

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

KALDREN LLC

Plaintiff,

v.

SNAP, INC.

Defendant.

C.A. No. _____

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Kaldren LLC (“Kaldren” or “Plaintiff”), by and through its attorneys, hereby alleges for its Complaint for Patent Infringement against Defendant Snap Inc., which conducts business in Delaware as Snapchat, Inc. (“Snap” or “Defendant”), on personal knowledge as to its own activities and upon information and belief as to all other matters, as follows:

THE PARTIES

1. Kaldren is a Texas limited liability company with a principal office at 555 Republic Drive, Suite 289, Plano, Texas 75074-5481.
2. Snap is a Delaware corporation with a registered agent at 2711 Centerville Road, Suite 400, Wilmington, Delaware. Snap conducts business in Delaware and elsewhere as Snapchat, Inc.

JURISDICTION AND VENUE

3. This is an action for patent infringement which arises under the Patent Laws of the United States, in particular, 35 U.S.C. §§271, 281, 284, and 285.
4. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a).

5. This Court has personal jurisdiction over Snap because it (either directly or through its subsidiaries, divisions, or groups) has sufficient minimum contacts with the forum as a result of business conducted within the State of Delaware and this district; and/or specifically over Snap (either directly or through its subsidiaries, divisions, or groups) because of its infringing conduct within or directed at parties in the State of Delaware.

6. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b) and 1400(b).

THE PATENTS-IN-SUIT

7. On August 8, 2000, the United States Patent and Trademark Office issued U.S. Patent No. 6,098,882 (“the ’882 Patent”), entitled “Variable Formatting of Digital Data Into a Pattern.” A true and correct copy of the ’882 Patent is attached as Exhibit 1 to this Complaint.

8. On January 23, 2001, the United States Patent and Trademark Office issued U.S. Patent No. 6,176,427 (“the ’427 Patent”), entitled “Variable Formatting of Digital Data Into a Pattern.” A true and correct copy of the ’427 Patent is attached as Exhibit 2 to this Complaint.

9. On November 23, 2004, the United States Patent and Trademark Office issued U.S. Patent No. 6,820,807 (“the ’807 Patent”), entitled “Variable Formatting of Digital Data Into a Pattern.” A true and correct copy of the ’807 Patent is attached as Exhibit 3 to this Complaint.

10. On October 9, 2012, the United States Patent and Trademark Office issued U.S. Patent No. 8,281,999 (“the ’999 Patent”), entitled “Variable Formatting of Digital Data Into a Pattern.” A true and correct copy of the ’999 Patent is attached as Exhibit 4 to this Complaint.

11. Kaldren is the owner of all right, title, and interest in and to the ’882 Patent, the ’427 Patent, the ’807 Patent, and the ’999 Patent (collectively, the “Patents in Suit”), including the right to assert all causes of action arising under the Patents in Suit, and the right to any and all remedies for the infringement of the Patents in Suit. Assignment of the Patents in Suit are duly recorded at the United States Patent and Trademark Office at Reel/Frame 041550/0316.

12. The ’882 Patent, the ’427 Patent, the ’807 Patent, and the ’999 Patent are presumed valid under 35 U.S.C. § 282(a).

COUNT 1: INFRINGEMENT OF THE '882 PATENT

13. Plaintiff incorporates by reference the above paragraphs.

14. Defendant has marketed and distributed a social networking application (or “app”) under the name “Snapchat” at least as early as 2011. The Snapchat App can be downloaded to mobile devices through sites such as the Google Play Store and the Apple App Store.

