1   UNITED STATES PATENT AND TRADEMARK OFFICE

2   BEFORE THE PATENT TRIAL AND APPEAL BOARD

3   SNAP INC.,

4   Petitioner

5   -v-   IPR2019-00714

6   Patent No. 8,825,084

7   BLACKBERRY LIMITED,   IPR2019-00714

8   Patent Owner   Patent No. 8,326,327

9   _____/

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13   Pursuant to Notice, the deposition of SAMRAT

14 BHATTACHARJEE, Ph.D., was taken remotely on Friday,

15 April 10, 2020, commencing at 10:37 a.m., via Zoom, in

16 Silver Spring, Maryland, before Jacqueline Kimball, a

17 Registered Professional Reporter and Notary Public.

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1   INDEX

2   WITNESS NAME: SAMRAT BHATTACHARJEE, PhD

3   EXAMINATION BY MR. STEPHENS   4

4   EXHIBITS:

5   (NONE)

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1   SAMRAT BHATTACHARJEE, PHD,

2   Called for examination, having been duly sworn to

3   tell the truth, the whole truth and nothing but the

4   truth, testified remotely as follows:

5   PROCEEDINGS

6   MR. STEPHENS: Thank you for being here

7   today, Dr. Bhattacharjee. We met as you recall

8   back in November for your deposition in DC, so

9   good to see you again. I'd like to pause for a

10   moment, and ask Chad on the line to say your

11   name for the record so we have the record of

12   who's on the deposition.

13   MR. PETERMAN: Chad Peterman from Paul

14   Hastings on behalf Snap, Inc. and the witness.

15   MR. STEPHENS: Okay, thank you. We are

16   doing this deposition virtually remotely due to

17   the COVID 19 situation. The parties have

18   agreed to this. Does that sound good to you,

19   Mr. Peterman?

20   MR. PETERMAN: Yes.

21   EXAMINATION

22   BY MR. STEPHENS:

23   Q.   If you're unable to hear me,

24   Dr. Bhattacharjee, or if there's any technical issues,

25   please just let me know, I'll try and correct it. And

1 I'll do the same, okay?

2   A.   Yes.

3   Q.   Also if you need to take a break don't

4 hesitate to let me know, we'll do so.

5   A.   Thank you.

6   Q.   Let's get started. Do you understand that

7 the parties have stipulated this deposition will be

8 applicable to IPR2019-00714, that's the IPR of the 084

9 patents and IPR2019-00715, that's the IPR on the 327

10 patent?

11   A.   Yes, I believe those are the numbers. Yes,

12 I understand that.

13   Q.   Okay. Do you understand that you are under

14 oath?

15   A.   Yes.

16   Q.   Is there any reason you cannot give truthful

17 and accurate testimony today?

18   A.   No.

19   Q.   For clarity I'd like to define some of the

20 terms that we'll be using during the questioning.

21 When I use the terms patent owner or BlackBerry I'm

22 referring to BlackBerry, Limited, you understand?

23   A.   Yes.

24   Q.   When I use the terms petitioner or Snap I'm

25 referring to Snap, Inc., okay?

1   A.   Yeah.

2   Q.   When I use the term 084 patent I'm referring

3   to U.S. patent 8825084 which is marked Exhibit 1001 in

4   the 084 IPR, okay?

5   A.   Yeah, I don't know the full number myself

6   but okay.

7   Q.   Yeah, when I use the term 327 patent we'll

8   be referring to U.S. patent 8326327, okay?

9   A.   Yes.

10   Q.   When we use the term Winkler I'll be

11   referring U.S. patent 8750906 which is marked as

12   Exhibit 1004 in both IPRs, you understand?

13   A.   Yes.

14   Q.   When I use the term Lemmela, I'll be

15   referring to U.S. patent application of 20080250337

16   which is marked as Exhibit 1005 in both IPRs, do you

17   understand?

18   A.   Yeah.

19   Q.   When I use the term Crowley we'll be

20   referring to U.S. patent number 7593740 which is

21   marked Exhibit 1008 in both IPRs, do you understand?

22   A.   Yes.

23   Q.   When I use the term Altman I'll be referring

24   to U.S. patent application publication 20070281716

25   which is marked Exhibit 1006 in both IPRs, you

1   understand?

2   A.   Yes.

3   Q.   Just a few more here. When I refer to your

4   first 084 declaration or the February 2019 084

5   declaration that's the declaration that was submitted

6   at Exhibit 1002 in the 084 IPR, okay?

7   A.   Yeah, the initial 084 declaration, that's

8   fine.

