UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

CIVIL MINUTES - GENERAL

Case No.	**CV 18-1844-GW(KSx)** CV 18-2693-GW(KSx)	Date	April 5, 2019
Title	*BlackBerry Limited v. Facebook, Inc. et al* *BlackBerry Limited v. Snap Inc.*		

Present: The Honorable	GEORGE H. WU, UNITED STATES DISTRICT JUDGE	
Javier Gonzalez	None Present	
Deputy Clerk	Court Reporter / Recorder	Tape No.
Attorneys Present for Plaintiffs:	Attorneys Present for Defendants:	
None Present	None Present	

PROCEEDINGS: **IN CHAMBERS - *CORRECTED* FINAL RULING ON CLAIM CONSTRUCTION/*MARKMAN* HEARING**

Attached hereto is the Court's *Corrected* Final Ruling on Claim Construction/*Markman* Hearing.

_____ : _____

Initials of Preparer JG

BlackBerry Limited v. Facebook, Inc. et al, Case No. 2:18-cv-01844-GW-(KSx) (Lead Case)
BlackBerry Limited v. Snap Inc., Case No. 2:18-cv-02693-GW-(KSx)
Final Ruling on Claim Construction/*Markman* Hearing

Technology Tutorial: March 21, 2019 at 8:30 a.m.;
Claim Construction Hearing: April 1, 2019 at 8:30 a.m.

I. Introduction

Plaintiff BlackBerry Limited ("BlackBerry") filed suit against Facebook, Inc., WhatsApp, Inc., Instagram, Inc.,[1] and Instagram, LLC (collectively, "Facebook Defendants") on March 6, 2018, alleging infringement of various patents. *BlackBerry Limited v. Facebook, Inc. et al*, Case No. 2:18-cv-01844-GW-(KSx) ("*Facebook Case*"), Docket No. 1; *see also* Docket No. 15 (Facebook First Amended Complaint).

A month later on April 3, 2018, BlackBerry separately filed suit against Snap Inc., alleging infringement of some of the same patents. *BlackBerry Limited v. Snap Inc.*, Case No. 2:18-cv-02693-GW-(KSx) ("*Snap Case*"), Docket No. 1. The two actions have been consolidated for pretrial purposes. Docket No. 92.[2]

Now pending are some of the parties' claim construction disputes. The parties have submitted a Joint Claim Construction and Prehearing Statement. *See* Docket No. 110; *see also* Docket No. 111 (Court's Order Regarding Joint Claim Construction and Prehearing Statement). The parties have also filed various claim construction briefs and supporting documents consistent with the Court's Order Regarding the Joint Claim Construction and Prehearing Statement:

- Opening Claim Construction Briefs: BlackBerry's Opening Claim Construction Brief (Docket No. 116); Defendants' Common Opening Claim Construction Brief (Docket No. 119); Facebook Defendants' Opening Claim Construction Brief (Docket No. 117); Snap's Opening Claim Construction Brief (*Snap Case*, Docket No. 97)
- Responsive Claim Construction Briefs: BlackBerry's Responsive Claim Construction

[1] Previously in Facebook Defendants' Motion to Dismiss, they stated, "Instagram, Inc. is no longer an active corporation, but joins this motion if necessary." *See Facebook Case,* Docket No. 36 at 1 n.2. Instagram, Inc. is listed on the face of the CM/ECF docket with other Facebook Defendants for each of Facebook Defendants' claim construction papers. However, Instagram, Inc. is not necessarily listed as joining the briefing itself. *See, e.g.*, Docket No. 119 at 1 (listing only "Defendants Snap Inc., Facebook, Inc., WhatsApp, Inc., and Instagram, LLC" as submitting an Opening Claim Construction Brief for the Common Patents). The parties are **ORDERED** to meet and confer regarding their positions regarding the involvement of Instagram, Inc. in this litigation and file a joint report with the Court within 7 days of the Court's final claim construction order.

[2] Citations are to the *Facebook Case* unless otherwise noted.

Brief (Docket No. 125); Defendants' Common Responsive Claim Construction Brief (Docket No. 123); Facebook Defendants' Responsive Claim Construction Brief (Docket No. 121); Snap's Responsive Claim Construction Brief (*Snap Case*, Docket No. 100)

- Claim Construction Presentation Materials: BlackBerry's Claim Construction Presentation Materials (Docket No. 128); Defendants' Common Claim Construction Presentation Materials (Docket No. 127) Facebook Defendants' Claim Construction Presentation Materials (Docket No. 126); Snap's Claim Construction Presentation Materials (*Snap Case*, Docket No. 103)

A technology tutorial was held on March 21, 2019. Docket No. 133. After the technology tutorial, the parties submitted a Joint Statement Regarding Disputed Claim Terms that narrowed the parties' claim construction disputes. Docket No. 135. The parties provided additional clarification regarding some of their positions in another Joint Report filed March 28, 2019. Docket No. 146.

Also after the technology tutorial, BlackBerry filed a Motion to Strike the Declaration of Jonathan Katz. Docket No. 134. The parties stipulated to an expedited briefing schedule on the Motion and it has now been fully briefed. Docket Nos. 139, 140.

The Court would construe the presented disputed terms as stated herein. The Court would **DENY** BlackBerry's Motion to Strike (Docket No. 134).

II. Background

For purposes of the parties' claim construction disputes, the parties request construction of terms in asserted claims of the following currently-asserted patents:

- Patents that BlackBerry asserts all Defendants infringe: U.S. Patent Nos. 8,301,713 ("the '713 Patent"), 8,296,351 ("the '351 Patent"), 8,676,929 ("the '929 Patent"), and 8,209,634 ("the '634 Patent");
- Patents that BlackBerry asserts Facebook Defendants infringe: U.S. Patent Nos. 9,349,120 ("the '120 Patent"), 8,677,250 ("the '250 Patent"), 8,279,173 ("the '173 Patent"), 7,372,961 ("the '961 Patent"), and 8,429,236 ("the '236 Patent");
- Patents that BlackBerry asserts Snap infringes: U.S. Patent Nos. 8,326,327 ("the '327 Patent"), and 8,825,084 ("the '084 Patent").

See Docket No. 110 at 2 n.1.

A. '351 and '929 Patents

The '929 Patent is a continuation of the '351 Patent and both patents share substantially the same specification. The '351 and '929 Patents also share the same title, "System and Method for Pushing Information to a Mobile Device." The '351 Patent issued on October 23, 2012 and the '929 Patent issued on March 18, 2014.

Claim 1 of the '351 Patent recites:

> 1. A system for pushing information to a mobile device, comprising:
> a proxy content server that receives information over a computer network from an information source and stores the information to one of a plurality of channels based on pre-defined information categories, wherein the plurality of channels comprise memory locations included in at least one of the proxy content server or a proxy content server database;
> the proxy content server to receive a feedback signal over a wireless network that indicates a position of the mobile device, and to use the feedback signal to select a channel for transmission of the information from the selected channel over the wireless network to the mobile device, wherein the information comprises at least one of static advertising information, dynamic advertising information, default advertising information, or content information, and wherein a combination of the static advertising information with one of the dynamic or default advertising information comprises an advertisement or an information bulletin.

Claim 1 of the '929 Patent recites:

> 1. A method for pushing information to a mobile device, the method comprising:
> detecting a triggering event comprising a time triggering event;
> determining, by a server, information relevant to the detected triggering event from among information stored in one of a plurality of memory location channels, wherein the information is stored in the one of the plurality of memory location channels based on a category of the information matching a pre-defined category of the one of the plurality of memory location channels;
> when the information relevant to the detected triggering event comprises content information, inserting to the content information, by the server, a meta tag for one or more advertisements to be displayed with the content information, wherein the meta tag identifies the one or more advertisements and advertisement display requirements, and wherein the one or more advertisements are selected based on the detected triggering event; and

transmitting the content information that includes the meta tag to the mobile device.

B. The '634 Patent

The '634 Patent issued June 26, 2012 and is titled "Previewing a New Event on a Small Screen Device." Claim 1 of the '634 Patent recites:

1. A method of providing notifications of unread messages on a wireless communication device, comprising:

displaying at least one icon relating to electronic messaging on a graphical user interface of the wireless communication device;

receiving a plurality of electronic messages on the wireless communication device, the plurality of electronic messages including messages from a plurality of different messaging correspondents; and

in response to receiving at least one of the plurality of electronic messages, visually modifying at least one displayed icon relating to electronic messaging to include a numeric character representing a count of the plurality of different messaging correspondents for which one or more of the electronic messages have been received and remain unread.

C. The '713 Patent

The '713 Patent issued October 30, 2012 and is titled "Handheld Electronic Device and Associated Method Providing Time Data in a Messaging Environment." Claim 1 of the '713 Patent recites:

1. A method of operating an electronic device, the method comprising:

outputting an electronic conversation comprising a plurality of indications, each indication being representative of at least a portion of a corresponding messaging communication between the electronic device and a second electronic device;

identifying a first messaging communication between the electronic device and the second electronic device occurring at a first time, the first messaging communication having a corresponding first indication representative of at least a portion of the first messaging communication and which is one of the plurality of indications;

determining that a predetermined duration of time has elapsed since the first time without additional communication between the electronic device and the second electronic device during that duration of time;

detecting an input to the electronic device following said identifying and determining steps, said input occurring at a second time; and

responsive to said detecting an input, outputting in the electronic conversation, a time stamp representative of the second time.

D. The '120 Patent

The '120 Patent issued May 24, 2016 and is titled "System and Method for Silencing Notifications for a Message Thread." The '120 Patent, Claim 24 recites:

> 24. A non-transitory computer readable medium comprising processing instructions which when executed by a data processor cause the data processor to perform a method for silencing notifications for incoming electronic messages to a communication system, the method comprising:
> receiving one or more selected message threads for silencing;
> in response to receiving the one or more selected message threads, activating one or more flags, each flag in association with a selected message thread of the one or more selected message threads, wherein the one or more flags indicate that the associated one or more selected message threads have been silenced;
> receiving a new incoming electronic message;
> identifying the new incoming message as associated with the selected one or more message threads;
> determining that a message thread associated with the new incoming message has been flagged as silenced using the one or more flags;
> overriding at least one currently-enabled notification setting to prevent a notification pertaining to receipt of the new incoming message from being activated; and
> displaying the new incoming electronic message in an inbox together with any message thread not flagged as silenced, while silencing any further notifications pertaining to receipt of the new incoming electronic message;
> wherein the new incoming message thread flagged as silenced is displayed in the inbox in a different manner than any message thread not flagged as silenced.