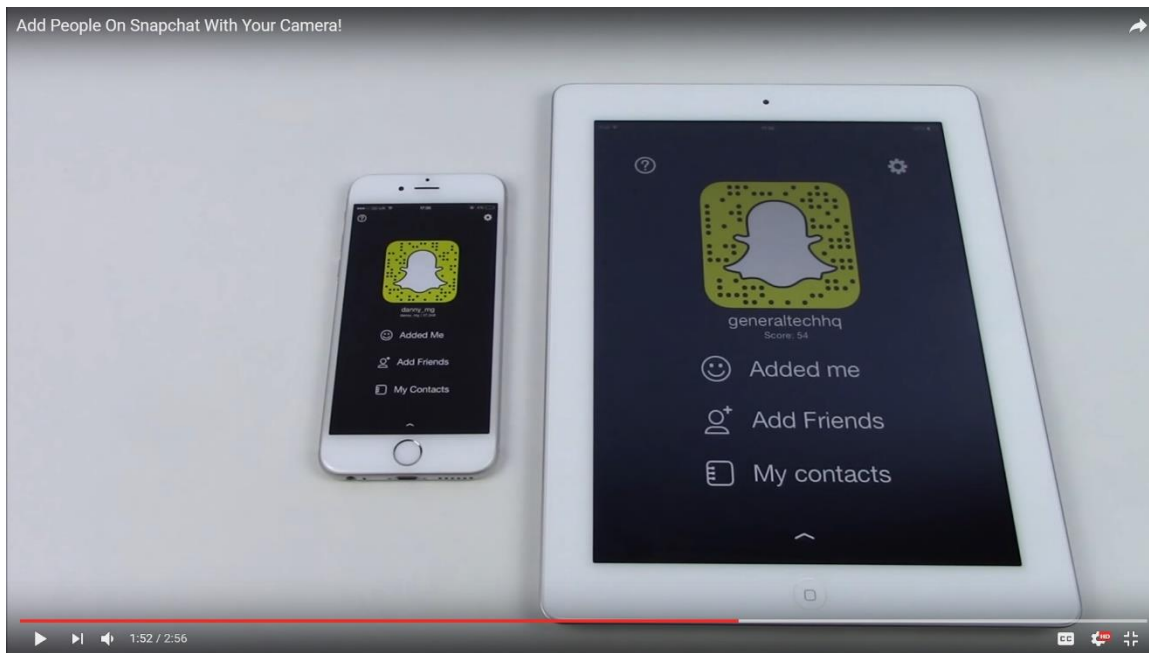
15. Defendant has operated various computer servers corresponding to its snapchat.com domain since at least 2012 (“Snapchat Servers”). One or more of the Snapchat Servers communicates with the Snapchat App during operation of the Snapchat App on a mobile device.

16. The Snapchat App includes functionality to scan and process a Snapcode, and one or more of the Snapchat Servers include functionality to generate Snapcodes.

17. Snapcodes were introduced under the name “Snaptags” at least as early as January 2015. *See, e.g.,* <https://techcrunch.com/2015/01/28/snaptags/>; <https://www.snap.com/en-US/news/post/snapcodes/> (Official Snapcode news post dated May 4, 2015) (“We introduced Snapcodes in early January as an easy way to add friends on Snapchat ... Snapchatters scan millions of Snapcodes each week! ... Today, we are making it easier to share and personalize your unique Snapcode by offering downloadable vector files and branding guidelines on our website.”).