9   Q.   Correct.

10   A.   I don't have the exhibit numbers but that's

11   fine.

12   Q.   Sure. This will be, that will be the first,

13   your initial 084 declaration?

14   A.   That's fine. If you would like me to call

15   it those I can, but I'm not looking at anything but

16   your video right now.

17   Q.   Okay. When I refer to your first 327

18   declaration that's the initial declaration that you

19   submitted in February 2019 with the 327 IPR, okay?

20   A.   Yes.

21   Q.   And conversely your second 084 declaration,

22   that's Exhibit 1011 in the 084 IPR, okay? That's the

23   one you just submitted a month ago?

24   A.   That's right, it's also called the rebuttal

25   of the fly declaration or something.

1   Q.   That's right, we can refer to it as the

2   rebuttal declaration.

3   A.   That's fine. Either way I think we're fine.

4   Q.   The same with 327 rebuttal declaration I'll

5   be referring to that as -- which is Exhibit 1020 in

6   the 327 IPR, okay?

7   A.   Okay, yeah.

8   Q.   I think we may use the acronym POSITA, and

9   if I use that, I'll be referring to a person of

10 ordinary skill in the art at the time of the

11 invention, okay?

12   A.   That's fine.

13   Q.   Can you describe how you prepared for

14 today's deposition?

15   A.   I read the materials in the IPR and I had a

16 few calls with attorneys from Snap.

17   Q.   Okay. As part of your preparation

18 approximately how much time did you spend preparing

19 for the deposition?

20   A.   I don't know, eight to 10 hours.

21   Q.   Was there any documents that you consulted

22 that were, in your preparation for the deposition

23 which are not already at record in the IPR?

24   A.   I don't know that -- I looked at the

25 documents for the IPR.

1   Q.   Okay. Your review mostly focused on the

2   record?

3   A.   That's correct.

4   Q.   Are you aware of any errors that exist in

5   either the 084 rebuttal declaration or the 327

6   rebuttal declaration?

7   A.   Not off the top of my head, no, sorry.

8   Q.   For the next set of questions I plan to

9   refer to your rebuttal declaration from the 084 IPR,

10   okay?

11   A.   Okay.

12   Q.   Do you have an electronic version or a

13   physical copy available to access?

14   A.   I have the files that were sent from

15   BlackBerry for this deposition, I can refer to them.

16   Q.   Sure. This would be Exhibit 1011 in the 084

17   IPR.

18   A.   Okay, would you like for me to open that?

19   Q.   Yes, go ahead.

20   A.   Okay.

21   Q.   I'm doing the same.

22   A.   I have a relatively small screen, so while

23   I'm looking at the document I probably won't be able

24   to see you, so if I miss something please restate it.

25   Q.   Okay, understood. I'll be asking questions

1   referring to the 084 rebuttal declaration but just for

2   the record unless we indicate otherwise the questions

3   will apply for both the 084 and 327 proceedings. I

4   believe these issues overlap between the two IPRs,

5   okay?

6   A.   Okay. If I am either confused or -- I'll

7   clarify with you if I think that they do not.

8   Q.   Perfect, thank you. Referring to paragraph

9   16 of the 084 rebuttal declaration, you state, this

10 starts at the last line on that page, page 7 paragraph

11 16, I agree with the board's institution's decisions

12 determination that the claims action spot refers to a

13 location or event in which the activity is occurring

14 or has occurred, right?

15   A.   I see that line, yeah.

16   Q.   Okay. In paragraph 14 just above that in

17 the 084 rebuttal declaration you acknowledge that any

18 related district court proceeding involving the 084

19 and 327 patents, The parties agree to a construction

20 for the term action spot as a location or event where

21 at least one activity is occurring relative to the

22 current location of another mobile device. Do you see

23 that?

24   A.   Oh, in paragraph 14?

25   Q.   Paragraph 14.

1   A.   Yes, I do see that.

2   Q.   Does the agreed-upon construction or the

3   term action spot as you quoted in paragraph 14

4   actually use the two-word phrase has occurred?

5   A.   The construction is there, I can read it out

6   to you if you wish.

7   Q.   Sure, yeah, can you read that out?

8   A.   The agreed, the construction for action spot

9   was a location or event where at least one activity is

10   occurring relative to the current location of another

11   mobile device.

12   Q.   Does that construction include the phrase

13   has occurred?

14   A.   No, I mean I just read it out to you, I

15   don't believe it does.

16   Q.   In your view would it be impossible to use

17   data from other mobile devices that have engaged in

18   documenting actions to reach a determination that some

19   type of activity is occurring at a location or event?

