relevant***
9 ***data originates from at least one information source that is associated with***
10 ***both (i) a location code corresponding to a geographic region within a***
11 ***defined distance from the geographic position specified in the received***
12 ***indication, and (ii) a demographic code associated with the***
13 ***communications device specified in the received indication.***—Instagram at
14 least uses a system (*e.g.*, one or more servers) comprising a processor for
15 initiating the transmission of relevant data to a communications device in
16 response to receiving (i) an identifier corresponding to the communications
17 device and (ii) an indication of the geographic position of the
18 communications device, wherein the relevant data originates from at least
19 one information source that is associated with both (i) a location code
20 corresponding to a geographic region within a defined distance from the
21 geographic position specified in the received indication, and (ii) a
22 demographic code associated with the communications device specified in
23 the received indication.

24 For example, on information and belief, the one or more servers that
25 facilitate Instagram’s location targeting service comprise a processor
26 configured to initiate the transmission of relevant data (*e.g.*, an
27 advertisement) to a communications device in response to receiving (i) an
28

1 identifier corresponding to the communications device and (ii) an indication
2 of the geographic position of the communications device.

3 For instance, on information and belief, when an Instagram user's
4 communications device has Instagram's location services enabled, the one or
5 more servers receive an identifier corresponding to the communications
6 devices. *See, e.g.*, <https://help.instagram.com/155833707900388> ("When
7 you use a mobile device like a tablet or phone to access our Service, we may
8 access, collect, monitor, store on your device, and/or remotely store one or
9 more 'device identifiers.' Device identifiers are small data files or similar
10 data structures stored on or associated with your mobile device, which
11 uniquely identify your mobile device. A device identifier may be data stored
12 in connection with the device hardware, data stored in connection with the
13 device's operating system or other software, or data sent to the device by
14 Instagram. A device identifier may deliver information to us or to a third
15 party partner about how you browse and use the Service and may help us or
16 others provide reports or personalized content and ads. Some features of the
17 Service may not function properly if use or availability of device identifiers
18 is impaired or disabled.").

19 Moreover, on information and belief, when an Instagram user's
20 wireless communications device has Instagram's location services enabled,
21 the one or more servers monitor the geographic position of the wireless
22 communications device and transmit relevant data (*e.g.*, advertisements) to
23 the user's wireless communications device to facilitate Instagram's location
24 targeting service. *See, e.g.*, [https://help.instagram.com/171821142968851](https://help.instagram.com/171821142968851?helpref=search&sr=1&query=%20location%20services)
25 [?helpref=search&sr=1&query=%20location%20services](https://help.instagram.com/171821142968851?helpref=search&sr=1&query=%20location%20services) (explaining how an
26 Instagram user can enable or disable Instagram's location services using an
27 iPhone). In this respect, the one or more servers are configured to receive
28 geographic position data for the wireless communications devices of

1 Instagram users that have not opted out of allowing Instagram to use location
2 services. *See, e.g.*, <https://www.facebook.com/business/a/location-targeting>
3 (“Location targeting [available through Facebook’s Ads Manager] helps you
4 find people where you do business, helping you create ads that are relevant
5 to people based on their location.”). Indeed, Facebook explains that “[t]he
6 choices for audiences within a location are: [1] (Default) Everyone in this
7 location. People whose current city on their Instagram profile is that location,
8 as well as anyone determined to be in that location via mobile device. [2]
9 People who live in this location. People whose current city from their
10 Instagram profile is within that location. This is also validated by IP address
11 and their Instagram friends’ stated locations. [3] Recently in this location.
12 People whose most recent location is the selected area, as determined only
13 via mobile device. This includes people who live there or who may be
14 traveling there. [4] People traveling in this location. People whose most
15 recent location is the selected area, as determined via mobile device, and are
16 greater than 100 miles from their stated home location from their Instagram
17 profiles.” <https://www.facebook.com/business/a/location-targeting>.