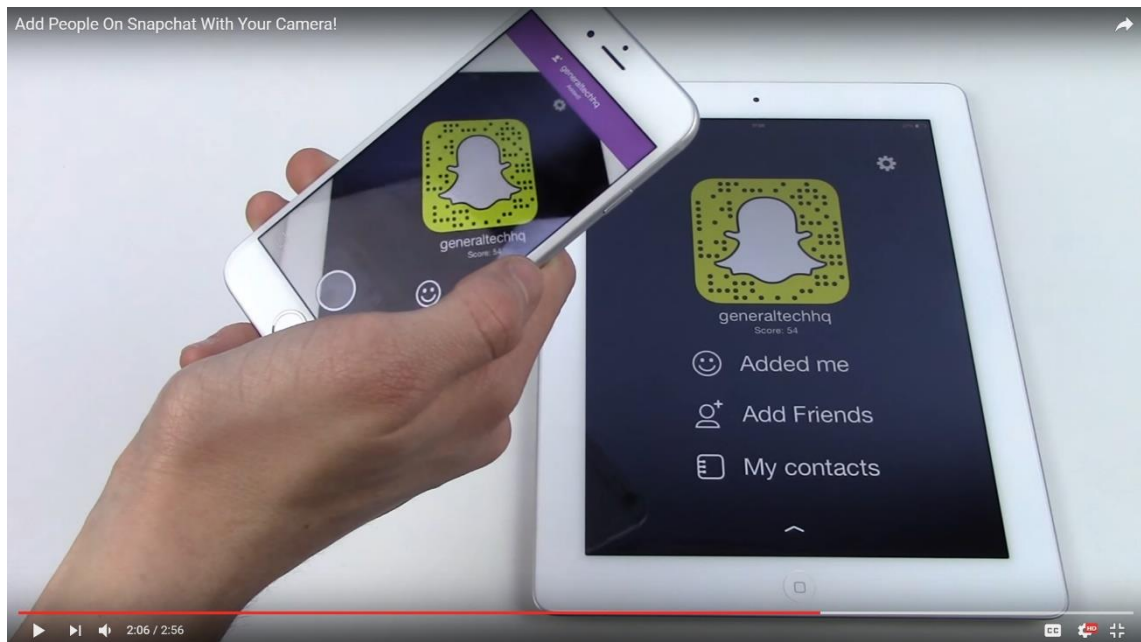
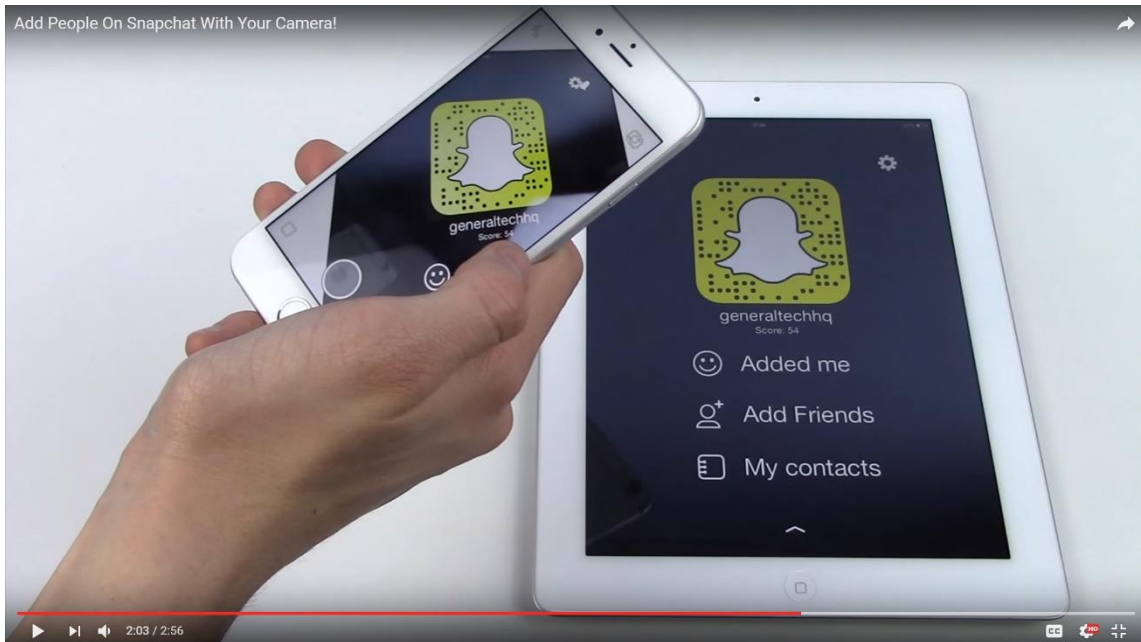
18. A Snapcode is a pattern that includes a two dimensional arrangement of dark colored (e.g., black) dots on a light colored (e.g., yellow) background between an outer border and an inner ghost-shaped border.

19. The following illustration from a YouTube video shows examples of Snapcodes being displayed within the Snapchat App executing on a mobile phone and on a tablet computer:



Source: <https://www.youtube.com/watch?v=OXeHBvC6Akg>

20. The following illustrations from the YouTube video referenced in the preceding paragraph show the Snapchat App on a mobile phone scanning the Snapcode for the user “generaltechhq” (displayed on a tablet computer) to add the user “generaltechhq” as a friend, with a confirmation being displayed at the top of the mobile phone when the Snapcode has successfully been scanned and the user “generaltechhq” has successfully been added as a friend:



Source: <https://www.youtube.com/watch?v=OXeHBvC6Akg>

21. When the Snapchat App scans a Snapcode corresponding to a particular user, the Snapchat App sends a request message to a “snaptag” application programming interface (API) endpoint hosted by a Snapchat Server.

22. The request message referenced in the preceding paragraph includes a hexadecimal “snaptag” value that is derived by the Snapchat App by decoding the scanned Snaptag.

23. In response to the request message referenced in the preceding paragraphs, the Snapchat App receives a response message that includes an information resource, such as the user identifier of the user whose Snapcode was scanned.

24. The user identifier referenced in the preceding paragraph is displayed in the Snapchat App, for example to confirm that the particular user was added as a friend.