20   MR. PETERMAN: Object to the form.

21   A.   Yeah, could you repeat that question? I'm

22   sorry.

23   Q.   Sure, would it be impossible for a system to

24   be designed that would use data from other mobile

25   devices that have engaged in documenting actions to

1   reach a determination that some type of activity is

2   occurring at a location or event?

3   MR. PETERMAN: Objection.

4   THE WITNESS: Go ahead, apologize.

5   MR. PETERMAN: I just made the same

6   objection to form.

7   A.   Yeah, I think that's a very vague question

8   in the sense that I don't know when, if, if we relate

9   it back to the actual claim elements then I believe

10   that's impossible. But it just depends on how or what

11   the context is.

12   Q.   Sure. Let's construct a hypothetical. If

13   you were leading a team of engineers and you were

14   trying to build a predictive model, for example, would

15   it be possible for those engineers in say the 2010

16   time frame to make a prediction about whether activity

17   is occurring based on indications of documenting the

18   actions that have occurred?

19   MR. PETERMAN: Object to form.

20   A.   It depends on the context but usually no. I

21   don't think a predictive model to do 100 percent

22   correct -- I don't believe the predictive model would

23   be 100 percent correct.

24   Q.   Is it a criteria of predictive models in

25   your experience to be 100 percent correct?

1   A.   It is -- it depends upon what your baud is,

2   you know. I could predict that lots of people are

3   doing Zoom right now but would I swear to it, no.

4   But, again, it all depends upon the definition of

5   activity occurring and so on. I don't believe that

6   based upon past information one can assert that

7   something is occurring.

8   Q.   If I received a text message from you that

9   said, or that included a video clip of a baseball

10   game, could a system reasonably infer that a baseball

11   game is occurring based on analysis of that message?

12   A.   No, I mean it could be a video from a past

13   baseball game, baseball game could be over, I don't

14   think you could necessarily assert that.

15   Q.   Not necessarily, I'm asking if it's a

16   possibility. If there were metadata, for example,

17   that indicated the current date and time would it be

18   possible?

19   MR. PETERMAN: Object to form.

20   A.   Again, it entirely depends on what the

21   criteria is or is occurring and the activity. It

22   could have been the last pitch of the game, so I don't

23   know that I can say that you cannot -- you can assert

24   that something is occurring.

25   Q.   Okay. Let's go to paragraph 12 of your 084

1   rebuttal declaration. There you indicated that you

2   reviewed a pair of documents from, related to the

3   district court proceeding, one being a corrected final

4   ruling on claim construction which is the marked in

5   order, marked Exhibit 2002 and the second document

6   being a final ruling on Defendant Snap's Motion for

7   Summary Judgment of Invalidity under section 101 which

8   is Exhibit 1012, do you see that?

9   A.   Yes, I do.

10   Q.   Do you understand that the summary judgment

11   order which is Exhibit 1012 in contrast to

12   Exhibit 2002 was not a Markman order that decided

13   claim construction issues?

14   A.   I do, I think so, yeah. I'd have to take a

15   look at those just to make sure there wasn't any claim

16   construction in that order, but in its place I believe

17   that's correct.

18   Q.   Is it your opinion that the portion of the

19   summary judgment order that you cited in paragraph 17

20   of the 084 rebuttal declaration altered the district

21   court's formal construction for actions brought from

22   the Markman order?

23   MR. PETERMAN: Object to form.

24   A.   I need to take a look at paragraph 17 for

25   anything specific that you're asking me.

1   Q.   Yeah, do you believe that the summary

2   judgment order altered the construction of the action

3   spot that was set forth in the Markman order?

4   MR. PETERMAN: Object to form.

5   A.   I frankly don't recall the details

6   sufficient enough to give you a reasonable answer to

7   that.

8   Q.   I'm going to refer to paragraph 21 of your

9   084 rebuttal declaration, and there you stated that,

10   you interpreted the claim phrase, determine at least

11   one action spot within a predetermined distance from

12   the current location of the first mobile device to

13   mean determine each action spot within a specific

14   distance from the current location of the first mobile

15   device, the specific distance being set prior to the

16   determining spot, do you see that?

17   A.   Yes.

18   Q.   I want to turn, go to your first 084

19   declaration, that's Exhibit 1002 in paragraph 35.

20   Just let me know when you're able to see that.

21   A.   I see it.

22   Q.   Okay. So in paragraph 35 you quoted the 084

23   patent and provided several examples of specific

24   distances such as five blocks, 10 blocks, 10 yards,

25   100 feet and other distances. Do you see that?