18 Thus, in response to receiving the device identifier and geographic
19 position indication, the one or more servers that facilitate Instagram’s
20 location targeting service are configured to initiate the transmission of a
21 relevant advertisement to the communications device, where the relevant
22 advertisement originates from an Instagram advertiser that is associated with
23 both (i) a location code corresponding to a geographic region within a defined
24 distance from the geographic position specified in the received indication and
25 (ii) a demographic code associated with the communications device specified
26 in the received indication. For instance, as discussed above, an Instagram
27 advertiser can define its particular “audience” based on a variety of factors,
28 including one or more geographic regions and one or more demographics. In

1 line with the above discussion, along with being associated with one or more
2 geographic regions, the Instagram advertiser can set respective defined
3 distances for the one or more geographic regions. The one or more servers
4 are configured to transmit the Instagram advertiser's advertisement to the
5 communications device when (i) the communications device's geographic
6 position is within any of the advertiser's defined distances corresponding to
7 any of its geographic regions and (ii) a demographic code associated with the
8 communications device corresponds to one or more demographics associated
9 with the advertiser.

10 106. Additionally, Instagram has been, and currently is, an active inducer
11 of infringement of the '450 Patent under 35 U.S.C. § 271(b) and contributory
12 infringer of the '450 Patent under 35 U.S.C. § 271(c).

13 107. Instagram knew of the '450 Patent, or at least should have known of
14 the '450 Patent, but was willfully blind to its existence. On information and belief,
15 Instagram has had actual knowledge of the '450 Patent since at least as early as the
16 filing and/or service of this Complaint.

17 108. Instagram has provided the Accused Products to its customers and, on
18 information and belief, instructions to use the Accused Products in an infringing
19 manner while being on notice of (or willfully blind to) the '450 Patent and
20 Instagram's infringement. Therefore, on information and belief, Instagram knew or
21 should have known of the '450 Patent and of its own infringing acts, or deliberately
22 took steps to avoid learning of those facts.

23 109. Instagram knowingly and intentionally encourages and aids at least its
24 end-user customers to directly infringe the '450 Patent.

25 110. On information and belief, Instagram provides the Accused Products
26 to customers through various third-party application stores (*e.g.*, the Apple iTunes
27 App Store) and instructions to end-user customers so that such customers will use
28 the Accused Products in an infringing manner.

1 111. Instagram’s end-user customers directly infringe at least one or more
2 claims of the ‘450 Patent by using the Accused Products in their intended manner
3 to infringe. Instagram induces such infringement by providing the Accused
4 Products and instructions to enable and facilitate infringement, knowing of, or
5 being willfully blind to the existence of, the ‘450 Patent. On information and belief,
6 Instagram specifically intends that its actions will result in infringement of at least
7 one or more claims of the ‘450 Patent, or subjectively believe that their actions will
8 result in infringement of the ‘450 Patent, but took deliberate actions to avoid
9 learning of those facts, as set forth above.

10 112. Additionally, Instagram contributorily infringes at least one or more
11 claims of the ‘450 Patent by providing the Accused Products and/or software
12 components thereof, that embody a material part of the claimed inventions of the
13 ‘450 Patent, that are known by Instagram to be specially made or adapted for use
14 in an infringing manner, and are not staple articles with substantial non-infringing
15 uses. The Accused Products are specially designed to infringe at least one or more
16 claims of the ‘450 Patent, and their accused components have no substantial non-
17 infringing uses. In particular, on information and belief, the software modules and
18 code that implement and perform the infringing functionalities identified above are
19 specially made and adapted to carry out said functionality and do not have any
20 substantial non-infringing uses.

21 113. Instagram’s infringement of the ‘450 Patent was and continues to be
22 willful and deliberate, entitling Corrino to enhanced damages.

23 114. Additional allegations regarding Instagram’s knowledge of the ‘450
24 Patent and willful infringement will likely have evidentiary support after a
25 reasonable opportunity for discovery.

26 115. Instagram’s infringement of the ‘450 Patent is exceptional and entitles
27 Corrino to attorneys’ fees and costs incurred in prosecuting this action under 35
28 U.S.C. § 285.