25. The following illustrations from the internet source code hosting website GitHub show the format of the request and response messages for the “snaptag” API endpoint, including the hexadecimal identifier in the “snaptag” field of the request and the user identifier in the “name” field of the response:

/bq/snaptag (POST)

Request

```
{"snaptag": "6BA8BCC94BEAB846813625522C7E3D2F",  
"req_token": "3a897d9eed9139d547384e3be5f89cd4ccf040fb7b11ad9aa9950ea3404a483a",  
"timestamp": 1422412632422,  
"username": "neuegram"}
```

Response

```
{"message": "neuegram is already your friend! 🤖",  
"action": "add_friend",  
"friend_action_status": "already_friend",  
"object":  
  {"can_see_custom_stories": true,  
   "direction": "OUTGOING",  
   "name": "neuegram",  
   "display": "Graham Smith",  
   "type": 0},  
"logged": true,  
"fallback_message": "neuegram is already your friend! 🤖"}
```

bq snaptag

Liam Jack edited this page on Sep 22, 2015 · 2 revisions

Endpoint

`/bq/snaptag`

Description

Used to find out the user behind a Snaptag, and add them to your friends.

Request

- `snaptag` : Friend's snaptag hash (Example: `800e50079cbb948cec1cae7336751567`)
- `timestamp`
- `req_token`
- `username`

Response

- `action` : `add_friend`
- `fallback_message`
- `friend_action_status` : `snapcode_now_friends`
- `logged` : `true`
- `message`
- `object`
 - `can_see_custom_stories`
 - `direction`
 - `display` : Friend's display name
 - `friendmoji_string`
 - `ignored_link`
 - `name` : Friend's username
 - `needs_love` : Whether Snapchat™ thinks your friend needs love or not
 - `type`

Sources: <https://github.com/neuegram/SnAPI/blob/master/README.md>;

<https://github.com/liamjack/SnapchatDevWiki/wiki/-bq-snaptag>

26. When Snapcodes were released in January 2015, Snapchat users had a Snapcode assigned to them.

27. One or more Snapchat Servers generated the Snapcodes for the Snapchat users prior to the release of Snapcodes in January 2015.

28. Each time a new user registers on Snapchat, the new user is assigned a Snapcode.

29. One or more Snapchat Servers have generated the Snapcodes for newly registered users.

30. One or more Snapchat Servers has encoded a hexadecimal value into each generated Snapcode, so that the hexadecimal value is detectable by the Snapchat App when the Snapcode is scanned and included in a request message to the “snaptag” API endpoint.

31. The Snapcode (with the encoded hexadecimal value) includes a unique set of dots.

32. The following illustrations from Snapchat’s Snapcode Branding Guidelines show that the size, shape, color contrast, and proportions of the Snapcode are important for a Snapcode to be scanned successfully, that Snapcodes should be printed smaller than one inch, and that various modifications to the Snapcode should not be made because such modifications may render the Snapcode unscannable:

Snapcode Code

Here are the rules for the coded dots: don’t move them, don’t connect them, don’t interrupt them in any way. The dots must stay in their exact pattern in order for the scan to be successful.

The code layer color is not required to be yellow. While yellow is definitely the preferred color, other colors that provide high-contrast to the darker frame and dot color will also scan.

The proportions of the boundary, dots, and ghost on this layer are the most important proportions of the code for scanning. Changing these proportions will result in your code becoming unscannable.

Snapcode Frame

The snapcode frame is critical to the scanning process. It provides the border, the dot fill-color, and the ghost outline. It must provide high-contrast

Minimum Dimensions



Snapcode Specifications

Don't print your snapcode smaller than 1". Anything smaller than 1" and your users will not be able to successfully focus on and scan your snapcode.

Be mindful of the distance at which your users will be scanning. A 1" snapcode can be scanned from up to 7" away. If you need your users to scan from a greater distance, you'll need to enlarge the print size of your code.

Snapcode Dont's

Do not remove the snapcode's frame. Doing this will remove the frame border and ghost outline which will make your snapcode unscannable.

Do not break or impede the border or ghost outline. This will make your snapcode unscannable.

Do not tamper with the ghost-to-frame proportions. The designated proportions are critical to the scanning process.

Do not skew or stretch the snapcode.

Do not invert the colors of the snapcode. The outer border, dots, and ghost outline must provide dark contrast to the lighter code layer color. Remember, always test your codes before publishing.

Do not print your snapcode on glossy material. The reflections of light and sheen from the material may interfere with the ability for the snapcode to be scanned.



Do not remove the border or ghost outline.



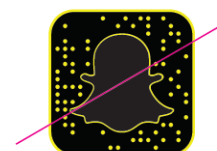
Do not break the border or ghost outline.