E. The '961 Patent

The '961 Patent issued May 13, 2008 and is titled "Method of Public Key Generation." The '961 Patent, Claim 23 recites:

> 23. A cryptographic unit configured for generating a key k for use in a cryptographic function performed over a group of order q, said cryptographic unit having access to computer readable instructions and comprises:
> an arithmetic processor for:
> generating a seed value SV from a random number generator;
> performing a hash function H( ) on said seed value SV to provide an output H(SV);

determining whether said output H(SV) is less than said order q prior to reducing mod q;
accepting said output H(SV) for use as said key k if the value of said output H(SV) is less than said order q;
rejecting said output H(SV) as said key if said value is not less than said order q;
if said output H(SV) is rejected, repeating said method; and
if said output H(SV) is accepted, providing said key k for use in performing said cryptographic function, wherein said key k is equal to said output H(SV).

F. The '236 Patent

The '236 Patent issued April 23, 2013 and is titled "Transmission of Status Updates Responsive to Status of Recipient Application." Claim 15 of the '236 Patent recites:

15. A mobile communications device, comprising:
a mode selector configured to determine whether a recipient application is actively processing status updates and to select a message transmission mode based on whether the recipient application is actively processing status updates; and
a message generator configured to generate status messages and to cause transmission of status messages from the mobile communications device to a recipient application using the selected message transmission mode.

G. The '327 and '084 Patents

The '084 Patent is a continuation of the '327 Patent, and the two patents share substantially the same specification. The '327 and '084 Patents also share the same title, "System and Method for Determining Action Spot Locations Relative to the Location of a Mobile Device." The '327 Patent issued on December 4, 2012 and the '084 Patent issued on September 2, 2014.

Claim 1 of the '327 Patent recites:

1. A mobile device comprising:
a display; and
a processor module communicatively coupled to the display and configured to receive executable instructions to:
display a graphical user interface on the display;
receive data indicative of a current location of the mobile device;
determine at least one action spot within a predetermined distance from the current location of the mobile device, the at least one action spot corresponding to a location where at least one other mobile device has engaged in documenting action within a predetermined period of time;
signify the at least one action spot on the graphical user interface; and

provide an indication of activity level at the at least one action spot.

Claim 1 of the '084 Patent recites:

1. A server configured to:
receive data indicative of a current location of a first mobile device;
determine at least one action spot within a predetermined distance from the current location of the first mobile device, the at least one action spot corresponding to a location where at least one second mobile device has engaged in at least one documenting action, the documenting action including at least one of capturing images, capturing videos and transmitting messages;
transmit the at least one action spot to the first mobile device; and
transmit to the first mobile device, an indication of an activity level at the at least one action spot,
wherein the activity level is based upon at least one of a number of images captured, a number of videos captured, and a number of messages transmitted.

III. Legal Standard

Claim construction is an interpretive issue "exclusively within the province of the court." *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). It is "a question of law in the way that we treat document construction as a question of law," with subsidiary fact-finding that is reviewed for clear error. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831, 837-40 (2015). The claim language itself is the best guide to the meaning of a claim term. *See Vederi, LLC v. Google, Inc.*, 744 F.3d 1376, 1382 (Fed. Cir. 2014). This is because the claims define the scope of the claimed invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). But a "person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent." *Id.* at 1313. Thus, claims "must be read in view of the specification," which is "always highly relevant to the claim construction analysis." *Phillips*, 415 F.3d at 1315 (internal quotations omitted).

Although claims are read in light of the specification, limitations from the specification must not be imported into the claims. *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009). "[T]he line between construing terms and importing limitations can be discerned with reasonable certainty and predictability if the court's focus remains on understanding how a person of ordinary skill in the art would understand the claim terms." *Phillips*, 415 F.3d at 1323.

The prosecution history is "another established source of intrinsic evidence." *Vederi*, 744

F.3d at 1382. "Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Phillips*, 415 F.3d at 1317 (citations omitted). "Furthermore, like the specification, the prosecution history was created by the patentee in attempting to explain and obtain the patent." *Id.* "Yet because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.*

Claim construction usually involves resolving disputes about the "ordinary and customary meaning" that the words of the claim would have had "to a person of ordinary skill in the art in question at the time of the invention." *Phillips*, 415 F.3d at 1312-13 (internal quotations and citations omitted). But in some cases, claim terms will not be given their ordinary meaning because the specification defines the term to mean something else. "[A] claim term may be clearly redefined without an explicit statement of redefinition," so long as a person of skill in the art can ascertain the definition by a reading of the patent documents. *Id.* at 1320; *see also Trustees of Columbia Univ. in City of New York v. Symantec Corp.*, 811 F.3d 1359, 1364 (Fed. Cir. 2016).

Where the patent itself does not make clear the meaning of a claim term, courts may look to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean," including the prosecution history and "extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Phillips*, 415 F.3d at 1314 (internal quotations omitted). Sometimes, the use of "technical words or phrases not commonly understood" may give rise to a factual dispute, the determination of which will precede the ultimate legal question of the significance of the facts to the construction "in the context of the specific patent claim under review." *Teva*, 135 S. Ct. at 841, 849. "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Phillips*, 415 F.3d at 1314. "In such circumstances, general purpose dictionaries may be helpful." *Id.*

IV. Discussion

A. Agreed Claim Terms

The parties have agreed to constructions for the following claim terms (*see* Docket Nos. 110, 135):

1. All Parties

Term	Asserted Patent(s)	Parties' Agreed Claim Construction
"dynamic advertising information"	'351 Patent, '929 Patent	"advertising information that regularly changes"
"static advertising information"	'351 Patent, '929 Patent	"advertising information that relates to the identity of an advertiser or that does not often change"
"default advertising information"	'351 Patent, '929 Patent	"advertising information that changes rarely"[3]
"channel" / "memory location channel"	'351 Patent, '929 Patent	"memory location"
"resumption message"	'713 Patent	"message after a period of interruption"
"icon"	'634 Patent	Plain and ordinary meaning

2. BlackBerry and Facebook Defendants

Term	Asserted Patent(s)	Parties' Agreed Claim Construction
"recipient application"	'236 Patent	"software, hardware, component, or collection of components that processes status updates from a mobile communications device and generates an output based on the status updates"
"message transmission mode"	'236 Patent	Plain and ordinary meaning
"flag"	'120 Patent	No construction necessary (*see* Docket No. 116 at 3 n.2)

3. BlackBerry and Snap

Term	Asserted Patent(s)	Parties' Agreed Claim Construction
"action spot"	'327 Patent '084 Patent	"location or event where at least one activity is occurring relative to the current location of another mobile device"

[3] At the tutorial hearing, the Court had a question as to what "rarely" meant in this context, but the parties did not provide a satisfactory answer.

B. Disputed Claim Terms

1. "proxy content server" ('351 Patent, Claims 1, 9, 14, and 21)

BlackBerry's Proposed Construction	Defendants' Proposed Construction
"server that aggregates information from an information source for distribution to a device" *Proposed modified construction:* "server that aggregates information from an information source for distribution to a device"	"a computer that receives information over a computer network and provides it to another device" *Proposed modified construction:* "a server that receives information over a computer network and provides it to another device"

After meeting and conferring regarding their competing proposed constructions for the term "proxy content server," the parties were able to effectively narrow their dispute to a disagreement over some of the phrases BlackBerry uses in its proposed construction, such as "aggregate" and "distribution."[4] Docket No. 123 at 2.

Again, Claim 1 of the '351 Patent states,

> 1. A system for pushing information to a mobile device, comprising:
> a proxy content server that receives information over a computer network from an information source and stores the information to one of a plurality of channels based on pre-defined information categories, wherein the plurality of channels comprise memory locations included in at least one of the proxy content server or a proxy content server database;
> the proxy content server to receive a feedback signal over a wireless network that indicates a position of the mobile device, and to use the feedback signal to select a channel for transmission of the information from the selected channel over the wireless network to the mobile device, wherein the information comprises at least one of static advertising information, dynamic advertising information, default advertising information, or content information, and wherein a combination of the static advertising information with one of the dynamic or default advertising information comprises an advertisement or an information bulletin.

'351 Patent, Claim 1. Claim 14 of the '351 Patent similarly requires that the proxy content server

[4] BlackBerry argues that the parties' positions for this claim term are relevant to their § 101 dispute. Docket No. 116 at 5 ("Defendants' construction. . . is a transparent attempt to genericize the term . . . in an apparent attempt to set the stage for a renewed motion for invalidity under Section 101."); *see also* Docket No. 119 at 15 (also stating dispute is relevant to § 101).

"receive[ ] information over a computer network from an information source" and "select a channel in response to a triggering event for transmission of the information from the selected channel over the wireless network to the mobile device." *Id.* at Claim 14. Claims 9 and 21 depend from independent Claims 1 and 14, respectively.

At the claim construction hearing, BlackBerry stated that it did not dispute Defendants' position that the proxy content server must be housed such that it is physically separate from the claimed mobile device. Both the intrinsic and extrinsic record support the parties' shared conclusion that "proxy" requires physical separation from the claimed mobile device.

Regarding the party's dispute over the use of the words "aggregate" and "distribution" in BlackBerry's proposed constructions, the Court agrees with Defendants that these words may not be readily accessible to all lay jurors. The Court also observes that the concepts of the proxy content server aggregating and distributing information appear to already be reflected in the plain language of the claims themselves, which require that the proxy content server receives information and stores it in a plurality of channels (*i.e.*, aggregate information) before receiving a feedback signal and selecting a channel for transmission of information to a mobile device (*i.e.*, distribute information). This appears to be BlackBerry's expert's position. *See, e.g.*, Almeroth Decl. at ECF33 ¶ 92. To the extent BlackBerry would argue that these phrases are intended to provide meaning beyond the plain claim language, it has not adequately stated what that meaning would be or its basis for that position.[5]

BlackBerry's expert suggests some challenge to Defendants' proposed construction of "a server *that receives information over a computer network* and provides it to another device." Rebuttal Declaration of Kevin Almeroth ("Almeroth Reb. Decl."), Docket No. 125-1 ¶ 20. At the hearing, BlackBerry primarily rejected to this language as redundant of language already in the claims themselves. *See* '351 Patent, Claims 1, 14. The Court also notes that to the extent Defendants, through their proposed construction, would seek to limit the meaning of "proxy content server" such that it can *only* receive information over a computer network, Defendants have not shown how such an interpretation would be consistent with the '351 Patent's open-ended claims. *See also* '351 Patent, 11:34-36.

[5] Defendants' basis for objecting to the phrases "aggregate" and "distribution" (and their apparently related concern that these phrases would not distinguish a "proxy content server" from a "content server") are not entirely clear, either, but need not be addressed based on the Court's current determination.