1   A.   Yeah.

2   Q.   Is it fair to say that you used the phrase

3   "specific distance from" as relating to some radius

4   that extends from the current location of the first

5   mobile device?

6   MR. PETERMAN: Object to form.

7   A.   I wouldn't necessarily say radius. I think

8   the distances are, you know, 10 yards may be a radius

9   but 10 blocks may not be. You may not have a 10-block

10 radius if, you now, one side of it is in the ocean.

11   Q.   Okay. A 10-block distance may not

12 necessarily be a radius but it's some distance that

13 extends from the current location of that first mobile

14 device?

15   A.   That's correct, so I mean radius refers to a

16 circular measure which I don't think it necessarily

17 implies in what I quoted. Radius I believe is a

18 circular measure and I don't believe a circular

19 measure is necessarily implied in what I quoted.

20   Q.   Let's turn to the Lemmela reference which is

21 Exhibit 1005.

22   A.   Okay.

23   Q.   The first thing I'd like to discuss is how

24 Lemmela's system attributes a location to messages

25 that are posted by mobile devices. This is described

1   around paragraph 33. So if you need to refresh and

2   take a look at paragraph 33 please do so. Then I'd

3   like to ask, can you explain how Lemmela's system

4   associates a location with a post?

5   MR. PETERMAN: Counsel, which exhibit in

6   paragraph 33 were you referring to?

7   MR. STEPHENS: Lemmela Exhibit 1005.

8   A.   Okay.

9   Q.   How does, based on paragraph 33 can you

10 explain how Lemmela's system associates a location

11 with a post from a mobile device?

12   A.   I think, I mean I can read out paragraph 33

13 but Lemmela is pretty agnostic and very broad as to

14 how a location can be determined. As it says in

15 paragraph 33, Such location postings include an

16 indication of a location for the posting. In some

17 cases the user may manually enter the location using

18 coordinates, map sectors, street names, et cetera.

19 However, when the posting is created by a mobile

20 terminal the location posting may automatically

21 include the location of the mobile terminal at the

22 time the posting was created or posted. Such location

23 data can be obtained from GPS, Global Positioning

24 System device, although other means of automatically

25 determining location such as inertial centers,

1   LORAN --

2   MR. PETERMAN: Can you slow down a little

3   bit, Doctor.

4   A.   Such location data would be obtained from a

5   GPS, (Global Positioning System) device, although

6   other means of automatically determining location such

7   as inertial centers, LORAN, L-O-R-A-N systems,

8   proximity detectors, et cetera, are also possible.

9   Let me just leave it at that, yeah.

10   Q.   Last line of paragraph 33 refers to location

11 coordinates, are you familiar with how GPS formats

12 location coordinates?

13   A.   It depends upon at what level you're asking

14 whether the GPS protocol itself, no. Commonly the

15 output of GPS is given in latitude/longitude -- and

16 also altitude. But internally I don't believe that's

17 necessarily how it is processed.

18   Q.   The output of a GPS module or chip is

19 plotted in latitude/longitude coordinates?

20   A.   That is my understanding. Now, there could

21 be software that's running between the GPS chip and

22 the user interface call that is translating the raw

23 output of the GPS, and making it into latitude,

24 longitude, altitude, which off the top of my head I

25 don't recall the GPS protocol sufficiently to give you

1   much more detail.

2   Q.   Okay. So regardless of how the location

3   coordinates are determined or how they're formatted,

4   Lemmela's system associates the location coordinates

5   with posts made by user devices, is that right?

6   A.   Location postings include an indication of

7   the location for the posting, correct.

8   Q.   In paragraph 35 of Lemmela they describe a

9   clustering algorithm, and one example is the K-means

10   clustering algorithm. Can you describe how the

11   clustering algorithm works?

12   A.   In general or the K-means?

13   Q.   K-means would be fine.

14   A.   Okay, so the easiest way to think about this

15   is suppose we have some form of a metric space where

16   metric space just means we have some notion of a

17   distance. I'm not being particularly technical here.

18   Then, and so what that means is if I have a set of

19   items then we can define a notion of distance or

20   similarity between those items over the space. And

21   you can think of the mean as the, outside of the

22   center of the space or the center of the item that

23   would be in a way represent the mean or average item

24   given all of the additions. And K-means will try to

25   output K of the items that are the K most, not quite

1   central but in terms of the distance measure, one way

2   to look at it would be these are the items such that

3   the maximum distance from any other item in the space

4   is minimized if I were to use these K items. I think

5   that's a reasonable high-level description.