1 116. Corrino is in compliance with any applicable marking and/or notice
2 provisions of 35 U.S.C. § 287 with respect to the ‘450 Patent.

3 117. Corrino is entitled to recover from Instagram all damages that Corrino
4 has sustained as a result of Instagram’s infringement of the ‘450 Patent, including,
5 without limitation, a reasonable royalty.

6 **COUNT V: INFRINGEMENT OF U.S. PATENT NO. 7,716,149**

7 118. Corrino incorporates by reference and re-alleges all the foregoing
8 paragraphs of this Complaint as if fully set forth herein.

9 119. Instagram has infringed and is infringing, either literally or under the
10 doctrine of equivalents, the ‘149 Patent in violation of 35 U.S.C. § 271 *et seq.*,
11 directly and/or indirectly, by making, using, offering for sale, or selling in the
12 United States, and/or importing into the United States without authority or license,
13 products and services that direct location-based information to location-specific
14 users, including the Accused Products, that infringe at least one or more claims of
15 the ‘149 Patent.

16 120. As just one non-limiting example, set forth below is a description of
17 infringement of exemplary claim 1 of the ‘149 Patent in connection with the
18 Accused Products. This description is based on publicly available information.
19 Corrino reserves the right to modify this description, including, for example, on the
20 basis of information about the Accused Products that it obtains during discovery.

21 ***1(a): A computer controlled method for monitoring a persistent virtual***
22 ***environment comprising:***—Instagram provides a persistent virtual
23 environment that takes the form of a social online world. For instance, a user
24 subscribes to Instagram’s social online world by creating an online entity via
25 an Instagram user account through which the user accesses Instagram’s
26 social networking platform via a computing device running a native
27 Instagram app or web browser. Within Instagram’s social networking
28 platform, an Instagram user through his/her online entity can virtually

1 experience new sights and activities, as well as virtually develop social
2 relationships with other registered Instagram users through their respective
3 online entities.

4 On information and belief, Instagram, through its employees (*e.g.*,
5 software developers, user support staff, etc.), has utilized and/or continues
6 utilizing a computer system (*e.g.*, desktop or laptop computers, mobile
7 phones, tablets, etc.) to perform the computer-controlled method of claim 1,
8 such as (i) during development of Instagram’s “Insights,” (ii) while
9 developing updates and/or revisions to Insights, and/or (iii) while providing
10 customer support related to Insights.


11 ***1(b): displaying, at a computer system, a visualization that represents a***
12 ***social aspect of said persistent virtual environment, said visualization***
13 ***responsive to a metric, wherein said visualization represents an overall***
14 ***interactivity level;***—Instagram causes computer systems to display a
15 visualization that represents a social aspect of a persistent virtual
16 environment (*i.e.*, Instagram’s social online world), said visualization
17 responsive to a metric, wherein said visualization represents an overall
18 interactivity level.

19 For example, “Instagram Insights provide information on who your
20 followers are, when they’re online and more. You can also view insights for
21 specific posts and stories you’ve created to see how each performed and how
22 people are engaging with them. You can view insights on posts, stories and
23 your overall account.” [https://www.facebook.com/help/instagram/788388](https://www.facebook.com/help/instagram/788388387972460?helpref=page_content)
24 [387972460?helpref=page_content](https://www.facebook.com/help/instagram/788388387972460?helpref=page_content). As explained by Instagram, “Insights
25 and metrics about your account include paid activity as well. Reach, accounts
26 reached, impressions, and impressions by day reflect both paid and organic
27 activity.” *Id.*

28 Instagram instructs and encourages its users to utilize their computer

1 systems to display Instagram Insights visualizations, such as those for a
2 user's posts, stories, and overall account. For example, Instagram instructs
3 and encourages users to access Instagram Insights in at least three different
4 ways:


5 **View insights from your business profile**

- 6
1. Go to your business profile.
 - 7 2. Tap  at the top right corner of your Business Profile. From here you can get an overall view of how people are interacting with your Business Profile.
 - 8 3. Select specific posts, stories or promotions you'd like to view insights on.