Do not tamper with the ghost-to-frame proportions.



Do not skew or stretch the snapcode in it's entirety.



Do not invert the colors of the snapcode.



Avoid printing on high-gloss papers, as the sheen could obstruct a successful scan.

Source: Snapcode Scan Guidelines Updated January 2016, http://ivoriccio.it/wp-content/uploads/2016/02/Snapcode_Guidelines.pdf

33. A Snapchat Server have defined at least one attribute, such as a size, of at least one symbol, such as a dot, of a Snapcode in terms of printer pixels.

34. A Snapchat Server have formatted the dots into the Snapcode.

35. Defendant operated mobile devices executing the Snapchat App to develop, test, modify, and/or maintain Snapcode functionality. Snapcode functionality refers to generating, encoding, outputting, scanning, and/or decoding Snapcodes.

36. Defendant operated internal servers that communicated with the mobile devices referenced in the preceding paragraphs to develop, test, modify, and/or maintain the Snapcode functionality.

37. The Snapchat App, Snapchat Servers, mobile devices, and internal servers used by Defendant to develop, test, modify, and/or maintain the Snapchat App or Snapcode

functionality (and/or combinations thereof) are referred to herein as “Accused Products.” Each of the above may be considered an Accused Product.

38. Defendant has directly infringed one or more claims of the ’882 Patent, including at least Claim 32, in this judicial district and elsewhere in Delaware, literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling at least one of the Accused Products during the pendency of the ’882 Patent (e.g., Claim 32 of the ’882 Patent recites a method of encoding data into a pattern for output to a substrate, the pattern comprising at least one symbol representing at least part of said data, the method comprising: defining at least one attribute of said at least one symbol in terms of printer pixels; and formatting said at least one symbol into said pattern).

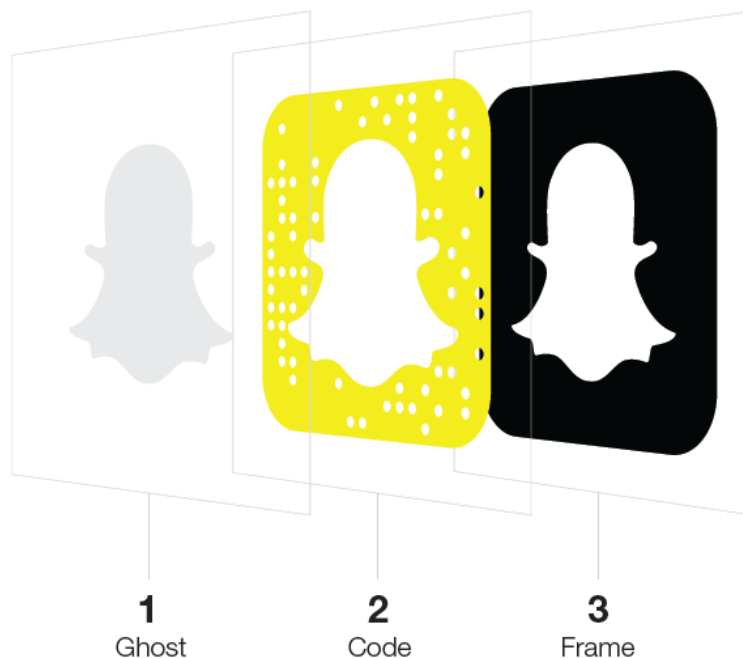
39. Plaintiff reserves the right to modify its infringement theories as discovery proceeds in this case, and Plaintiff shall not be estopped for claim construction purposes by its preliminary infringement analysis provided in this Complaint. Plaintiff’s preliminary infringement analysis does not limit its final claim construction positions.

COUNT 2: INFRINGEMENT OF THE ’427 PATENT

40. Plaintiff incorporates by reference the above paragraphs.

41. The Snapchat App decodes (and has been used to decode) digital data values, such as a hexadecimal “snaptag” value, from a pattern, such as a Snapcode.

42. The following illustration shows that a Snapcode includes three “layers”: ghost, code, and frame:



Source: Snapcode Scan Guidelines Updated January 2016, http://ivoriccio.it/wp-content/uploads/2016/02/Snapcode_Guidelines.pdf

43. The Snapchat App determines (and has been used to determine) locations of the outer border and/or the inner ghost outline in the process of decoding the Snapcode.

44. The Snapchat App uses (and has used) the outer border and/or the inner ghost outline to determine formatting information, such as dot size and/or an expected area where dots may be present, concerning the code layer of the Snapcode.