6   Q.   That was good, thank you. What is the

7   similarity measure or the distance measure that is

8   used among Lemmela's algorithm?

9   A.   The, Lemmela I think is relatively broad in

10   terms of the measure that is being used. If we take a

11   look at paragraph 35 Lemmela says that we can use the

12   suitably defined similarity measure taking into

13   account both the similarity between the postings by

14   salient words or some other measure and the geographic

15   distance. Then it says and other embodiments, other

16   methods may utilize ontologies, common-sense knowledge

17   sources, calculating semantic distances between words

18   and phrases, or given sufficient amounts of data

19   unsupervised learning methods like self-organizing

20   maps. So Lemmela is pretty broad. It's talking about

21   semantic distance. There are very well known ways of

22   trying to find salient words in documents or something

23   like that. An early example which would have been

24   known at that time would be something called PFIDF,

25   something like that could be used. Ways of finding

1   salient words was known in that time frame. One

2   example might be something called PFIDF.

3   Q.   In Lemmela's system a cluster of postings is

4   a set of postings that are related semantically and

5   geographically, for example?

6   A.   Some embodiment, that would be correct.

7   Q.   Okay, let's, I'd like to look at paragraphs

8   39 and 40 of Lemmela. Do you see that paragraph 39

9   identifies the Nokia 770 Internet tablet as one type

10   of mobile terminal that can be used in Lemmela's

11   system?

12   A.   Yes.

13   Q.   And then paragraph 40 identifies a number of

14   other devices besides the Nokia 770 tablet that could

15   alternatively be used in the system, right?

16   A.   Among other things, yeah.

17   Q.   Okay. Such as a cellular phone, a laptop

18   computer, PDA, GPS receiver or car navigation device?

19   A.   I don't think you read them, maybe you

20   did --

21   Q.   I may not have the right order --

22   A.   -- in order, but I have found cellular

23   phone, a laptop computer or combination thereof, car

24   navigation device. Yeah, I see, I believe I see all

25   the examples you pointed to.

1   Q.   The second to last sentence in paragraph 40

2   describes how Lemmela's mobile device can communicate

3   with a web server using either a wired connection or a

4   wireless connection, do you see that?

5   A.   Yes, I see that it says, Mobile device 50

6   may also communicate with a web server one or more

7   ports not shown on the mobile device that may allow a

8   wired connection to the Internet, such as universal

9   serial bus, USB, connection and/or via the short-range

10   wireless connection not shown, such as the Bluetooth

11   link or a wireless connection to WLAN access point.

12   And I think we should keep in mind that that was not

13   the only way that Lemmela's mobile device could

14   communicate with a web server because in the very

15   previous line it talks about cellular communication as

16   other types of network that could be used.

17   Q.   Sure. Paragraph 40 describes a number of

18   different examples that could each be used to

19   implement Lemmela's techniques, right?

20   A.   That's correct.

21   Q.   Were broadband Internet connections

22   available in the late 2000s via a wired connection to

23   a computing device?

24   A.   You're asking me in the late 2000s could one

25   connect to the Internet using a broadband wired

1   connection?

2   Q.   That's correct.

3   A.   Yeah.

4   Q.   (Inaudible) how would you connect to a

5   broadband wired connection?

6   MR. PETERMAN: Could you repeat the

7   question? I actually missed it. You were

8   talking over.

9   Q.   Thank you. What were some examples of how a

10   user could connect his computing device with a wired

11   connection to obtain broadband Internet?

12   A.   Okay, so this is a question which is

13   somewhat interesting because the term broadband itself

14   is not particularly well defined. But if we go with

15   the colloquial, let's say, definition then one might

16   have a cable modem connection or a DSL which may or

17   may not be broadband, or by the late 2000s I believe

18   we also have fiber connections to the home. Now, if

19   it was to a place of work then you could suddenly have

20   fiber or Ethernet or other types of connection that

21   would eventually be connected to a service provider

22   that was connected to the greater Internet. And then

23   within the premises you might run your own network

24   such as Ethernet. I don't know that anything that

25   was, that much was being used as a wired connection by

1   then. And one could connect using Ethernet, and in

2   some cases maybe Ethernet connected to USB or

3   something. Then back to the access connection you had

4   which would be cable modem, fiber, DSL and so on.

5   Q.   So it would have been possible for Lemmela's

6   mobile device to use an Ethernet or fiberoptic

7   connection to obtain broadband Internet?