After considering the parties' disputes and the plain language of the claims, the Court is not persuaded that the term "proxy content server" requires construction. Both Claims 1 and 14 provide extensive information about the claimed proxy content server and how it functions and/or interacts with other components of the claimed system. For these reasons, the term "proxy content server" is not construed.

In reaching the determination that the "proxy content server" term does not require construction, the Court notes that nothing in this Order should be deemed to suggest that the Court has reached a determination regarding whether: (1) the term "proxy content server" was a term coined by the inventors; or (2) a "proxy content server" as claimed, including its recited functions in the claims, is a routine, conventional, and/or well-understood computer component. These are factual disputes the Court previously identified as relevant to the § 101 inquiry that are not appropriately resolved on the current record. *See* Docket No. 68 at 11-12.

2. "content information" ('351 Patent, Claims 1 and 14; '929 Patent, Claims 1, 2, 9, and 10)

BlackBerry's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning; alternatively, "information other than advertising information" *Proposed modified construction:* Plain and ordinary meaning; alternatively, "information other than advertising information and meta tags"	"information, other than advertising information and meta tags, which is displayed for viewing by the user" *Proposed modified construction:* "information, other than advertising information and meta tags, which can be displayed for viewing by the user"

After meeting and conferring, the parties narrowed their dispute for the term "content information," to the issue of whether content information requires information "which can be displayed for viewing by the user."[6] Defendants' original claim construction proposal did not include any reference to the display of information. As the parties approached the deadline to file their Joint Claim Construction and prehearing statement, Defendants added the "which is displayed for viewing" phrase to their proposed construction. In its responsive claim construction brief, BlackBerry argued that this proposed language "fail[ed] to account for content information that is sent to a mobile device user but never viewed." Docket No. 125 at 3; *see also* Almeroth Reb.

[6] The parties state in general terms that their positions for this claim term are relevant to the question of whether Defendants infringe the asserted patent. Docket No. 119 at 17-18 ("Adoption of Defendants' construction would provide an additional non-infringement defense on all asserted claims."); *see also* Docket No. 116 at 8 (also stating dispute is relevant to infringement issues).

Decl., ¶ 27 ("Defendants' construction ignores the teaching where content information that is sent to a mobile device user [is] never viewed."). After the technology tutorial, Defendants modified their proposal to include information "which *can be* displayed for viewing by the user."

At the claim construction hearing, BlackBerry acknowledged that "content information" means information that is *ultimately* intended for display to a user. However, BlackBerry raised a concern that when, for instance, content information is being stored at the proxy content server (before it is delivered to a mobile device), the information may not be stored in a format that would allow it to be capable of display by a user. As BlackBerry put it, the content information may just be displayed at the proxy content server as a collection of "1s and 0s." BlackBerry stated that to the extent Defendants' claim construction position would exclude "content information" that is not necessarily in its final viewing format, including content information as it exists at the proxy content server, Defendants' position would not be supported by the specification. Defendants did not dispute that content information that is not yet in its final form for viewing is still, nonetheless, content information. Defendants asserted that this understanding is reflected in their proposed construction, including the language "*capable of being*."

Based on the parties' respective representations about their understanding of the scope of this claim term at the claim construction hearing, the Court construes the term "content information" as "information, other than advertising information and meta tags, which is capable of being displayed for viewing."

3. <u>"meta tag for one or more advertisements to be displayed with the content information" ('929 Patent, Claims 1, 2, 9, and 10)</u>

BlackBerry's Proposed Construction	Defendants' Proposed Construction
"meta tag": "embedded control sequence inserted to indicate when advertising should be inserted" *Remainder of term*: Plain and ordinary meaning	"meta tag for one or more advertisements to be displayed at the same time as the content information" "Meta tag" does not need to be construed and should be given its plain and ordinary meaning. To the extent it is construed as BlackBerry contends, a "meta tag" is "one or more characters containing information about a file, record type, or other structure, where the characters and information cannot be viewed by a user" *Proposed modified construction:* Plain and ordinary meaning

After meeting and conferring, the parties purport to have narrowed their dispute over the construction of this term to a single issue.[7] The parties dispute whether the patent applicant acted as its own lexicographer for the term "meta tag."[8]

Claim 1 of the '929 Patent states,

> 1. A method for pushing information to a mobile device, the method comprising:
>
> detecting a triggering event comprising a time triggering event;
>
> determining, by a server, information relevant to the detected triggering event from among information stored in one of a plurality of memory location channels, wherein the information is stored in the one of the plurality of memory location channels based on a category of the information matching a pre-defined category of the one of the plurality of memory location channels;
>
> when the information relevant to the detected triggering event comprises content information, ***inserting to the content information, by the server, a meta tag for one or more advertisements to be displayed with the content information, wherein the meta tag identifies the one or more advertisements and advertisement display requirements, and wherein the one or more advertisements are selected based on the detected triggering event***; and
>
> transmitting the content information that includes the meta tag to the mobile device.

'929 Patent, Claim 1 (emphasis added). As BlackBerry observes, the claim language itself already provides significant information about the claimed "meta tag," including that it is "insert[ed] to" content information, identifies information about an advertisement (including advertisement display requirements), and is transmitted with the content information to the mobile device. Docket No. 116 at 10. The claim language also already requires that the advertisement (associated with the meta tag) is itself selected based on a detected triggering event comprising a time triggering event.

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[7] BlackBerry states, "BlackBerry understands that both Defendants have abandoned their position that the larger claim phrase requires advertisements to be displayed simultaneously with content information." Docket No. 146 at 6. Defendants state that they "have not abandoned their position that the larger phrase requires advertising and content to be displayed with each other, but believe that the relative placement of the ads and content on the display is within the ordinary meaning." *Id.* at 7-8. Although it is not clear that the parties have actually resolved their dispute on this issue, they apparently are no longer asking the Court to consider it and thus the Court declines to do so.

[8] BlackBerry speculates that Defendants' claim construction proposal for this term is driven by a non-infringement position or an attempt to limit the scope of reasonable damages. Docket No. 116 at 11. Defendants do not state how this dispute impacts dispositive issues in this case.

BlackBerry's proposal for the term "meta tag" comes from the following paragraph of the '929 Patent specification:

> As information is viewed, the Channel Viewer and Selector **45** presents the content information **51**A, **51**B to the user and monitors the information for meta-tags within the content. ***Meta tags are embedded control sequences that the Proxy Content Server 18 has inserted to indicate when advertising should be inserted.*** These tags would normally include an advertising name, a corresponding advertising identifier and perhaps additional information like the number of advertising points for viewing the advertisement.

'929 Patent, 8:29-38 (emphasis added). Besides a reference to meta tags in the patent abstract, this paragraph provides the first mention of meta tags in the '929 Patent specification. However, it is made in the context of describing a specific embodiment of the '929 Patent. Indeed, just three paragraphs earlier, the '929 Patent states, "***[a]n example*** of one set of steps that can be followed by the mobile device user when using the invention is as follows: . . . . " *Id.* at 8:14-15 (emphasis added). At the hearing, BlackBerry acknowledged that its cited portion of the specification appeared as part of an example, but emphasized that it appeared in an example of steps followed by a mobile device user "***when using the invention***." BlackBerry argued that based on the common claim construction notion that using the phrase "the invention" can serve to limit the scope of the claims, the explanation of "meta tag" in the example is definitional.

During the claim construction hearing, BlackBerry for the first time also asserted that the term "meta tag" did not have a plain and ordinary meaning at the time of the invention. BlackBerry's claim construction briefs had not gone quite so far, but BlackBerry's expert, Almeroth, did state in his rebuttal declaration that "the '929 patent uses 'meta tag' in a manner contrary to its typical usage." Almeroth Reb. Decl. ¶ 33. He states, "[t]he term 'meta tag' is normally used to refer to descriptive text within HTML code that is 'hidden to the viewer of the page but readable by search engines.'" *Id.* (citing Craig K. Weaver, Signposts to Oblivion? Meta-Tags Signal the Judiciary to Stop Commercial Internet Regulation and Yield to the Electronic Marketplace, 22 Seattle U. L. Rev. 667, 668 (1998), Docket No. 125-15). BlackBerry also expressed concern at the hearing that Defendants' interpretation of the plain meaning of "meta tag" was based on combining dictionary definitions for the separate words "meta" and "tag," rather than based on a dictionary definition for the term "meta tag" itself.

After considering the evidence presented by both parties, the Court agrees that Defendants have failed to present evidence sufficient to support their position that the term "meta tag" has a

broad and well-understood plain and ordinary meaning that is consistent with how the term is used in the '929 Patent. The weight of the evidence also supports the conclusion that the '929 Patent does not use the term "meta tag" to mean hidden, descriptive text within HTML code.

But interpreting the plain meaning of the term "meta tag" ***in the context of and consistent with the '929 Patent specification*** does not necessarily require that the Court adopt the claim construction "embedded control sequence inserted to indicate when advertising should be inserted" verbatim as a lexicographic definition. The Court is still not persuaded that the patent applicant acted as its own lexicographer with this sentence,[9] but it does not appear to matter, given the plain language of the claims themselves. As BlackBerry's expert recognizes (and as the Court previously explained), the claims already include meaningful requirements that inform the meaning of the term "meta tag." Importantly, for instance, the claims require that the meta tag identify "advertisement display requirements." BlackBerry has not explained what the phrase "embedded control sequence" means that would limit the meaning of the term "meta tag" beyond this claim requirement itself. The Court is particularly concerned that the phrase "embedded control sequence" would not be understandable by a lay juror. Without an accessibly-phrased explanation of the concepts underlying the '929 Patent's statement that "Meta tags are embedded control sequences," and given the claim language itself, the Court finds that claim construction at this stage would be inappropriate.

For the above stated reasons, the term "meta tag for one or more advertisements to be displayed with the content information" is not construed.

In reaching this determination, the Court notes that nothing in this Order should be deemed to suggest that the Court has reached a determination regarding whether a "meta tag," including as

[9] The Court remains persuaded that the patent applicant, in framing its discussion of "meta tags" in the specification as part of an "example of one set of steps," did not exhibit a clear intent to redefine the meaning of the term beyond the plain language of the claims. *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) ("The words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art ***when read in the context of the specification and prosecution history*** . . . . To act as its own lexicographer, a patentee must 'clearly set forth a definition of the disputed claim term' other than its plain and ordinary meaning."). BlackBerry's argument about the phrase "when using the invention" is not persuasive. *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1370 (Fed. Cir. 2003) ("this court recognizes that it must interpret the claims in light of the specification, . . . yet avoid impermissibly importing limitations from the specification. That balance turns on how the specification characterizes the claimed invention. In this respect, this court looks to whether the specification refers to a limitation only as a part of less than all possible embodiments or whether the specification read as a whole suggests that the very character of the invention requires the limitation be a part of every embodiment." (internal citations omitted)). BlackBerry has not argued that the claims of the '929 Patent are limited by all aspects of the "example . . . set of steps" disclosed in the specification.

claimed, including its identification of advertisement and advertisement display requirements, is a routine, conventional, and/or well-understood computer component. Such factual disputes are not appropriately resolved at this stage.