9 You can track weekly **Impressions, Reach** and **Profile Visits**

10 You can also see what times during the day your followers engage with you business profile. This can help you decide which times you should post new content from you business profile.


11 **View insights from your post**

1. Go to your business profile.
- 12 2. Tap an image you'd like to view insights on. If you see  in the bottom-right corner, this means you've promoted the post.
 - 13 • If the post has been promoted, you'll be able to see insights for both the original post and the promoted post. Tap **Original** to view insights for the original version of the post. Tap **Promotion** to view insights for the promoted version of the post.

- 14
- 15
- 16 3. Below the image, tap **View Insights**

17 If you're viewing insights from a post, you'll be able to see impressions, reach, and actions taken on your profile.

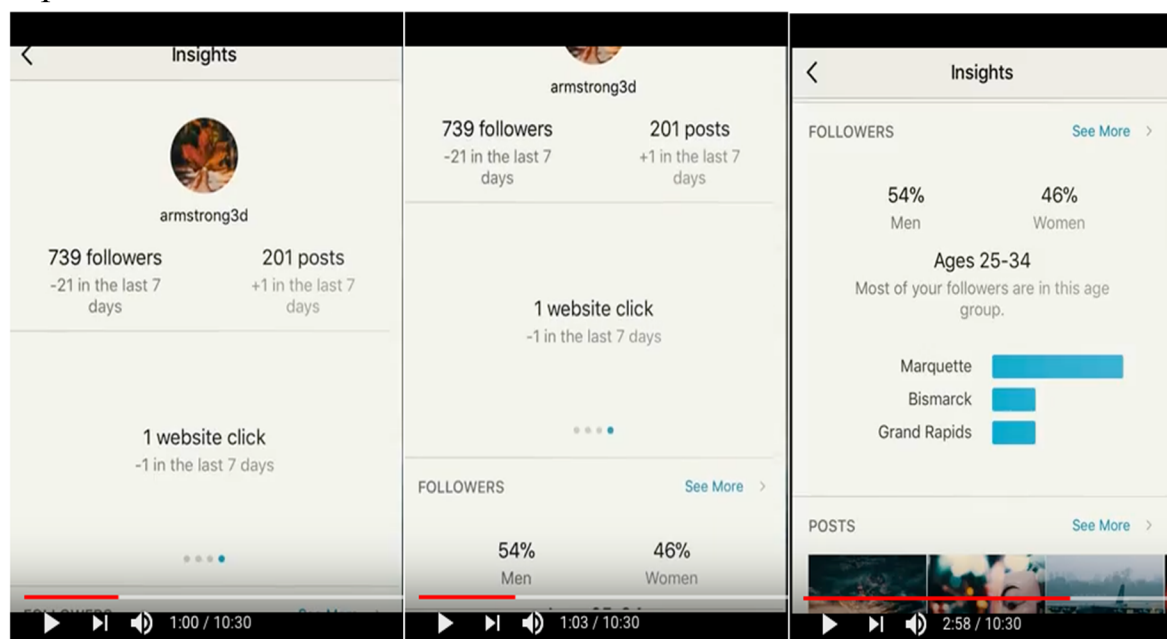
18 **View insights from your story**

- 19 1. Go to your story
- 20 2. Swipe up on your image or video
- 21 3. Click 
- 22 4. View insights on your story

23 [https://www.facebook.com/help/instagram/1533933820244654?helpref=pa](https://www.facebook.com/help/instagram/1533933820244654?helpref=page_content)
24 [ge_content](https://www.facebook.com/help/instagram/1533933820244654?helpref=page_content).