45. The Snapchat App uses (and has used) the determined dot size and/or expected area where dots may be present to decode dots in the code layer of the Snapcode.

46. The Snapchat App derives (and has been used to derive) digital data values, such as the hexadecimal “snaptag” value, from the Snapcode by decoding the Snapcode.

47. The digital data values are derived from the Snapcode based on the dot size and/or expected area determined from the outer border and/or the inner ghost outline.

48. The digital data values (embedded in a Snapcode) are used (and have been used) by the Snapchat App executing on a mobile device, e.g., to add a friend.

49. Defendant operated mobile devices executing the Snapchat App to develop, test, modify, and/or maintain the Snapcode functionality.

50. Defendant operated printing devices that printed Snapcodes that were scanned by the mobile devices referenced in the preceding paragraphs to develop, test, modify, and/or maintain the Snapcode functionality.

51. Defendant has directly infringed one or more claims of the '427 Patent, including at least Claim 9, in this judicial district and elsewhere in Delaware, literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling at least one of the Accused Products during the pendency of the '427 Patent (e.g., Claim 9 of the '427 Patent recites a method of decoding digital data values from a pattern, the method comprising: determining formatting information concerning a plurality of first cells contained in a first portion of the pattern from a first feature contained in a second portion of the pattern; determining the locations of the first cells; and deriving digital data values from the cells by using the formatting information provided by the first feature).

52. Plaintiff reserves the right to modify its infringement theories as discovery proceeds in this case, and Plaintiff shall not be estopped for claim construction purposes by its preliminary infringement analysis provided in this Complaint. Plaintiff's preliminary infringement analysis does not limit its final claim construction positions.

COUNT 3: INFRINGEMENT OF THE '807 PATENT

53. Plaintiff incorporates by reference the above paragraphs.

54. The Snapchat App retrieves data based on scanning and processing a Snapcode.

55. A Snapcode is a machine readable indicia that includes digital data values formatted into a two dimensional pattern.

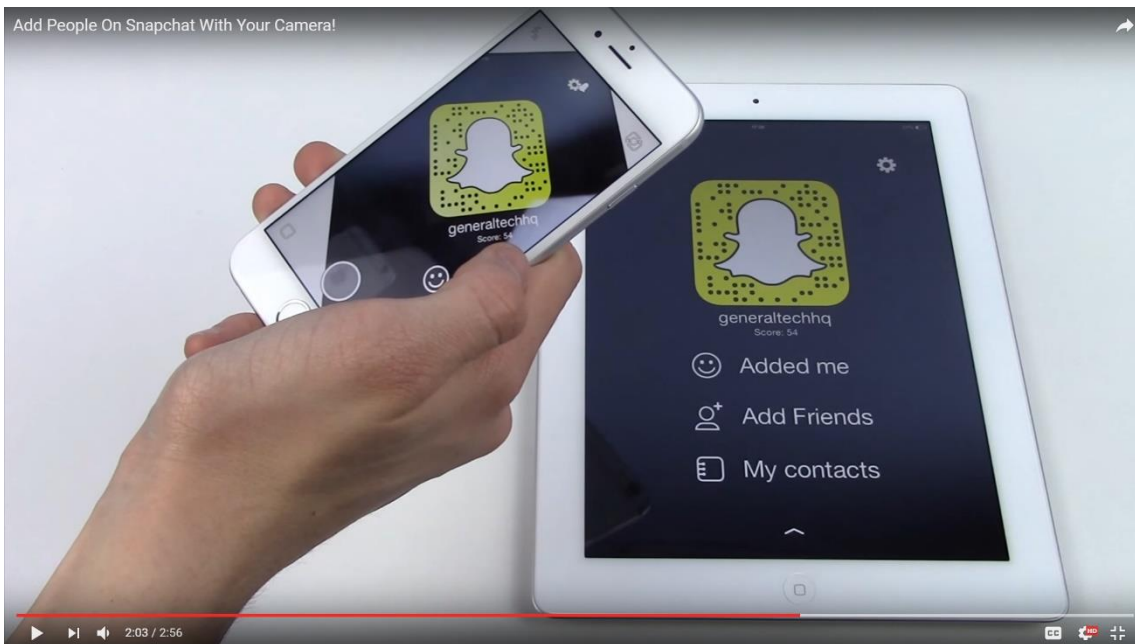
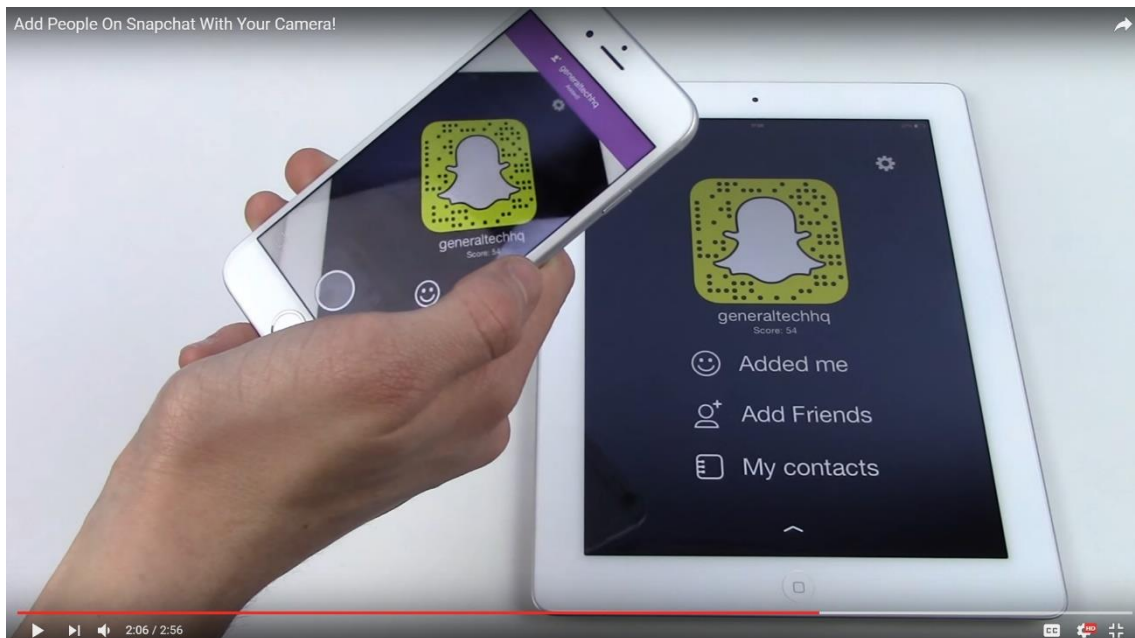
56. The Snapchat App controls (and/or is configured to control) a camera of a mobile device to scan a Snapcode.