4. ’929 Patent, Claim 2 (Validity Under 35 U.S.C. § 112 ¶ 4)

The parties dispute whether Claim 2 of the ’929 Patent satisfies 35 U.S.C. § 112, ¶ 4. Section 112, ¶ 4 states, “a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.” 35 U.S.C. § 112, ¶ 4.

Claim 2 of the ’929 Patent depends from Claim 1. For convenience, both claims recite:

> 1. A method for pushing information to a mobile device, the method comprising:
>
> detecting a triggering event comprising a time triggering event;
>
> determining, by a server, information relevant to the detected triggering event from among information stored in one of a plurality of memory location channels, wherein the information is stored in the one of the plurality of memory location channels based on a category of the information matching a pre-defined category of the one of the plurality of memory location channels;
>
> ***when the information relevant to the detected triggering event comprises content information***, inserting to the content information, by the server, ***a meta tag for one or more advertisements to be displayed with the content information, wherein the meta tag identifies the one or more advertisements and advertisement display requirements, and wherein the one or more advertisements are selected based on the detected triggering event***; and
>
> transmitting the content information that includes the meta tag to the mobile device.
>
> 2. The method of claim 1, further comprising ***when the information relevant to the detected triggering event comprises advertisement***, transmitting the advertisement to the mobile device instead of the content information that includes the meta tag.

’929 Patent, Claims 1 and 2 (emphasis added).

Defendants argue that Claim 2 of the ’929 Patent fails to satisfy § 112, ¶ 4. Defendants argue that Claim 2 adds separate limitations from Claim 1, rather than “specify[ing] a further limitation of the subject matter claimed” in Claim 1. *See* 35 U.S.C. § 112, ¶ 4. Defendants argue that because Claim 1 makes no mention of information relevant to the detected triggering event

comprising an advertisement, Claim 2 has impermissibly added a new limitation beyond the subject matter claimed in Claim 1. BlackBerry argues that "Claim 2 further narrows claim 1 by reciting an additional action when the information relevant to the time triggering event comprises an advertisement." Docket No. 125 at 5.

After further consideration, the Court agrees with Defendants that Claim 2 of the '929 Patent suffers from a fatal problem. The inconsistencies with the two claims are best observed by considering an example where "information relevant to the detected triggering event" comprises ***both*** content information and advertisement. Claim 1 would require that, because the relevant information includes content information, the content information with a meta tag are transmitted to the mobile device. In that same scenario, however, Claim 2 would require that, because the relevant information includes an advertisement, the advertisement is transmitted to the mobile device instead of the content information. From an infringement perspective, it would therefore be possible to infringe Claim 2 without infringing Claim 1. This outcome, however, is contrary to the requirements of § 112, ¶ 4. *See also Ferring B.V. v. Watson Labs., Inc.-Fla.*, 764 F.3d 1401, 1411 (Fed. Cir. 2014) ("Because we hold that the asserted independent claims of Ferring's patents are not infringed, the asserted dependent claims are likewise not infringed. *Becton Dickinson & Co. v. C.R. Bard, Inc.,* 922 F.2d 792, 798 (Fed. Cir. 1990); *Wahpeton Canvas Co. v. Frontier, Inc.,* 870 F.2d 1546, 1552 n. 9 (Fed. Cir. 1989) ('One who does not infringe an independent claim cannot infringe a claim dependent (and thus containing all the limitations of) that claim.').").)

At the hearing, BlackBerry argued that the Court's example was precluded by the patent specification. According to BlackBerry, the patent specification limits the meaning of "information relevant to the detected triggering event" such that it can never include both content information and advertisement. Instead, BlackBerry argued that content information and advertisement are "mutually exclusive" in this context.

Claim 2 of the '929 Patent, by its very nature, requires that "information relevant to the detected triggering event" include both content information and advertisement. Claim 1 recites "when the information relevant to the detected triggering event comprises content information . . ." Claim 2 recites "the method of Claim 1 ***further*** comprising . . ." For Claim 2 to build on the steps of Claim 1, each requirement of Claim 1 must be present and adopted into Claim 2. *See* 35 U.S.C. § 112, ¶ 4. This analysis is consistent with the case BlackBerry cited in its responsive claim construction brief. *See Michilin Prosperity Co. v. Fellowes Mfg. Co.*, 450 F. Supp. 2d 35, 39

(D.D.C. 2006), *dismissed sub nom. Michilin Prosperity Co. v. Fellows Mfg. Co.*, 230 F. App'x 996 (Fed. Cir. 2007) ("Claim 1 recites two switches, and claim 4 recites an additional "single switch." Claim 4's single switch, then, must be construed as a switch ***in addition to*** the paper touch switch and disc touch switch. Any other result would amount to redrafting Michilin's claims, a power this court lacks." (emphasis added)); *see also* Docket No. 125 at 5. Claim 2, because it includes the requirements of Claim 1, must begin with the requirement that information relevant to the detected triggering event comprise content information. Otherwise, Claim 2 would not fully incorporate all the limitations of Claim 1. Thus, Claim 2 simply adds that, *in addition to* the content information required by Claim 1, information relevant to the detected triggering event must also include advertisement. If one were to assume BlackBerry's position that content information and advertisement are mutually exclusive in the context of the '929 Patent, Claim 2 would still be invalid for violating that position.

At the hearing, BlackBerry argued that the parties' dispute should not be addressed at the claim construction stage and is better saved for summary judgment briefing. This is not an argument BlackBerry made in either of its claim construction briefs. The Court disagrees that BlackBerry has not been afforded a full and fair opportunity to address this dispute. Nor did BlackBerry present arguments at the hearing that would warrant a different outcome than the one reached by the Court in its tentative construction. BlackBerry's request that the Court defer ruling on this issue is rejected.

The Court concludes that Defendants have shown that Claim 2 of the '929 Patent fails to meet the requirements of § 112, ¶ 4 and is thus invalid.

5. "wireless communication device" ('634 Patent, Claims 1 and 7)

BlackBerry's Proposed Construction	Defendants' Proposed Construction
"small-screen wireless mobile device"	No construction required; in the alternative, "device that can communicate without wires"

The parties dispute whether the term "wireless communication device" requires a small-screen mobile device.[10] The parties' positions are based on competing interpretations of both the claims and patent specification.

[10] "BlackBerry believes that this claim construction dispute is relevant to, but not dispositive of, validity issues in this case. Specifically, BlackBerry's proposed construction relates to validity of the asserted claims over prior art

Claim 1 of the '634 Patent describes "[a] method of providing notifications of unread messages on a wireless communication device." '634 Patent, Claim 1. The claims on their face thus do not limit the wireless communication device to a particular size.

The parties dispute the impact of the patent's written description on the meaning of the term. The title of the '634 Patent, for instance, is "Previewing a New Event on a Small Screen Device." In one excerpt of the '634 Patent specification in the "Description of the Related Art" section, the '634 Patent further explains, "[w]ireless devices are usually small relative to less portable computing devices such as laptops and desktop computers. Inherently then, a visual display such as an LCD or other screen component of the wireless mobile device has a small display area." '634 Patent, 1:36-40. This excerpt, however, uses the phrase "[w]ireless devices are ***usually*** small." This phrase does not provide a clear indication that the inventors sought to limit the plain meaning of the phrase "wireless communication device" to ***only*** small devices. Although the title also represents one piece of evidence on the issue, it must be considered in combination with the rest of the patent specification and the language used in it (notably, the title does not use the phrase "wireless communication device").

Specifically, the '634 Patent specification, in describing some exemplary embodiments, states that it is illustrating "pertinent components of a wireless communication device which communicates within a wireless communication network in accordance with the prior art." '634 Patent, 3:9-12; *see also id.* at FIG. 1. Although the '634 Patent proceeds by using the phrase "mobile station" rather than "wireless communication device," the disclosure supports the conclusion that the specification is using the two phrases interchangeably. For instance, the '634 Patent describes "mobile station **102**," as depicted in Figure 1, by stating:

> Mobile station **102** may consist of a single unit, such as a data communication device, a multiple-function communication device with data and voice communication capabilities, a personal digital assistant (PDA) enabled for wireless communication, or a computer incorporating an internal modem. Alternatively, mobile station **102** may be a multiple-module unit comprising a plurality of separate components, ***including but in no way limited to a computer or other device connected to a wireless modem***. In particular, for example, in the mobile station block diagram of FIG. 1, RF transceiver

involving large screen, non-portable electronic devices such as desktop computers." Docket No. 116 at 19. Defendants argue that BlackBerry's approach is also intended to rebut Defendants' argument that the '634 Patent is invalid under § 101. Docket No. 119 at 8-9. Defendants argue that even if BlackBerry's interpretation is adopted, it "will simply add an additional ground for noninfringement. The accused devices do not have a 'small-screen' according to the specification and prosecution history." *Id.* at 8 n.3.

> circuitry **108** and antenna **110** may be implemented ***as a radio modem unit that may be inserted into a port on a laptop computer***. In this case, the laptop computer would include display **112**, keyboard **114**, one or more auxiliary UIs **116**, and controller **106** embodied as the computer's CPU. ***It is also contemplated that a computer or other equipment not normally capable of wireless communication may be adapted to connect to and effectively assume control of RF transceiver circuitry 108 and antenna 110 of a single-unit device such as one of those described above***. Such a mobile station **102** may have a more particular implementation as described later in relation to mobile station **202** of FIG. 2.

'634 Patent, 4:55-5:9 (emphasis added). Based on the disclosure in the specification, including this passage, it appears that the specification intended both the terms "mobile station" and "wireless communication device" to broadly encompass any device that could be "adapted" for wireless communication, even when "not normally capable of wireless communication."

At the hearing, BlackBerry for the first time argued that the interpretation of this term is informed by the provisional application to which the '634 Patent claims priority. Provisional Application No. 60/525,958 states that it relates to "intuitively displaying the arrival of a new message on a small screen device." It then describes exemplary embodiments as showing the "main screen for a phone with Personal Digital Assistant (PDA) functionality." The provisional application does not use the term "wireless communication device," and thus is unhelpful in eliciting the meaning of that term. Although the Court acknowledges that the application that eventually issued as the '634 Patent maintained some of the language of the provisional application insofar as the purported goals of the invention, the '634 Patent also includes sweeping language about what constitutes a "mobile station, *i.e.* "wireless communication device," in the context of the patented invention. Further, there is no indication that the terms "computer" or "laptop computer" as those terms are used and described in the '634 Patent (as potential "mobile stations") are intended to be limited solely to small screen devices. In this case, there is insufficient evidence based on the patent written disclosure to support the conclusion that the term "wireless communication device" is limited to small screen devices.