25 Each of these three navigation flows results in Instagram's servers
26 causing a computer system to display a variety of Instagram Insights
27 visualizations that represent a social aspect of Instagram's social online
28 world. For example, the first navigation flow results in Instagram's servers causing a computer system to display an "Account" section that includes a

1 variety of Instagram Insights visualizations that are responsive to metrics and
 2 that represent an overall interactivity level, including a “Reach”
 3 visualization, a “Website Clicks” visualization, a “Profile Visits”
 4 visualization, a “Posts” visualization, and a “Followers” visualization,
 5 among various other visualizations. [https://www.facebook.com/help/](https://www.facebook.com/help/instagram/788388387972460?helpref=page_content)
 6 [instagram/788388387972460?helpref=page_content](https://www.facebook.com/help/instagram/788388387972460?helpref=page_content). An example of the
 7 Account section is provided below, which comes from a user documenting
 8 performance of the method of claim 1:



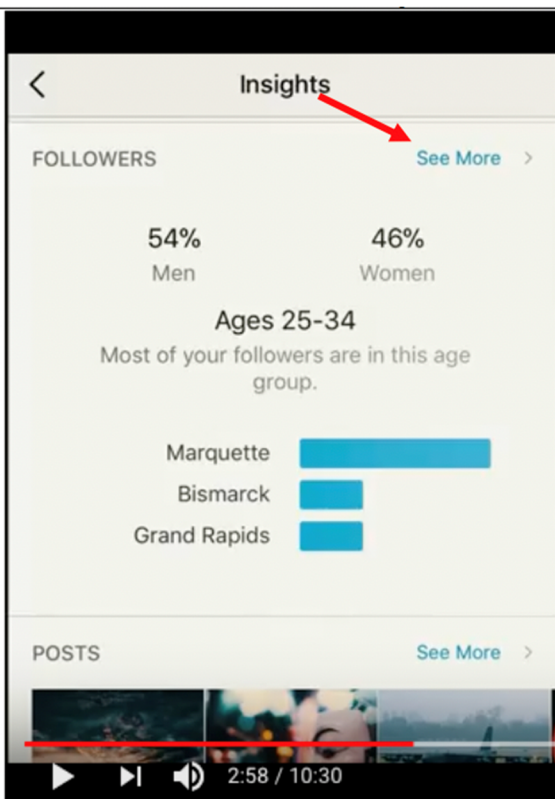
19 <https://www.youtube.com/watch?v=UK4B7oKz6FM>.

20 On information and belief, Instagram facilitates and/or has facilitated
 21 the performance of this method step, such as in connection with Instagram
 22 Insights, consistent with how Instagram expects and encourages its users to
 23 facilitate the performance of this method step.

24 ***1(c): receiving a selection command at the computer system; and—***
 25 Instagram utilizes computer systems to receive a selection command at the
 26 computer systems.

27 Indeed, Instagram instructs and encourages its users to interact with
 28 Instagram Insights such that the users’ computer systems receive selection

1 commands, which result in the users viewing additional Instagram Insights
 2 information. For instance, Instagram instructs and encourages a user to cause
 3 a computer system to receive a selection command corresponding to, for
 4 example, a selection of the Followers “See More” icon (identified by the red
 5 arrow below).