57. The Snapchat App controls (and/or is configured to control) a processor of the mobile device to extract an address of an information resource (e.g., an identifier of a user to be added as a friend) from the Snapcode.

58. The Snapchat App retrieves and presents (and/or is configured to retrieve and present) the information resource to a user of the mobile device.

59. When a Snapcode is scanned to add a friend, the Snapchat App adds the friend to the user's friend list and displays a confirmation that the friend has been added, and the confirmation includes the friend's user identifier.

60. The following illustrations from a YouTube video show the Snapchat App on a mobile phone scanning the Snapcode for the user "generaltechhq" (displayed on a tablet computer) to add the user "generaltechhq" as a friend, with a confirmation being displayed at the top of the mobile phone when the Snapcode has successfully been scanned and the user "generaltechhq" has successfully been added as a friend:



Source: <https://www.youtube.com/watch?v=OXeHBvC6Akg>

61. Defendant operated mobile devices executing the Snapchat App to develop, test, modify, and/or maintain the Snapcode functionality.

62. Defendant operated internal servers that communicated with the mobile devices referenced in the preceding paragraphs to develop, test, modify, and/or maintain the Snapcode functionality.

63. Defendant has directly infringed one or more claims of the '807 Patent, including at least Claim 20, in this judicial district and elsewhere in Delaware, literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling at least one of the Accused Products during the pendency of the '807 Patent (e.g., Claim 20 of the '807 Patent recites a method for retrieving an information resource, the method comprising: scanning a machine readable indicia comprising digital data values formatted into a two dimensional pattern; extracting an address of the information resource from the machine readable indicia; and retrieving the information resource for presentation to a user).

64. Plaintiff reserves the right to modify its infringement theories as discovery proceeds in this case, and Plaintiff shall not be estopped for claim construction purposes by its preliminary infringement analysis provided in this Complaint. Plaintiff's preliminary infringement analysis does not limit its final claim construction positions.