As stated, both parties also rely on the prosecution history to support their competing positions for the term "wireless communication device." In January 28, 2008, the applicant amended its proposed claims to recite "a wireless communication device having a small display." Response to Office Action, App. No. 10/784,781, Jan. 28, 2008, Docket No. 120-10 at ECF3 (amending Claims 21-41). By September 8, 2011, the applicant had canceled its previously-

proposed claims referencing a small display, and was presenting new claims to, for example, "[a] method of providing notifications of unread messages on a wireless communication device." Response to Office Action, App. No. 10/784,781, Sept. 8, 2011, Docket No. 116-2 at ECF3. In its September 2011 remarks, the applicant began by stating, "[t]he claims, as presented herein, may be broader in some respects than claims previously presented. Applicant intends that the claims now pending be interpreted under the ordinary interpretation understood in the art." *Id.* at ECF13. But the applicant later stated, to distinguish a prior art reference to Canfield, that:

> Canfield does not teach or suggest methods, devices, or other solutions suitable for implementation on wireless communications devices, such as mobile PDAs. Canfield is concerned solely with desktop-type large screen devices having access to virtually unlimited screen space and processing power. As such, Canfield teaches away from Applicant's invention.

Id. at ECF15. The applicant did not, however, rely on these statements as the only basis to distinguish Canfield. *See id.*

The Court finds the prosecution history itself, particularly when considered in combination with the rest of the intrinsic record, ambiguous as to the issue of the appropriate scope of the claim term "wireless communication device." Defendants' recapture argument is not particularly persuasive because the applicant canceled its proposed claims referencing a small display. But neither is BlackBerry's apparent prosecution history disclaimer argument persuasive. The specification describes a "wireless communication device" as a "mobile station" that could include a wide range of devices, including a computer with an internal modem. The applicant stated in its prosecution history remarks that it intended its claim terms to have their "ordinary interpretation." The applicant's somewhat contrary statements distinguishing Canfield do not clearly and unambiguously state that the claimed wireless communications device in the '634 Patent is intended to solely be limited to devices of a particular type or size. For instance, the applicant references "mobile PDAs" as an example of a "wireless communications device," but does not unequivocally state that "wireless communications devices" are limited to devices the size of "mobile PDAs" or smaller. The applicant then states that "Canfield is ***concerned solely*** with desktop-type large screen devices." Particularly when weighed against the specification and, to a much lesser extent, Defendants' competing arguments about the patent prosecution history, BlackBerry's arguments are ultimately unpersuasive.

The contrary opinions of BlackBerry's expert, LaViola, are rejected. LaViola merely embarks on an analysis of the patent intrinsic record to reach a conclusion about the scope of the phrase "wireless communication device." *See, e.g.*, Declaration of Joseph LaViola ("LaViola Decl."), Docket No. 110-2 at ECF132-135, ¶¶ 43-52. It is the Court's job, not the expert's, to perform that task. *Teva Pharms. USA, Inc v. Sandoz, Inc.*, 789 F.3d 1335, 1342 (Fed. Cir. 2015) (a party "cannot transform legal analysis about the meaning or significance of the intrinsic evidence into a factual question simply by having an expert testify on it."); *id.* at 1339 (citing *Teva*, 135 S. Ct. at 841) (while "[e]xperts may explain terms of art and the state of the art at any given time, . . . they cannot be used to prove the legal construction of a writing.").

The Court finds that no construction of the term "wireless communication device" is necessary.

6. "messaging correspondent" ('634 Patent, Claims 1 and 7)

BlackBerry's Proposed Construction	Defendants' Proposed Construction
"distinct sender of an electronic message to the user of the wireless communication device"	"a person from whom messages may be received" *Proposed modified construction:* "distinct sender associated with an electronic messaging account"

After meeting and conferring, the parties narrowed their dispute over the construction of the term "messaging correspondent." In their March 28, 2019 Joint Report, the parties also attempted to explain their modified positions. Docket No. 146 at 2.

BlackBerry argues that Defendants' proposal would impermissibly narrow the scope of the claims by requiring "one-to-one correspondence between senders and accounts." Docket No. 146 at 2. BlackBerry cites portions of the '634 Patent specification for the proposition that "the specification teaches that a single user may have more than one account." *Id.* (citing '634 Patent, 1:53-60). BlackBerry also suggests that in certain circumstances a system might allow an individual to "use a single account to message in either an individual capacity or on behalf of an association or group. In this situation, the software might treat the messages as having been sent from two different 'messaging correspondents.'" *Id.*

Defendants do not dispute the general notion that a single user may have more than one account. Indeed, that notion appears to inform the basis of Defendants' proposed modified construction. Instead, the issue is whether there can be more than one distinct "messaging

correspondent," even for messages coming from a single messaging "account." Defendants cite portions of the specification for the proposition that the '634 Patent "emphasizes that a 'distinct sender' of electronic messages is associated with ***an*** account." *Id.* (emphasis in original) (citing '634 Patent, 1:58-60, 8:11-13, 8:17-19, 8:51-55, 9:21-23). Defendants argue that under BlackBerry's proposal, a person who sends an individual message but also sends a message as part of a group conversation would be improperly characterized as two distinct correspondents/senders. *Id.*

Claim 1 of the '634 Patent states, *inter alia*,

> receiving a plurality of electronic messages on the wireless communication device, the plurality of electronic messages including messages from a plurality of different messaging correspondents; and
>
> in response to receiving at least one of the plurality of electronic messages, visually modifying at least one displayed icon relating to electronic messaging to include a numeric character representing a count of the plurality of different messaging correspondents for which one or more of the electronic messages have been received and remain unread.

'634 Patent, Claim 1. Nothing in the plain language of the claims limits the term "messaging correspondent" by tying it to a particular electronic messaging account.

Defendants' cited portions of the specification also fail to explicitly limit the meaning of the claims. The specification states, for instance, "[p]ersons of ordinary skill in the art will appreciate that a visual modification **400** different from a bubble may be used and the count may represent other information, such as the number of correspondents or "buddies" from which one or more messages have been received but remain unread." '634 Patent, 8:8:13; *see also id.* at 9:21-23 ("modifications **804** comprises an event count and state preview indicating IM correspondent buddy 'Red98' has signed on."). The specification goes on to state:

> State information may include whether the user is currently signed in (and their user name), the state of the conversation, and the current state of the user (away vs. available). In an e-mail application, such as associated with one of icons **310**, **312**, a count may be of unread e-mail messages or distinct senders of unread e-mail.

Id. at 8:17-24. Although Defendants would characterize these portions of the specification as tying a distinct sender to a messaging account, the Court finds these excerpts of the specification

ambiguous at best on the issue. Moreover, these excerpts appear in the context of the particular exemplary embodiments disclosed in the patent specification.

The extrinsic evidence provided by the parties during claim construction briefing is not helpful to resolving the particular dispute they raise now. Instead, it generally relates to their previous dispute about whether a sender must be "a person."

Based on the current record, there is insufficient basis to support limiting the meaning of "messaging correspondent" to Defendants' proposal. The term "messaging correspondent" is construed as "distinct sender of an electronic message."

7. "a numeric character representing a count of the plurality of different messaging correspondents for which one or more of the electronic messages have been received and remain unread" ('634 Patent, Claims 1 and 7)

BlackBerry's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Facebook: "a number that enables the user to track the number of correspondents from whom the user has received unread messages" Snap: "the number of different messaging correspondents for which one or more of the electronic messages have been received and remain unread"

BlackBerry, Facebook Defendants, and Snap each provide a different proposal for the claim construction of the term "a numeric character representing a count of the plurality of different messaging correspondents for which one or more of the electronic messages have been received and remain unread." Defendants argue that during patent prosecution, the applicant "devoted ten pages . . . distinguishing the claimed numeric character from the prior art numeric count," and assert that their proposed constructions track this prosecution history.[11] Docket No. 123 at 8. BlackBerry states that it "does not dispute that the patentee distinguished its claimed count from simply counting unread messages during prosecution." Docket No. 125 at 8. BlackBerry argues that Defendants' proposals would further narrow the meaning of the claim phrase and that Facebook Defendants' proposal would likely confuse the jury. *Id.* at 8-9.

Facebook Defendants' and Snap's proposals would replace the phrase "a numeric character

[11] Defendants primarily argue that they are seeking a construction of this term simply to clarify it for the Court and the jury. Docket No. 119 at 5. At the hearing, the parties stated that this dispute, in combination with their dispute regarding the term "messaging correspondents," is relevant to some of Defendants' noninfringement positions.

representing a count" with "a number that enables the user to track" (Facebook Defendants) or simply "the number" (Snap). For the phrase "the plurality of different messaging correspondents for which one or more of the electronic messages have been received and remain unread," Facebook Defendants would swap in "the number of correspondents from whom the user has received unread messages" and Snap would simply omit the phrase "plurality of" and leave "different messaging correspondents for which one or more of the electronic messages have been received and remain unread."

Claim 1 states, *inter alia*:

> in response to receiving at least one of the plurality of electronic messages, visually modifying at least one displayed icon relating to electronic messaging to include a numeric character representing a count of the plurality of different messaging correspondents for which one or more of the electronic messages have been received and remain unread.

'634 Patent, Claim 1. The claim language itself thus reflects that the "numeric character representing a count" provides a visual modification to a displayed icon.

During prosecution history, the patent applicant distinguished certain prior art by stating:

> counting either a total number of unread messages or a number of conversations does not, for example, enable a user to track the number of correspondents from whom the user has received unread messages. By tracking a number of correspondents, rather than a number of messages or conversations [later described as a "session"], a device presents different information to a user. For example, a single correspondent might either (a) send a plurality of messages to the user, or (b) start and stop a number of conversations, without affecting the number of distinct correspondents from whom the user has received unread messages.

After-Final Amendment and Summary of Interview, App. No. 10/784,781, Mar. 12, 2012, Docket No. 120-7 at ECF17. Defendants, particularly Snap, argue that their proposed constructions are consistent with and indeed required by this language in the patent prosecution. Defendants, however, have not shown how this language is especially different from the plain language of the claim itself or represents a clear and unequivocal disavowal of the claim language. For instance, after referring to the "user . . . track[ing]" correspondents, the applicant then referred to "a device" "present[ing] different information to the user" "[b]y tracking a number of correspondents." *See id.* In other words, Snap's claim construction proposal requiring that a "user . . . track" correspondents is not supported by a clear and unequivocal disclaimer during the patent prosecution history.