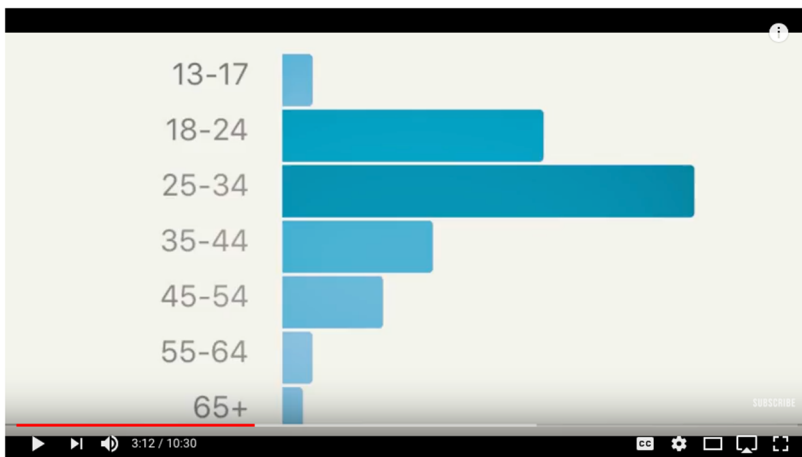
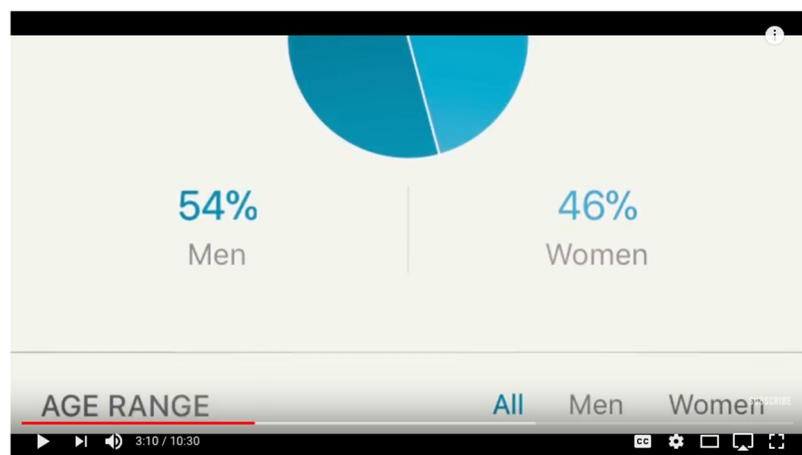
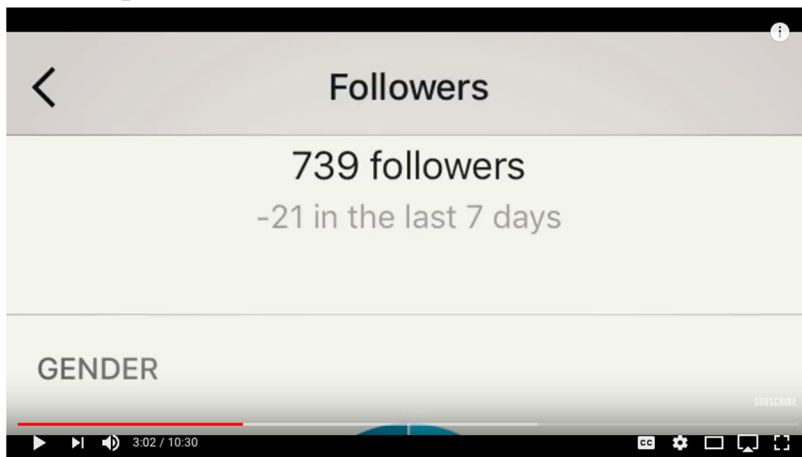


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 18 On information and belief, Instagram facilitates and/or has facilitated
 19 the performance of this method step, such as in connection with Instagram
 20 Insights, consistent with how Instagram expects and encourages its users to
 21 facilitate the performance of this method step.