COUNT 4: INFRINGEMENT OF THE '999 PATENT

65. Plaintiff incorporates by reference the above paragraphs.

66. The Snapchat App that is executable on mobile devices represents a communication system.

67. The Snapchat App includes processing means, such as processor-executable instructions for decoding Snapcodes.

68. A Snapcode is a machine readable code formatted into a two dimensional pattern.

69. A Snapcode includes contact information, such as an identifier of a user to be added as a friend.

70. The contact information included in a Snapcode is derived by decoding the Snapcode.

71. The Snapchat App includes imaging means, such as processor-executable instructions for controlling a camera of the mobile device executing the Snapchat App, for imaging a Snapcode.

72. The image of the Snapcode is decoded responsive to the imaging means imaging the Snapcode.

73. The Snapchat App includes communicating means, such as processor-executable instructions, to communicate using the contact information derived from the Snapcode.

74. When a Snapcode is scanned to add a friend, the Snapchat App derives a user identifier of the friend from the Snapcode and communicates using the derived user identifier, for example to add the friend to a friends list.

75. Defendant used a mobile device, representing the communication system, to test the functionality of at least one of the Accused Products during the pendency of the '999 Patent.

76. Defendant has directly infringed and continues to infringe one or more claims of the '999 Patent, including at least Claim 8, in this judicial district and elsewhere in Delaware, literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling at least one of the Accused Products during the pendency of the '999 Patent (e.g., Claim 8 of the '999 Patent recites a communication system comprising: processing means for decoding a machine-readable code formatted into a two dimensional pattern where that machine-readable code contains contact information, whereby the contact information is derived, imaging means for imaging a machine-readable code whereby the processing means decodes the image of the machine-readable code produced by the imaging means, and communicating means for communicating where said communicating means communicates using the contact information derived from the processing means).

77. Defendant has received notice and actual or constructive knowledge of the '999 Patent since, at the latest, the date of service of this Complaint.

78. Through its actions, Defendant has actively induced product makers, distributors, retailers, and/or end users of the Accused Products to infringe the '999 Patent throughout the United States, including within this judicial district, by, among other things, advertising and promoting the use of the Accused Products in various websites, including providing and disseminating instructions on how to use the Accused Products. Examples of such advertising, promoting, and/or instructing include the document at <https://www.snap.com/en->

[US/news/post/snapcodes/](http://www.usnews.com/news/post/snapcodes/) and the Snapcode Scan Guidelines Updated January 2016 at http://ivoriccio.it/wp-content/uploads/2016/02/Snapcode_Guidelines.pdf.

79. Through its actions, Defendant has contributed to the infringement of the '999 Patent by having its product makers, distributors, retailers, and/or end users, sell, offer for sale, or use one or more of the Accused Products throughout the United States, including within this judicial district, with knowledge that one or more of the Accused Products infringe the '999 Patent. The Accused Products are especially made or adapted for infringing the '999 Patent and have no substantial non-infringing use. For example, in view of the preceding paragraphs, one or more of the Accused Products contain functionality which is material to at least one claim of the '999 Patent.

80. Plaintiff reserves the right to modify its infringement theories as discovery proceeds in this case, and Plaintiff shall not be estopped for claim construction purposes by its preliminary infringement analysis provided in this Complaint. Plaintiff's preliminary infringement analysis does not limit its final claim construction positions.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that the Court:

A. Enter judgment that Defendant has infringed one or more claims of the '882 Patent, the '427 Patent, and the '807 Patent literally and/or under the doctrine of equivalents;

B. Enter judgment that Defendant has infringed, infringes and continues to infringes one or more claims of the '999 Patent literally and/or under the doctrine of equivalents;

C. Award Plaintiff past and future damages, to be paid by Defendant in an amount adequate to compensate Plaintiff for such past and future damages, together with pre-judgment and post-judgment interest for the infringement by Defendant of the '882 Patent, the '427 Patent, the '807 Patent, and the '999 Patent through the date such judgment is entered in accordance with 35 U.S.C. §284;

D. An accounting of all infringing sales including, but not limited to, those sales not presented at trial; and

E. Award Plaintiff its costs, disbursements, attorneys' fees, and such further and additional relief as is deemed appropriate by this Court.

JURY DEMAND

Plaintiff demands a trial by jury on all claims and issues so triable.

Dated: June 13, 2017

STAMOULIS & WEINBLATT LLC

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CERTIFICATE OF SERVICE

I hereby certify that on June 13, 2017, I electronically filed the foregoing document with the Clerk of Court using CM/ECF which will send electronic notification of such filings to all registered counsel.

/s/ Stamatios Stamoulis

Stamatios Stamoulis #4606