UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
AMENDED
CIVIL MINUTES - GENERAL

Case No.	**CV 18-1844-GW-KSx** CV 18-2693-GW-KSx	Date	October 1, 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 - FINAL RULINGS ON:**

DEFENDANTS' CONSOLIDATED MOTION FOR SUMMARY JUDGMENT OF INVALIDITY UNDER 35 U.S.C. § 101 (U.S. PATENT NOS. 8,296,351, 8,676,929, AND 9,349,120) [239]

DEFENDANT SNAP, INC.'S MOTION FOR LEAVE TO FILE A FIRST AMENDED ANSWER AND COUNTERCLAIMS TO BLACKBERRY LIMITED'S COMPLAINT [242]

BLACKBERRY'S MOTION FOR PARTIAL SUMMARY JUDGMENT OF U.S. PATENT NO. 8,825,084 [244]

BLACKBERRY'S MOTION FOR PARTIAL SUMMARY JUDGMENT OF INFRINGEMENT OF U.S. PATENT NOS. 8,677,250, 8,279,173, AND 9,349,120 [247]

FACEBOOK DEFENDANTS' MOTION FOR SUMMARY JUDGMENT OF INVALIDITY UNDER 35 U.S.C. § 101 (U.S. PATENT NO. 8,279,173) [267]

DEFENDANT SNAP INC.'S MOTION FOR SUMMARY JUDGMENT OF INVALIDITY UNDER SECTION 101 OF U.S. PATENT NOS. 8,825,084 AND 8,326,327 [272]

Attached hereto is the Court's Final Rulings on the above-entitled Motions.

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Initials of Preparer   JG

Final Rulings on: (1) Consolidated Defendants' Motion for Summary Judgment as to Motion for Summary Judgement of Invalidity under 35 U.S.C. § 101 of US Patent Nos. 8,296,351, 8,676,929 and 9,349,120; (2) Facebook Defendants' Motion for Summary Judgment as to Invalidity under 35 U.S.C. Section 101 (U.S. Patent No. 8,279,173); (3) BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patents 8,677,250; 8,279,173; and 9,349,120 against Facebook Defendants; (4) Snap's Motion for Summary Judgment as to Invalidity under Section 101 of U.S. Patent Nos. 8,825,084 and 8,326,327; (5) BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patent 8,825,084 against Snap; and (6) Snap's Motion for Leave to File a First Amended Answer and Counterclaims

[Portions of the parties' briefing related to the pending motions addressed by this Ruling were filed under seal. The Court has ██████████ the portions of this Ruling that it understands as pertaining to material the parties have stated is confidential. The parties will be expected to state their positions as to whether the highlighted material and/or any other material should remain under seal in a joint report filed three days after the issuance of the sealed version of this Order, including by proposing any redactions they would wish made to a public version of the document.]

I. Background

Plaintiff BlackBerry Limited ("BlackBerry") has filed suit against Facebook, Inc., WhatsApp, Inc., and Instagram, LLC (collectively, "Facebook Defendants"), alleging infringement of nine 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). BlackBerry separately filed suit against Snap Inc., alleging infringement of six patents. *BlackBerry Limited v. Snap Inc.*, Case No. 2:18-cv-02693-GW-(KSx) ("*Snap Case*"), Docket No. 1.

The following six motions are pending in the case:

> (1) Consolidated Defendants' Motion for Summary Judgment as to Motion for Summary Judgement of Invalidity under 35 U.S.C. § 101 of US Patent Nos. 8,296,351, 8,676,929 and 9,349,120 (Docket No. 239**);**
>
> (2) Facebook Defendants' Motion for Summary Judgment as to Invalidity under 35 U.S.C. Section 101 (U.S. Patent No. 8,279,173) (Docket No. 267);
>
> (3) BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patents 8,677,250; 8,279,173; and 9,349,120 against Facebook Defendants (Docket No. 247);
>
> (4) Snap's Motion for Summary Judgment as to Invalidity under Section 101 of

U.S. Patent Nos. 8,825,084 and 8,326,327 (Docket No. 272);

(5) BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patent 8,825,084 against Snap (Docket No. 244); and

(6) Snap's Motion for Leave to File a First Amended Answer and Counterclaims (Docket No. 242-4).