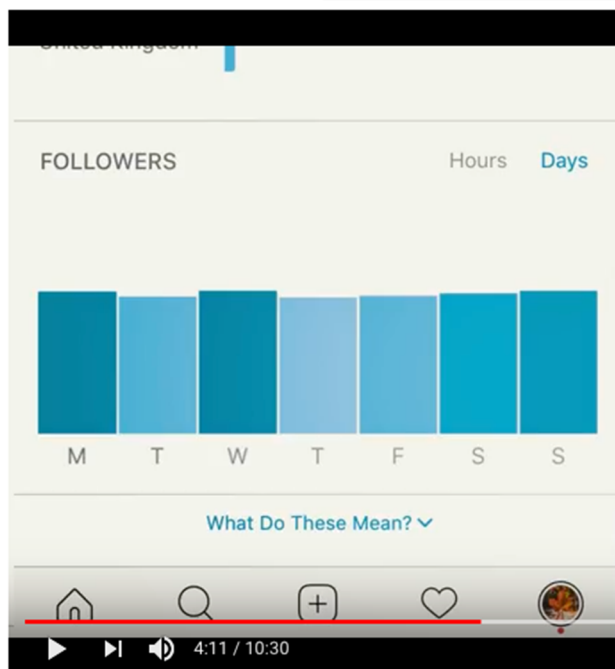
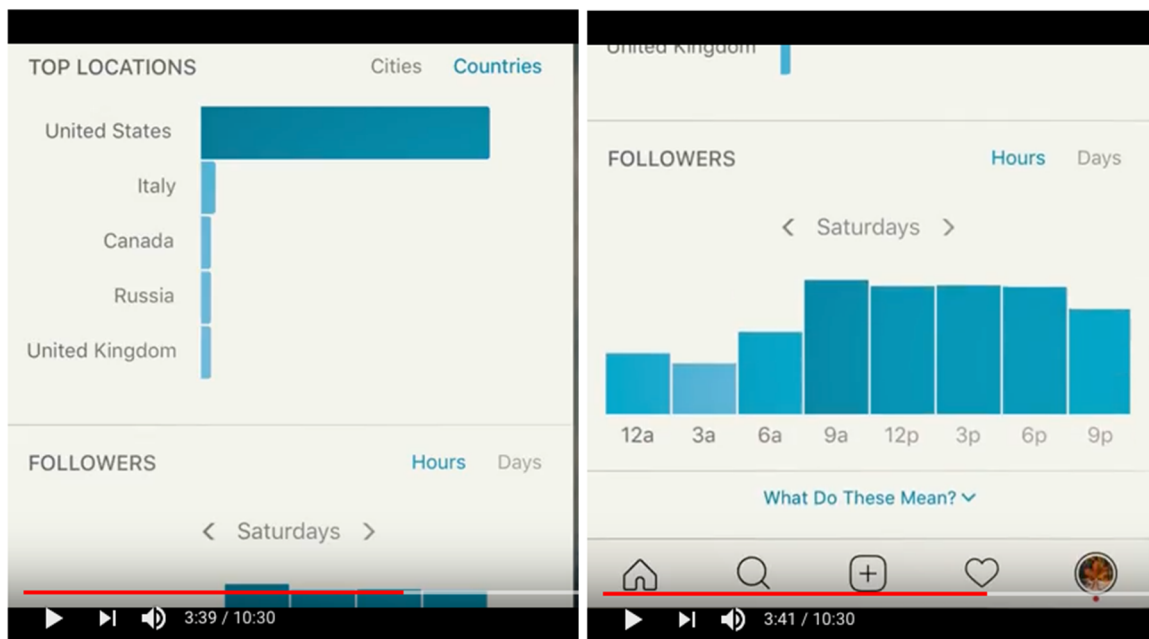
22 ***1(d): displaying, at the computer system, responsive to said selection***
 23 ***command, a second visualization that represents drill-down information***
 24 ***associated with said metric.***—Instagram causes computer systems to
 25 display, responsive to said selection command, a second visualization that
 26 represents drill-down information associated with said metric.

27 For example, in response to the computer system receiving the
 28

1 selection command corresponding to the selection of the See More icon for
2 the Followers Insight, Instagram's servers cause the computer system to
3 display a second visualization that represents drill-down information
4 associated with the Followers metric. An example of a Followers drill-down
5 visualization is provided below.



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<https://www.youtube.com/watch?v=UK4B7oKz6FM>.

On information and belief, Instagram facilitates and/or has facilitated the performance of this method step, such as in connection with Instagram Insights, consistent with how Instagram expects and encourages its users to facilitate the performance of this method step.

121. Additionally, Instagram has been, and currently is, an active inducer of infringement of the '149 Patent under 35 U.S.C. § 271(b) and contributory

1 infringer of the '149 Patent under 35 U.S.C. § 271(c).

2 122. Instagram knew of the '149 Patent, or at least should have known of
3 the '149 Patent, but was willfully blind to its existence. On information and belief,
4 Instagram has had actual knowledge of the '149 Patent since at least as early as the
5 filing and/or service of this Complaint.

6 123. Instagram has provided the Accused Products to its customers and, on
7 information and belief, instructions to (i) use the Accused Products in an infringing
8 manner and/or (ii) make an infringing device, while being on notice of (or willfully
9 blind to) the '149 Patent and Instagram's infringement. Therefore, on information
10 and belief, Instagram knew or should have known of the '149 Patent and of its own
11 infringing acts, or deliberately took steps to avoid learning of those facts.