8   A.   I actually have one of the Nokias except for

9   one after the 770. So I don't believe you can connect

10   an Ethernet to that. But some laptops had Ethernet

11   jacks at that time period so they could use a wired

12   connection.

13   Q.   Look at figure 6 in Lemmela.

14   A.   Okay.

15   Q.   This is a block diagram of the mobile device

16   at the right?

17   A.   That's correct.

18   Q.   Shown in figure 6 there's a memory 56 where

19   map information 66 and posting information 68 and

20   processing instruction 70 is stored, do you see that?

21   A.   I believe that's just the memory of the

22   device. And yeah, that information would be stored

23   there.

24   Q.   Do the types of memory that are described in

25   paragraph 45 of Lemmela, are those the type of memory

1   that could used as memory 56?

2   A.   Yeah, it's pretty comprehensive, so I think

3   56 would include RAM, probably not EEPROM or ROM,

4   maybe, maybe if the processing instructions were on

5   EEPROM or ROM --

6   MR. PETERMAN: He said EPROM, E-P-R-O-M,

7   all caps. And ROM, R-O-M, all caps.

8   THE WITNESS: I said EEPROM, E-E-P-R-O-M

9   and ROM. And I also said RAM, R-A-M.

10   Q.   A CD-ROM and a DVD are two of the types of

11   memories listed in paragraph 45, correct?

12   A.   That's correct. But the types of, at least

13   some of the types of mobile devices that have been

14   identified in the previous paragraph and in our prior

15   conversation don't easily connect to CD-ROM or DVD,

16   they don't have onboard CD-ROM or DVD.

17   Q.   Do you know what the typical memory capacity

18   of a CD-ROM was in the late 2000s?

19   A.   700 megabytes give or take.

20   Q.   Can you say that again? I didn't quite

21   catch it.

22   A.   700 megabytes give or take.

23   Q.   For like an audio CD?

24   A.   I mean all CDs I believe it's around 700

25   megabytes, six to 700 megabytes.

1   Q.   Do you know what the typical memory capacity

2   of a DVD was?

3   A.   4.3 gigabytes. Again, off the top of my

4   head, I believe it's around 4.3 gigabytes.

5   Q.   Okay. Let's look at paragraph 43 of Lemmela

6   which states, Memory 56 may also include posting

7   information 68 which may include raw location posting

8   information received from a network or any type of

9   processed information, correct?

10   A.   Yeah, that's one of the lines in paragraph

11   43, correct.

12   Q.   Would it have been impossible for Lemmela's

13   mobile device to predownload posting information 68

14   before the information was needed to be displayed?

15   A.   To implement all of what Lemmela is talking

16   about it would have been impossible.

17   Q.   What are some of the portions of Lemmela

18   that lead you to believe it would be impossible?

19   A.   Well, Lemmela talks about dynamically

20   updating the location posting based upon the user

21   location and also time period, and there is nothing in

22   Lemmela that can change the time period to be in the

23   past. I think a Lemmela-contemplated system where

24   postings are downloaded as they are posted or as the

25   user queries for them based upon their location, and

1   that could not be done using an offline storage

2   system.

3   Q.   Let's turn to figure 5 in Lemmela.

4   A.   After we're done with the Lemmela line of

5   questioning if we could take a break that would be

6   helpful.

7   Q.   No problem, that would be fine. Figure 5

8   shows a timeline 46?

9   A.   That's correct.

10   Q.   What does the timeline 46 allow the user to

11   do?

12   A.   It allows the user to constrain the location

13   posting view using that timeline.

14   Q.   Can you give an example of how a user might

15   interact with the user interface in figure 5 to change

16   the timing view?

17   A.   Given that Nokia was a touch screen, though

18   it had a little stylus, I believe you could either

19   click on particular days or, you know, that's just a

20   sample interface, one could presumedly get finer than

21   the days and weeks view shown there. You might have

22   been able to drag over that hand and presumably in a

23   path from now until whenever or even in the past.

24   Q.   In the view in figure 5 do you see that at

25   the left-hand side of the timeline there's a label

1   that says week five?

2   A.   Yes, I do see it.

3   Q.   Goes all the way to 13 on the right-hand

4   side?

5   A.   That's correct.

6   Q.   Is there a way that a user could access

7   earlier postings from say weeks one through four?

8   A.   Presumably there are little arrows there on

9   the two edges of the time line. My understanding is

10   if one were to click on those arrows it would go back

11   to the past.

12   Q.   If you clicked on left arrows you could go

13   back in the past?