The motions have been fully briefed.[1] After briefing was completed on the motions, Facebook Defendants and Snap each filed one *ex parte* application seeking to submit an additional filing with respect to issues raised in some of the pending motions. Docket Nos. 353, 369. A hearing was held on the motions on September 5, 2019 and the matters were taken under submission.[2]

For the reasons stated in this Order, the Court would rule as follows:

(1) **GRANT-IN-PART** and **DENY-IN-PART** Consolidated Defendants' Motion for Summary Judgment as to Motion for Summary Judgement of Invalidity under 35 U.S.C. § 101 of US Patent Nos. 8,296,351, 8,676,929 and 9,349,120 (Docket No. 239**);**

(2) **DENY** Facebook Defendants' Motion for Summary Judgment as to Invalidity under 35 U.S.C. Section 101 (U.S. Patent No. 8,279,173) (Docket No. 267);

(3) **DENY** BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patents 8,677,250; 8,279,173; and 9,349,120 against Facebook Defendants (Docket No. 247) and **DENY AS MOOT** Facebook Defendants' *ex parte* application to file a surreply regarding motion (Docket No. 353);

(4) **GRANT** Snap's Motion for Summary Judgment as to Invalidity under Section 101 of U.S. Patent Nos. 8,825,084 and 8,326,327 (Docket No. 272);

(5) **DENY AS MOOT** BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patent 8,825,084 against Snap (Docket No. 244); and

(6) **DENY AS MOOT** Snap's Motion for Leave to File a First Amended Answer and Counterclaims (Docket No. 242-4) and **DENY AS MOOT** Snap's *ex parte* application to file a supplemental brief regarding motion (Docket No. 369).

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[1] The docket numbers for the briefing on the motions addressed by this Ruling will be provided as relevant in the discussion sections of this Order.

The Court notes that for sealed versions of briefing, Plaintiff's submissions (and one of Defendants' submissions – *see* Docket No. 279) are only available as sealed declarations in support of applications to seal. Plaintiff has not, after the Court has granted leave to file a document under seal, "thereafter file[d] the document with whatever motion or other document the under-seal filing is intended to support." *See* L.R. 79-5.2.2(c). The parties are expected to comply with this local rule requirement in a timely manner with future sealed filings.

[2] At the hearing, a tentative ruling was provided to the parties regarding the Court's tentative thoughts on the pending motions.

II. Legal Standard

A. Summary Judgment

Summary judgment shall be granted when a movant "shows that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); *see also Miranda v. City of Cornelius*, 429 F.3d 858, 860 n.1 (9th Cir. 2005). As to materiality, "[o]nly disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A dispute as to a material fact is "genuine" if there is sufficient evidence for a reasonable jury to return a verdict for the nonmoving party. *Id.*

To satisfy its burden at summary judgment, a moving party without the burden of persuasion "must either produce evidence negating an essential element of the nonmoving party's claim or defense or show that the nonmoving party does not have enough evidence of an essential element to carry its ultimate burden of persuasion at trial." *Nissan Fire & Marine Ins. Co. v. Fritz Cos., Inc.*, 210 F.3d 1099, 1102 (9th Cir. 2000); *see also Devereaux v. Abbey*, 263 F.3d 1070, 1076 (9th Cir. 2001) (*en banc*); *Fairbank v. Wunderman Cato Johnson*, 212 F.3d 528, 532 (9th Cir. 2000).

> If the party moving for summary judgment meets its initial burden of identifying for the court the portions of the materials on file that it believes demonstrate the absence of any genuine issue of material fact, the nonmoving party may not rely on the mere allegations in the pleadings in order to preclude summary judgment[, but instead] must set forth, by affidavit or as otherwise provided in Rule 56, specific facts showing that there is a genuine issue for trial.

T.W. Elec. Serv., Inc., v. Pac. Elec. Contractors Ass'n, 809 F.2d 626, 630 (9th Cir. 1987) (internal citations and quotation marks omitted). In judging evidence at the summary judgment stage, the court does not make credibility determinations or weigh conflicting evidence, and views all evidence and draws all inferences in the light most favorable to the non-moving party. *See id.* at 630-31 (citing *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574 (1986)); *see also Hrdlicka v. Reniff*, 631 F.3d 1044 (9th Cir. 2011); *Motley v. Parks*, 432 F.3d 1072, 1075 n.1 (9th Cir. 2005) (*en banc*).