This portion of the prosecution history also focuses on the underlying concept of counting correspondents, rather than the graphical representation of that concept. For this reason, Defendants' arguments that "a numeric character representing a count" must be simplified to "a number" are also unpersuasive. Meanwhile, in other contexts, the specification of the '634 Patent specifically acknowledges that size limitations can impact what is displayed on a graphical user interface. '634 Patent, 8:59-62 ("[d]ue to the inherent size of main screen **300** and other considerations apparent to those skilled in the art, there is an upper limit to the number of unread messages that may be previewed in such a manner."). This is consistent with BlackBerry's explanation that due to screen size constraints, the "numeric character representing a count" may max out at 99 even though the actual number of messaging correspondents for which unread messages have been received is 100 or more.

After considering the parties' positions, the Court would reject Defendants' prosecution history disclaimer arguments and construe the term for readability only as "a numeric character representing the number of different messaging correspondents for one or more of the plurality of electronic messages that have been received and remain unread."

8. "predetermined duration of time" ('713 Patent, Claims 2, 4, 6, and 8)

BlackBerry's Proposed Construction	Defendants' Proposed Construction
"duration of time determined in advance" *Proposed modified construction:* "a duration of time determined based on computer programming that is implemented prior to the first messaging communication"	"a length of time set in advance before the first messaging communication is sent"

The Court previously concluded that Claims 1, 5, and 9 of the '713 Patent failed to recite patent-eligible subject matter under 35 U.S.C. § 101. Docket No. 68 at 18. The Court found, however, that Defendants had failed to prove patent ineligibility for the remaining claims of the '713 Patent. *Id.* Defendants have already indicated that they intend to renew their § 101 challenge to the dependent claims of the '713 Patent, particularly given BlackBerry's agreement on the meaning of the term "resumption message." Despite this, the parties have still sought construction the term "predetermined duration of time" in the remaining asserted claims of the '713 Patent. *See* Docket No. 110 at 4 (both BlackBerry and Defendants agreeing "predetermined duration of time" is one of 10 most significant terms for construction).

At the technology tutorial, it became apparent that the parties' dispute regarding the term "predetermined duration of time" is driven by a dispute over at least one of BlackBerry's infringement positions. The accused products include computer programming such that they will display a message time stamp if the clock has changed from one minute to the next (or one day to the next, in the case of Facebook Defendants) between the time messages are sent. BlackBerry's proposed construction for the phrase "predetermined duration of time," particularly as modified, would seek to cover the clock change based on the notion that the determination to enter a time stamp when the clock changes was pre-programmed. Defendants argue that an actual length of time must be set in advance before the previous-to-last messaging communication to meet the claim language.

Despite the Court's other comments regarding the scope of the term at the technology tutorial, the Court is hesitant to issue an advisory opinion on the meaning of the phrase "predetermined duration of time" on the current record at this time. The Court takes this position particularly because it is not apparent to the Court how either parties' construction would make a difference insofar as the patent eligibility of the remaining asserted dependent claims of the '713 Patent. Indeed, BlackBerry's proposed construction further confirms the Court's previous determination that there are not meaningful limits on the meaning of the phrase "predetermined duration of time" that would support the patent eligibility of Claims 1, 5, and 9. Docket No. 68 at 16 (finding that BlackBerry's interpretation of "predetermined duration of time" as a "break" in messaging "fails to address embodiments where a 'break' between communications is only a miniscule amount of time."); *see also id.* at 16 ("The language of Claim 1 is broad enough that it would cover embodiments that may not actually improve when timestamp information is displayed.").

At the hearing, BlackBerry argued that for reasons of "parity," it should be allowed to re-argue § 101 validity for the independent claims of the '713 Patent that the Court has already found invalid. The Court disagrees. The parties' ongoing invalidity disputes regarding certain dependent claims do not mean that BlackBerry gets a do-over on issues that have already been finally decided with respect to independent claims invalidated on a Rule 12(b)(6) motion.

The Court declines to construe the term "predetermined duration of time" at this time. To the extent Defendants do not soon renew their § 101 motion or the dispute over the meaning of this claim term becomes urgently relevant to other issues in this case, the parties are responsible

for notifying the Court of such and their respective/collective positions as to when and if the Court should construe this term.

9. "notification" ('120 Patent, Claims 9, 13, 15, 20, 21, and 24)

BlackBerry's Proposed Construction	Facebook Defendants' Proposed Construction
Plain and ordinary meaning; alternatively, "user alert"	"an indication providing notice that an event has occurred" *Proposed modified construction:* "an indication providing notice that an electronic message has been received. The diminished appearance of a silenced new incoming electronic message in an inbox is not a notification"

After meeting and conferring, Facebook Defendants proposed a new construction for the claim term "notification."[12] The parties' dispute remains substantially the same, in that BlackBerry proposes that a notification is a "user alert" and Facebook Defendants suggest that a notification is something broader than just user alerts. Facebook Defendants "agree[ ] that the mere appearance of a message [in an email inbox] may not be a 'notification.'" Docket No. 121 at 1. Facebook Defendants originally suggested by their proposal, however, that almost any difference in visual appearance could satisfy this claim language, stating that even certain un-bolded messages in an email inbox could still be considered "notifications." *Id.* ("an un-bolded message would be 'displayed in the inbox in a different manner than any message thread not flagged as silenced.'"). Facebook Defendants' new claim construction proposal clarifies an argument that "the diminished appearance of a silenced new incoming electronic message in an inbox is not a notification," consistent with the plain language of the claims. However, Facebook Defendants appear to still suggest by their proposal that the term "notification" should be construed to encompass almost any other difference in the visual appearance of a message.

Claim 24 of the '120 Patent recites:

> 24. A non-transitory computer readable medium comprising processing instructions which when executed by a data processor cause the data

[12] The parties argue that this dispute relates to BlackBerry's infringement position. Docket No. 117 at 8 (Facebook Defendants stating BlackBerry's proposal is "presumably in an effort to narrow the terms in the hopes of improving its infringement positions. The claims require 'silencing ***any further*** notifications,' and thus, a narrow construction of 'notification' would in turn narrow what notifications must be silenced. Defendants do not silence any further notifications, even if construed as 'user alert.'"); *see also* Docket No. 125 (BlackBerry's Responsive Claim Construction Brief, which does not respond to Defendants' argument about the impact of this term on BlackBerry's infringement position).

> processor to perform a method for silencing notifications for incoming electronic messages to a communication system, the method comprising:
>
> receiving one or more selected message threads for silencing;
>
> in response to receiving the one or more selected message threads, activating one or more flags, each flag in association with a selected message thread of the one or more selected message threads, wherein the one or more flags indicate that the associated one or more selected message threads have been silenced;
>
> receiving a new incoming electronic message;
>
> identifying the new incoming message as associated with the selected one or more message threads;
>
> determining that a message thread associated with the new incoming message has been flagged as silenced using the one or more flags;
>
> overriding ***at least one currently-enabled notification setting to prevent a notification pertaining to receipt of the new incoming message from being activated***; and
>
> displaying the new incoming electronic message in an inbox together with any message thread not flagged as silenced, ***while silencing any further notifications pertaining to receipt of the new incoming electronic message***;
>
> wherein the new incoming message thread flagged as silenced is displayed in the inbox in a different manner than any message thread not flagged as silenced.

'120 Patent, Claim 24 (emphasis added). Claims 9, 13, 15, 20, and 21 incorporate or separately recite similar language about overriding "at least one currently-enabled notification setting to prevent a notification" and "silencing any further notifications pertaining to receipt of the new incoming electronic message."

The parties offer up somewhat amorphous and ambiguous constructions for what the Court views as a commonly-used term. In one portion of its opening claim construction brief, BlackBerry states that "notification" in the context of the '120 Patent "refers to some form of visual, auditory, or physical cue to draw a user's attention to an occurrence that the user would not otherwise notice and at the time of the occurrence." Docket No. 116 at 27. The Court agrees with BlackBerry and its expert that this explanation is consistent with the plain meaning of the term "notification" as used in the '120 Patent. *See* '120 Patent, 1:30-33, 9:26-31, 13:19-22; *see also* Declaration of Craig Rosenberg ("Rosenberg Decl."), Docket No. 110-2 at ECF264-68, ¶¶ 75-85.

The patent explains, for instance, that "[n]otifications could include, for example, auditory user alerts such as ring tones, visual alerts such as flashing lights or pop-ups and physical alerts such as vibrations." '120 Patent, 1:30-33. Elsewhere, the '120 Patent states:

> [o]ther notification settings may indicate that a user only wishes to receive auditory notifications for specific types of communications, such as telephony communications. In other circumstances, a user may enable a notification setting which may prevent any auditory notifications from being emitted for any type of communication while the setting is enabled. Those of skill in the art will recognize that there may be many different types of notification settings, including visual alarms (including, for example, pop-up messages, blinking lights of one or more colors, frequencies, etc.) and/or physical alarms such as vibrators or shakers.

Id. at 9:20-31. These portions of the specification support the conclusion that a "notification" is intended to be a cue to a new message at the time the message is received.

At the hearing, Facebook Defendants agreed that a "notification" is limited in time to a cue that occurs when a message is received. This agreement aside, Facebook Defendants otherwise seek an interpretation of "notification" that is broader than the explanation *supra* from BlackBerry. At the hearing, Facebook Defendants agreed that their proposed construction of this term would cover a change to a numeric character on a phone application icon, without any other cue to draw attention to it. They also agreed that a change in the listed number of unread messages in an email inbox, without any other cue to draw attention to it, would be considered a notification under their interpretation. There is inadequate support for such a broad interpretation of the term "notification," particularly when considering the patent intrinsic record.

After considering the parties' competing positions, the Court construes the term "notification" consistent with its plain and ordinary meaning, which in the context of the '120 Patent is "some form of visual, auditory, or physical cue to draw attention to an incoming message that would not otherwise have been noticed, at the time of the incoming message."[13]

10. "reducing mod q" ('961 Patent, Claim 23)

BlackBerry's Proposed Construction	Facebook Defendants' Proposed Construction
Plain and ordinary meaning	"computing the remainder of dividing a value by q"

Claim 23 of the '961 Patent states:

> 23. A cryptographic unit configured for generating a key k for use in a cryptographic function performed over a group of order q, said cryptographic

[13] At the hearing, Facebook Defendants argued that the examples of a changing numeric icon or a changing number of unread messages in an email inbox would meet this construction of the term "notification." That is not the intent of the Court's construction, nor does it sync with the arguments the parties made in their claim construction briefing.