12 124. Instagram knowingly and intentionally encourages and aids at least its
13 end-user customers to directly infringe the '149 Patent.

14 125. On information and belief, Instagram provides the Accused Products
15 to customers through various third-party application stores (*e.g.*, the Apple iTunes
16 App Store) and instructions to end-user customers so that such customers will use
17 the Accused Products in an infringing manner and/or make an infringing device
18 comprising the Instagram www.Instagram.com and www.Instagramchat.com
19 websites and/or mobile application.

20 126. Instagram's end-user customers directly infringe at least one or more
21 claims of the '149 Patent by using the Accused Products in their intended manner
22 to infringe and/or by making an infringing device via downloading the Instagram
23 www.Instagram.com and www.Instagramchat.com websites and/or mobile
24 application. Instagram induces such infringement by providing the Accused
25 Products and instructions to enable and facilitate infringement, knowing of, or
26 being willfully blind to the existence of, the '149 Patent. On information and belief,
27 Instagram specifically intends that its actions will result in infringement of at least
28 one or more claims of the '149 Patent, or subjectively believe that their actions will

1 result in infringement of the ‘149 Patent, but took deliberate actions to avoid
2 learning of those facts, as set forth above.

3 127. Additionally, Instagram contributorily infringes at least one or more
4 claims of the ‘149 Patent by providing the Accused Products and/or software
5 components thereof, that embody a material part of the claimed inventions of the
6 ‘149 Patent, that are known by Instagram to be specially made or adapted for use
7 in an infringing manner, and are not staple articles with substantial non-infringing
8 uses. The Accused Products are specially designed to infringe at least one or more
9 claims of the ‘149 Patent, and their accused components have no substantial non-
10 infringing uses. In particular, on information and belief, the software modules and
11 code that implement and perform the infringing functionalities identified above are
12 specially made and adapted to carry out said functionality and do not have any
13 substantial non-infringing uses.

14 128. Instagram’s infringement of the ‘149 Patent was and continues to be
15 willful and deliberate, entitling Corrino to enhanced damages.

16 129. Additional allegations regarding Instagram’s knowledge of the ‘149
17 Patent and willful infringement will likely have evidentiary support after a
18 reasonable opportunity for discovery.

19 130. Instagram’s infringement of the ‘149 Patent is exceptional and entitles
20 Corrino to attorneys’ fees and costs incurred in prosecuting this action under 35
21 U.S.C. § 285.

22 131. Corrino is in compliance with any applicable marking and/or notice
23 provisions of 35 U.S.C. § 287 with respect to the ‘149 Patent.

24 132. Corrino is entitled to recover from Instagram all damages that Corrino
25 has sustained as a result of Instagram’s infringement of the ‘149 Patent, including,
26 without limitation, a reasonable royalty.

27 **PRAYER FOR RELIEF**

28 WHEREFORE, Corrino respectfully requests:

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- A. That Judgment be entered that Instagram has infringed at least one or more claims of the Patents-in-Suit, directly and/or indirectly, literally and/or under the doctrine of equivalents;
- B. An award of damages sufficient to compensate Corrino for Instagram’s infringement under 35 U.S.C. § 284, including an enhancement of damages on account of Instagram’s willful infringement;
- C. That the case be found exceptional under 35 U.S.C. § 285 and that Corrino be awarded its reasonable attorneys’ fees;
- D. Costs and expenses in this action;
- E. An award of prejudgment and post-judgment interest; and
- F. Such other and further relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Corrino respectfully demands a trial by jury on all issues triable by jury.

Respectfully submitted,
Dated: October 4, 2018

LEE SULLIVAN SHEA & SMITH LLP
and
DEVLIN LAW FIRM

By: /s/ Jeffrey F. Craft

George I. Lee
Jeffrey F. Craft

***Attorneys for Plaintiff
Corrino Holdings LLC***