14   A.   That is my understanding.

15   Q.   Then on, I guess conversely on the

16   right-hand side you could maybe go forward to week 14

17   or 15?

18   A.   Well, that's kind of interesting because I

19   believe this view is contemporaneous. Lemmela was,

20   Lemmela was filed on April 6, 2007, and if we take a

21   look at that view it in fact includes the present

22   which is I guess week 14, beginning of April 2007, I'm

23   not sure it could go very much farther to the right

24   including the present in there. But of course that's

25   a, it's a mockup, but it's kind of interesting that it

1   actually is including the date on which it was posted

2   or filed.

3   Q.   Is the Nokia device that you personally have

4   a Nokia 770, is that what you said?

5   A.   No, I have an 810. I can show it to you if

6   you like.

7   Q.   You have it on your desk right now?

8   A.   I'll get it for you. Here is the Nokia, and

9   over here is the stylus. One of these things pop out.

10   It's really cool, has a little keyboard that comes

11   out. Well, I haven't used this for years, decades,

12   but here is the little stylus. Oh, yeah, it has a

13   little slide-out keyboard. The 770 was very similar

14   if I remember. But I thought I had one but I had this

15   one instead, which was I guess one revision later.

16   Q.   Okay, great. That's all the Lemmela

17   questions. I just have this one left, two questions

18   here. In your first declaration from the 084 IPR,

19   Exhibit 1002?

20   A.   Yes.

21   Q.   On pages 59 to 60 of the declaration there's

22   a cell where you analyze claim element 1B?

23   A.   Yeah.

24   Q.   One moment, I'm just turning to it myself.

25   In that cell for element 1B you cite paragraphs 38 and

1   42 of Lemmela, correct?

2   A.   The specific citations are to 42 and 38,

3   that's correct.

4   Q.   Are there any citations to Crowley in the

5   cell for element 1B?

6   A.   The element 1B does not cite to Crowley.

7   MR. STEPHENS: That's all I have for

8   Lemmela, so if you'd like to take a 10-minute

9   break.

10   (Brief pause in the proceedings.)

11   BY MR. STEPHENS:

12   Q.   Let's turn to the Winkler reference,

13   Exhibit 1004. Looking at figure 6A to 6C, can you

14   just describe what's shown here in this progression

15   from figure 6A to figure 6B to figure 6C? There's

16   some description in the text in column 11.

17   A.   Right. As column 11 says, figure 6A depicts

18   a screen presenting a map element 610. Before the

19   occurrence of an event the map element may be a

20   certain color, size and/or design. After an event is

21   detected the system in figure 6B modifies the map

22   element. It indicates the occurrence of the event.

23   For example, the system may change the color of the

24   map element as shown in the figure when a friend

25   arrives at the location or adds a comment to the map

1   element. The system may also modify the map element

2   based on events that occur with the user's mobile

3   device. Figure 6C depicts the screen presenting a

4   different map element 620 sun when the system detects

5   the user's mobile device be approximate or at the

6   location of the map element.

7   Q. So in figure 6C when the user's mobile

8   device is proximate to or at the location of,

9   indicated by map element 610, then element 610 changes

10   appearance to the sun 620?

11   A. That's right. And as Winkler describes map

12   elements and the dynamic and that's one of the

13   examples of it changing, and can also be the location

14   of another user or another device.

15   Q. I'd like to turn to paragraph 75 of the 084

16   rebuttal declaration. Just let me know when you're

17   there.

18   A. Yes.

19   Q. And toward the middle of that paragraph,

20   paragraph 75, you cited Winkler's disclosure at

21   figure 5 in column 10, line 17 to 19 to support the

22   contention that Winkler discloses map elements that

23   correspond to the current location of the mobile

24   device, correct?

25   A. That's correct.

1   Q.   Paragraph 75 includes no other citations for

2   the assertion that Winkler discloses map elements

3   corresponding to the current location of the mobile

4   device, correct?

5   A.   I'd have to, it's a long paragraph but there

6   is certainly that disclosure in Winkler.

7   MR. STEPHENS: Okay. No further

8   questions.

9   MR. PETERMAN: Okay the deposition is

10   over. We would like to read the transcript.

11   Snap would like a copy of the deposition on the

12   same time frame as BlackBerry, although I don't

13   think we need a rough. We can just take the

14   final on Tuesday.

15   MADAM REPORTER: Rough on Monday and final

16   on Tuesday?

17   MR. STEPHENS: That's right.

18   (The deposition was concluded at 11:45 a.m.)