> unit having access to computer readable instructions and comprises:
> an arithmetic processor for:
> generating a seed value SV from a random number generator;
> performing a hash function H( ) on said seed value SV to provide an output H(SV);
> determining whether said output H(SV) is less than said order q prior to ***reducing mod q***;
> accepting said output H(SV) for use as said key k if the value of said output H(SV) is less than said order q;
> rejecting said output H(SV) as said key if said value is not less than said order q;
> if said output H(SV) is rejected, repeating said method; and
> if said output H(SV) is accepted, providing said key k for use in performing said cryptographic function, wherein said key k is equal to said output H(SV).

'961 Patent, Claim 23 (emphasis added). After further meeting and conferring, the parties "agree that the claims of the '961 Patent permit, but do not actually require, the performance of a 'reducing mod q' operation." Docket No. 146 at 5-6. The parties' remaining dispute relates to whether the phrase "reducing mod q" requires the performance of operation(s) that always output a result with a reduced value.[14]

The parties agree that the phrase "mod q" alone refers to a modulo / modulus operation. As counsel for Facebook Defendants explained at the technology tutorial, a modulo operation is essentially a division operation where the output is the remainder. Tr. 31:18-20. For example, calculating 9 mod 4 would output 1 (because 9 divided by 4 equals 2, remainder 1). A modulo operation thus allows for parsing down the value of large numbers into a manageable numeric range – performing a "mod 4" operation will always result in an output between 0 and 3, even though it can be performed with any number as the dividend. Thus, for the most part, a mod q operation will result in an output that is reduced compared to the original input dividend. In certain circumstances, however, the input and output will be the same. For instance, 3 mod 4 will output 3 (because 3 divided by 4 equals 0, remainder 3).

The parties agree on this. Their primary dispute is over the meaning of the phrase "***reducing*** mod q." The Court understands the parties' positions as follows:

[14] It is not clear from the parties' arguments what dispositive issues in the case are impacted by the parties' dispute, but it appears likely that they relate to Defendants' noninfringement position(s).

Party	Graphical Representation of Position	Explanation
BlackBerry	{reducing _ mod q}	Perform a mod q operation that results in an output of a reduced numerical value. In other words, "reducing mod q" does not include mod q operations where H(SV) is less than q. *See also* Declaration of Aviel Rubin ("Rubin Decl."), Docket No. 110-2 at ECF295 ¶ 55 ("those of ordinary skill would have understood that 'reducing mod q' has a plain and ordinary meaning that refers to lowering a numerical value based on a modulo q").
Facebook Defendants	{reducing mod q}	Perform a mod q operation. The term "reducing" is simply a descriptor for the operation itself. Thus, "reducing mod q" covers mod q operations for all values of H(SV), even when H(SV) is less than q. The resulting output of a "reducing mod q" operation may either be smaller than q or have the same value q.

The plain language of the claim states, "determining whether said output H(SV) is less than said order q ***prior to reducing mod q***[.]" BlackBerry does not dispute that the claim thus requires an initial analysis of the output H(SV) to determine whether it is more or less than q. In other words, this clause requires determining the value of an output "prior to reducing mod q." If BlackBerry's position regarding the meaning of "reducing mod q" were accepted, this claim limitation would essentially mean: "determining whether the output is less than q ***prior to*** reducing mod q if the output is greater than or equal to q."[15] This slightly circular interpretation is not particularly elegant. Under BlackBerry's proposal, how would anyone be sure they are "reducing mod q" without first making a determination about the H(SV) value?

[15] This meaning is not as readily apparent when the actual language proposed by BlackBerry's expert is used. In that case, the phrase would read more like "determining whether the value of an output is less than q prior to ***lowering a numerical value based on a modulo q***." But this carefully-worded proposed construction somewhat conceals the fact that the claimed "reducing modulo q," under BlackBerry's construction, excludes modulo q operations where H(SV) has a certain value.

During patent prosecution, the patent applicant explained that the "determining" step separated the claim from the prior art:

> [T]he step of determining whether or not the output is less than the order q ***is done prior to reducing mod q***. ***The Schneier reference does not teach accepting or rejecting a key by checking that it is less than q before reducing mod q*** . . . the Schneier reference, which refers to DSA and the DSS, ***requires the reduction of the integer mod q which can expect that more values will lie in the first interval than the second, hence the bias***. It has been recognized by Applicant that by first checking that the output to be used as the key is less than q and then accepting or rejecting based on this determination can avoid the bias altogether . . . . It was agreed . . . that neither the Vanstone reference, nor the Schneier paper recognize the bias let alone tech the making such a determination prior to reducing mod q.

Response to Office Action, App. No. 10/025,924, Oct. 30, 2007, at 7 (emphasis added).[16] In this excerpt, the patent applicant refers to the Schneier prior art reference as not first checking that a key is less than q, but rather simply requiring "reduction of the integer mod q." The patent applicant further stated that Schneier's "reduction of the integer mod q" would lead to bias. This portion of the patent prosecution history thus supports the conclusion that the applicant used the phrase "reducing mod q" or "reduction of the integer mod q" simply to refer to a modulo q operation, without reference to the input, and thus the output, of the operation (and with the understanding that performing "reducing mod q" operations could introduce the bias the patent applicant was seeking to eliminate with its claimed method).

The parties have cited various additional portions of the intrinsic and extrinsic record to support. One hotly-contested portion of the specification, although arguably ambiguous when considered alone, is consistent with Facebook Defendants' interpretation of "reducing mod q" when considered in context and alongside the prosecution history. '961 Patent, 2:32-55 ("the implementation of the DSA may be done in such a way as to inadvertently introduce a bias in to the selection of k. This small bias may be exploited to extract a value of the private key d and thereafter render the security of the system vulnerable. One such implementation is the DSS . . . . A seed value, SV, is generated from a random number generator which is then hashed by a SHA−1 hash function to yield a bit string of predetermined length, typically 160 bits. The bit string represents an ***integer between 0 and $2^{160}-1$. However this integer could be greater than the prime***

[16] BlackBerry cited this portion of the prosecution history at the claim construction hearing. It was also previously submitted to the Court with copies of the annotated file histories as required by Judge Guilford's Patent Local Rules.

q and so the DSS requires the reduction of the integer mod q, i.e. k=SHA−1(seed) mod q. Accordingly the algorithm for selecting k may be expressed as: if SHA−1(seed)≧*q* then *k*←SHA−1(seed)−*q* [/]else *k*←SHA−1(seed). With this algorithm it is to be expected that more values will lie in the first interval than the second and therefore there is a potential bias in the selection of k.").

In its tentative, the Court also found a treatise considered during the prosecution history ("Schneier," *supra*) and submitted by Facebook Defendants' rebuttal expert,[17] titled "Applied Cryptography: Protocols, Algorithms, and Source Code in C" by Bruce Schneier (2d ed. 1996), supported Facebook Defendants' position. *See* Rebuttal Declaration of Jonathan Katz ("Katz Reb. Decl."), Docket No. 122-2 ¶ 21; *see also id.* at Ex. B at ECF45. The treatise defines "*a*" as "*a* = *b* + *kn* for some integer *k*." *Id.* The treatise states, "[i]f *a* is non-negative and *b* is between 0 and *n*, you can think of *b* as the remainder of *a* when divided by *n*. Sometimes, *b* is called the residue of *a*." *Id.* The treatise goes on to state, "[t]he operation *a* mod *n* denotes the residue of *a*, such that the residue is some integer from 0 to n – 1. This operation is **modular reduction**." *Id.* (emphasis in original). Although BlackBerry suggests the language of the treatise is somewhat ambiguous, assuming that *k* may equal 0, this evidence would still support the conclusion, consistent with the claim language itself and the prosecution history, that "modular reduction" simply refers to a "mod q" operation. Overall, the Court finds this piece of extrinsic evidence does not heavily weigh in the analysis, given the information provided by the intrinsic record itself.

After weighing and considering the extrinsic evidence, including the evidence described herein, the Court finds that it more strongly supports the conclusion consistent with the patent intrinsic record[18] that "reducing mod q" refers to the modulo q operation itself, not a modulo q operation for only particular inputs.

The term "reducing mod q" is construed as "computing the remainder of dividing a value by q."

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[17] BlackBerry has moved to strike Katz's rebuttal declaration as untimely disclosed. Docket No. 134. After considering the parties' positions, and particularly after considering the technical complexity of this claim term, the Court would in its discretion **DENY** BlackBerry's motion.

[18] BlackBerry and its expert also raise arguments about statements in the patent prosecution history. Having considered the cited portions of the patent prosecution history, the Court finds they do not shed light on this dispute or unequivocally support BlackBerry's proposed interpretation for this claim term.

11. "determin[e] / [ing] at least one action spot within a predetermined distance from the current location of the mobile device" ('327 Patent, Claims 1 and 13; '084 Patent, Claims 1 and 9)

BlackBerry's Proposed Construction	Snap's Proposed Construction
Plain and ordinary meaning	"determine / determining each action spot within a specific distance from the current location of the [first] mobile device, the specific distance being set prior to this determining step"

The parties have two, maybe three, disputes regarding the meaning of the claim term "determin[e] / [ing] at least one action spot within a predetermined distance from the current location of the mobile device." First, the parties dispute whether the phrase requires identification and/or determination of each, *i.e.* all, action spots within a predetermined distance. Second, the parties dispute whether "predetermined distance" requires a "specific distance." Third, the parties may or may not dispute when the claimed "predetermined distance" must be set.

Claim 1 of the '327 Patent requires a processor configured to "determine at least one action spot within a predetermined distance from the current location of the mobile device, the at least one action spot corresponding to a location where at least one other mobile device has engaged in documenting action within a predetermined period of time." The other relevant asserted claims have similar limitations. '327 Patent, Claim 13 ("determining at least one action spot within a predetermined distance from the current location of the mobile device, the at least one action spot corresponding to a location where at least one other mobile device has engaged in documenting action within a predetermined period of time"); '084 Patent, Claim 1 (substantially similar to Claim 1 of the '327 Patent), Claim 9 (same as Claim 1 of the '084 Patent).

Taking each of the parties' three disputes in turn, the plain language of the claims does not support Snap's argument that *all* action spots within a predetermined distance must be determined. The claims simply require "determining ***at least one***" action spot. As Snap recognizes, the Federal Circuit has held in another context that "[a]t least one means there could be only one or more than one." *Z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1349 (Fed. Cir. 2007). The plain language of the claim itself supports a similar outcome in this case. Despite this, Snap argues that "the patents only describe how to determine *all* action spots within the predetermined distance." *Snap Case*, Docket No. 97. Snap provides no evidentiary support in its brief for this assertion about the patent disclosure. Snap then relies on this unsupported statement to argue that adopting BlackBerry's proposed construction for the phrase "at least one action spot" would render the

relevant claims invalid under 35 U.S.C. § 112 ¶ 1 for lack of written description. But only in certain limited circumstances does a claim construction analysis consider whether a particular construction would ultimately result in a determination that a claim is invalid. Specifically, "unless the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous, the axiom regarding the construction to preserve the validity of the claim does not apply." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 911 (Fed. Cir. 2004). Indeed, the Federal Circuit "certainly [has] not endorsed a regime in which validity analysis is a regular component of claim construction." *Phillips*, 415 F.3d at 1327. Snap has not provided any other legal or evidentiary basis to support its argument to limit the meaning of this claim phrase, and Snap's proposal to do so is rejected.

Regarding whether a "predetermined distance" requires a specific distance, Snap identifies a portion of the patent specification listing off various distances that would be considered predetermined distances: "[t]he predetermined distance can be within five blocks, ten blocks, ten yards, one hundred yard, one hundred feet, thirty feet, ten meters, fifteen meters, five miles, ten miles, twelve miles, twenty miles, or any other distance from the current location **302** of the mobile device **100**." '327 Patent, 8:23-28; *see Snap Case*, Docket No. 97 at 2. Snap's argument that this solitary portion of the specification should be relied on to limit the plain meaning of the claim term "predetermined distance" to require a "specific distance" is not persuasive. Indeed, Snap's cited passage uses the permissive phrase "[t]he predetermined distance ***can be*** . . ." *See* '327 Patent, 8:23-28. "There are no magic words that must be used, but to deviate from the plain and ordinary meaning of a claim term to one of skill in the art, the patentee must, with some language, indicate a clear intent to do so in the patent. And there is no such language here." *See Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1373 (Fed. Cir. 2014). At the claim construction hearing, BlackBerry also noted that Claim 5 of the '084 Patent specifically requires "wherein the determining of the at least one action spot is based upon a defined distance from the mobile device." This further supports the conclusion that limiting predetermined distance to a specific distance would unduly limit the scope of the claims.[19] Snap's second argument for limiting the meaning of this claim term is rejected.

[19] At the hearing, Snap for the first time argued that it believes failing to construe the phrase "predetermined distance" as anything other than "specific distance" would lead to § 112 invalidity problems for the claims, including problems relating to enablement, written description, and indefiniteness. Those disputes were not previously raised with the Court and are not properly resolved on the current record.

It is not clear whether BlackBerry disputes Snap's assertion that the claimed predetermined distance must be set before action spots are determined. Although Snap raised this dispute as a concern in its opening claim construction brief (*Snap Case*, Docket No. 97 at 2), BlackBerry's responsive brief does not reference it (Docket No. 125 at 13 (stating "[t]here are two disputes for this term")). The claim phrase is "determin[e] / [ing] at least one action spot within a predetermined distance from the current location of the mobile device." The Court agrees that the plain language of the claim requires that the predetermined distance be set before the at least one action spot is determined.

After considering the disputes presented by the parties, the Court finds that no construction is necessary for the term "predetermined distance." Particularly for this term, the Court notes that the parties' positions regarding dispositive issues in the case such as infringement and/or invalidity have not been well-explained, and the Court reserves the right to revisit the appropriate construction for this term once the parties' competing positions on dispositive issues become clearer.

12. "activity level" ('327 Patent, Claims 1, 2, 13, and 15; '084 Patent, Claim 1)

BlackBerry's Proposed Construction	Snap's Proposed Construction
"measure of the actions taken by one or more mobile devices" *Proposed modified construction:* "level of the actions taken by one or more mobile devices"	"the number of actions where the [second] mobile device is being used to observe and make note of a location or event currently occurring at the location of the [second] mobile device" *Proposed modified construction:* "[a] number of documenting actions by one or more [other / second] mobile devices"

After further meeting and conferring, the parties have narrowed their dispute regarding the meaning of the term "activity level" to one, maybe two, issues.[20] The parties' primary dispute relates to whether an "activity level" requires a tabulation of the number of (documenting) actions taken by other mobile devices or should more generally be understood as a "level."

Claim 1 of the '327 Patent requires a processor to determine there is "at least one action spot" within a predetermined distance from a mobile device; "signify the at least one action spot

[20] BlackBerry speculates that Snap's argument regarding this claim term is based on a noninfringement position. Docket No. 116 at 36.

on the graphical user interface; and provide an indication of activity level at the at least one action spot." '327 Patent, Claim 1. Claim 2 of the '327 Patent states, "[t]he mobile device as recited in claim 1, wherein the indication of activity level includes coloring a graphical item associated with the at least one action spot in accordance with a range of activity occurring at the at least one action spot." *Id.* at Claim 2. Similar to Claim 2, independent Claim 13 focuses on the graphical representation of the activity level, requiring "marking the graphical item [signifying an action spot] according to an activity level." *Id.* at Claim 13.

Claim 1 of the '084 Patent elaborates further by stating that a server must "transmit to the first mobile device, an indication of an activity level at the at least one action spot, wherein the activity level is based upon at least one of a number of images captured, a number of videos captured, and a number of messages transmitted." '084 Patent, Claim 1.

Certainly, each of the relevant claims is phrased to require that, even if one were to assume that the activity level itself must be a number, the graphical representation of the activity level need not be. As explained, each of the claims refers to "***an indication of*** an activity level" or marking a graphical item "***according to*** an activity level." *See also* '327 Patent at 10:8-21 ("The graphical item associated with the action spot **406** can be orange to indicate that the action spot **406** has the second most activity. The graphical item associated with the actions items **404** and **402** can be yellow to indicate that the activity level of action items **404** and **402** is less than that at the action spot **406** . . . . One of ordinary skill in the art will understand that at least one of a color scheme, graphical-item-sizing scheme, activity icon scheme, or a combination of at least two of a color scheme, graphical-item-sizing scheme, and activity icon scheme can be associated with a range of activity levels.").

Setting aside the fact that the plain language of the claims does not require the graphical display of an activity level as a number, the Court also finds that there is no basis in the specification to conclude that the term "activity level" itself must always be based simply on a "number" of actions. In particular, the '327 Patent describes a situation where an action spot **410** "is a video camera." '327 Patent, 9:37-38. The '327 Patent states,

> T[t]he larger size of the graphical item associated with action spot **410** can indicate that the level of video camera activity occurring at action spot **410** is higher than the level of activity occurring at action spots **402**, **404**, **406**, and **408**. The level of activity can be determined by the size of the data packets associated with transmitting or posting the video recording, the length of the video recording, the number mobile devices capturing video, the number of

> video recordings being posted on a virtual posting forum, or any other calculation or method of determining the level of video recording activity.

Id. at 9:47-57; *see also id.* at 7:26-44 (activity level measured by server based on size or number of data packet transmissions). Snap's proposed claim construction would potentially omit these disclosed embodiments from the specification.

Snap argues that its proposed construction is dictated by the prosecution history of the '084 Patent. *Snap Case*, Docket No. 100 at 2; *see also* Response to Non-Final Office Action, App. No. 13/648,167, *Snap Case*, Docket No. 97-2. The Court first notes that the applicant's remarks in its office action response are specific to a limitation in Claim 1 of the '084 Patent that is not in the asserted claims of the '327 Patent. Moreover, the applicant's statements merely repeated the proposed claim language:

> Saavedra [a prior art reference] does not, however, describe **providing an indication of the quantity of such actions**. Thus, Saavedra does not disclose, teach or suggest transmitting "an indication of an activity level at the at least one action spot, wherein the activity level is based upon at least one of a **number** of images captured, a **number** of videos captured, and a **number** of messages transmitted," as recited in amended independent claim 1.

Id. at ECF9 (bold emphasis in original, underline emphasis added). The Court finds that the applicant did not clearly and unequivocally disclaim the scope of the term "activity level" through this statement.

The only other relevant difference between the parties' competing modified proposals is that BlackBerry would construe the term activity level as a measure of "actions" and Snap would construe the term activity level as a number of "***documenting*** actions." The word "documenting" was not in Snap's original claim construction proposal for this term, and the Court is not persuaded based on its review of the record that it is necessary to include the word in a construction of the term. Although the relevant asserted claims specifically reference action spots corresponding to "documenting action[s]," that requirement is clear from the plain face of the claim language itself. *See, e.g.*, '327 Patent, Claims 1, 13; '084 Patent, Claim 1. The Court further notes that the parties' agreed claim construction for the term "action spot" does not include the phrase "documenting actions."

Although the Court is not particularly persuaded that construction of this claim phrase is necessary to aid a jury, based on the parties' agreed clarification that the activity level refers to the

actions of one or more mobile devices, the Court construes the term "activity level" generally consistent with BlackBerry's proposal as "level of actions taken by one or more other mobile devices."

V. Conclusion

The Court would **DENY** BlackBerry's Motion to Strike (Docket No. 134).

For the reasons stated, the Court would construe the disputed terms as follows:

Term	Asserted Claim(s), Asserted Patent(s)	Court's Construction
"proxy content server"	'351 Patent, Claims 1, 9, 14, and 21	No construction
"content information"	'351 Patent, Claims 1 and 14; '929 Patent, Claims 1, 2, 9, and 10	"information, other than advertising information and meta tags, which is capable of being displayed for viewing"
"meta tag for one or more advertisements to be displayed with the content information"	'929 Patent, Claims 1, 2, 9, and 10	No construction
**	'929 Patent, ~~Claim 1~~ Claim 2	Invalid for failing to satisfy 35 U.S.C. § 112, ¶ 4
"wireless communication device"	'634 Patent, Claims 1 and 7	No construction
"messaging correspondent"	'634 Patent, Claims 1 and 7	"distinct sender of an electronic message"
"a numeric character representing a count of the plurality of different messaging correspondents for which one or more of the electronic messages have been received and remain unread"	'634 Patent, Claims 1 and 7	"a numeric character representing the number of different messaging correspondents for one or more of the plurality of electronic messages that have been received and remain unread"
"predetermined duration of time"	'713 Patent, Claims 2, 4, 6, and 8	Construction, if any, deferred
"notification"	'120 Patent, Claims 9, 13, 15, 20, 21, and 24	"some form of visual, auditory, or physical cue to draw attention to an

		incoming message that would not otherwise have been noticed, at the time of the incoming message"
"reducing mod q"	'961 Patent, Claim 23	"computing the remainder of dividing a value by q"
"determin[e] / [ing] at least one action spot within a predetermined distance from the current location of the mobile device"	'327 Patent, Claims 1 and 13; '084 Patent, Claims 1 and 9	No construction
"activity level"	'327 Patent, Claims 1, 2, 13, and 15; '084 Patent, Claim 1	"level of actions taken by one or more other mobile devices"