19

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23

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25

1   STATE OF MARYLAND

2   ANNE ARUNDEL COUNTY

3   I, Jacqueline Kimball, a Notary Public in

4   and for the State of Maryland, County of Anne Arundel,

5   do hereby certify that foregoing transcript is a true

6   and correct record of the testimony given; that said

7   testimony was taken by me stenographically and then

8   transcribed from my stenographic notes to the within

9   printed matter by means of computer-assisted

10   transcription in a true and accurate manner.

11   I further certify that I am not of counsel

12   to any of the parties, not an employee of counsel, nor

13   related to any of the parties, nor in any way

14   interested in the outcome of this action.

15   AS WITNESS my hand and Notarial Seal this

16   13th day of April, 2020, at Annapolis, Maryland.

17

18

19   Jacqueline Kimball, Notary Public

20   My commission expires May 1, 2023.

21

22

23

24

25

1   Veritext Legal Solutions
                          1100 Superior Ave
2   Suite 1820
                        Cleveland, Ohio 44114
3   Phone: 216-523-1313
4
      April 14, 2020
5
      To: Chad J. Peterman, Esq.
6
      Case Name: Snap Inc. v. Blackberry Limited
7
      Veritext Reference Number: 4047296
8
      Witness: Samrat Bhattacharjee, Ph.D.   Deposition Date: 4/10/2020
9
10   Dear Sir/Madam:
11
      Enclosed please find a deposition transcript. Please have the witness
12
      review the transcript and note any changes or corrections on the
13
      included errata sheet, indicating the page, line number, change, and
14
      the reason for the change. Have the witness' signature notarized and
15
      forward the completed page(s) back to us at the Production address
16   shown
17   above, or email to production-midwest@veritext.com.
18
      If the errata is not returned within thirty days of your receipt of
19
      this letter, the reading and signing will be deemed waived.
20
21   Sincerely,
22   Production Department
23
24
25   NO NOTARY REQUIRED IN CA

1   DEPOSITION REVIEW
                  CERTIFICATION OF WITNESS
2
         ASSIGNMENT REFERENCE NO: 4047296
3   CASE NAME: Snap Inc. v. Blackberry Limited
         DATE OF DEPOSITION: 4/10/2020
4   WITNESS' NAME: Samrat Bhattacharjee, Ph.D.
5   In accordance with the Rules of Civil
    Procedure, I have read the entire transcript of
6   my testimony or it has been read to me.
7   I have made no changes to the testimony
    as transcribed by the court reporter.
8

    _____   _____
9   Date   Samrat Bhattacharjee, Ph.D.
10   Sworn to and subscribed before me, a
    Notary Public in and for the State and County,
11 the referenced witness did personally appear
    and acknowledge that:
12
         They have read the transcript;
13   They signed the foregoing Sworn
              Statement; and
14   Their execution of this Statement is of
              their free act and deed.
15
         I have affixed my name and official seal
16
    this _____ day of_____, 20____.
17

         _____
18   Notary Public
19   _____
         Commission Expiration Date
20
21
22
23
24
25

DEPOSITION REVIEW
CERTIFICATION OF WITNESS

ASSIGNMENT REFERENCE NO: 4047296
CASE NAME: Snap Inc. v. Blackberry Limited
DATE OF DEPOSITION: 4/10/2020
WITNESS' NAME: Samrat Bhattacharjee, Ph.D.
In accordance with the Rules of Civil
Procedure, I have read the entire transcript of
my testimony or it has been read to me.
I have listed my changes on the attached
Errata Sheet, listing page and line numbers as
well as the reason(s) for the change(s).
I request that these changes be entered
as part of the record of my testimony.

I have executed the Errata Sheet, as well
as this Certificate, and request and authorize
that both be appended to the transcript of my
testimony and be incorporated therein.

_____   _____
Date   Samrat Bhattacharjee, Ph.D.

Sworn to and subscribed before me, a
Notary Public in and for the State and County,
the referenced witness did personally appear
and acknowledge that:
They have read the transcript;
They have listed all of their corrections
        in the appended Errata Sheet;
They signed the foregoing Sworn
        Statement; and
Their execution of this Statement is of
        their free act and deed.
I have affixed my name and official seal
this _____ day of_____, 20____.
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                Notary Public

                _____
                Commission Expiration Date

1   ERRATA SHEET
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4   _____

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19

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20   Date   Samrat Bhattacharjee, Ph.D.
21   SUBSCRIBED AND SWORN TO BEFORE ME THIS _____
22   DAY OF _____, 20_____ .
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24

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25   Commission Expiration Date

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(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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