Alternatively, a moving party *with* the burden of persuasion must establish "beyond controversy every essential element of its [claim or defense]" to satisfy its burden

at summary judgment. *S. Cal. Gas Co. v. City of Santa Ana*, 336 F.3d 885, 888 (9th Cir. 2003). Therefore, in order to defeat such a motion, the nonmoving party need only raise a genuine issue of dispute on a single element of the claim.

B. Patent Eligibility under 35 U.S.C. § 101

An invention or a discovery is patentable if it is a "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. "In choosing such expansive terms . . . Congress plainly contemplated that the patent laws would be given wide scope." *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). Still, the Supreme Court has identified exceptions to this wide scope to distinguish patents that claim the building blocks of human ingenuity, which are ineligible for patent protection, from those that "integrate the building blocks into something more." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.,* 566 U.S. 66, 89 (2012)) (internal quotations omitted). These exceptions to patent protection are "laws of nature, natural phenomena, and abstract ideas." *Diamond v. Diehr*, 450 U.S. 175, 185 (1981). While the boundaries of the judicial exceptions remain subject to further development, the Supreme Court has clearly delineated the policy underlying those exceptions: avoiding patents that "too broadly preempt the use of a natural law [or abstract idea]." *Mayo*, 566 U.S. at 73. Thus, patent law should "not inhibit further discovery by improperly tying up the future use of laws of nature [or abstract ideas]." *Id*. at 85.

In *Mayo*, the Supreme Court "set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 573 U.S. at 217. The first step is to ask "whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If not, the claims fall within the scope of § 101 and are patent-eligible. If the claims are directed to one of the exceptions, the next step is to search for an "inventive concept" that is "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself." *Mayo*, 566 U.S. at 72-73. In doing so, a court must "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78-79). If, in considering the claim elements individually and as an ordered combination, they merely recite well-understood, routine, and conventional steps, they will not constitute an inventive

concept for patent eligibility purposes. *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018). "Whether the claim elements or the claimed combination are well-understood, routine, conventional is a question of fact." *Id.*; *see also Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368-69 (Fed. Cir. 2018) ("Like indefiniteness, enablement, or obviousness, whether a claim recites patent eligible subject matter is a question of law which may contain underlying facts.").

C. Patent Infringement

A determination of patent infringement requires a two-step analysis. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995). The first step is to construe the claims; *i.e.*, to determine the scope and meaning of what is allegedly infringed. *Id.* This step is a question of law. *Id.* at 970-71. The second step is to compare the properly construed claims to the accused product to determine whether each of the claim limitations is met, either literally or under the doctrine of equivalents. *Id.* at 976; *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1365 (Fed. Cir. 2002); *Tex. Instruments Inc. v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165, 1173 (Fed. Cir. 1993) (although no literal infringement of a claim, an accused device may still infringe under the doctrine of equivalents.). This determination is a question of fact. *Bai v. L &L Wings Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998); *Schoell v. Regal Marine Indus., Inc.*, 247 F.3d 1202, 1207 (Fed. Cir. 2001).

III. Discussion Regarding 35 U.S.C. § 101 Invalidity

Three of Defendants' pending motions are motions for summary judgment of invalidity under 35 U.S.C. § 101. *See* Consolidated Defendants' Motion for Summary Judgment as to Motion for Summary Judgement of Invalidity Under 35 U.S.C. § 101 of US Patent Nos. 8,296,351, 8,676,929 and 9,349,120, Docket No. 239;[3] Facebook Defendants' Motion for Summary Judgment as to Invalidity Under 35 U.S.C. Section 101 (U.S. Patent No. 8,279,173), Docket No. 267;[4] Snap's Motion for Summary Judgment as to Invalidity Under Section 101 of U.S. Patent Nos. 8,825,084

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[3] *See also* BlackBerry's Opposition to Consolidated Defendants' Motion, Docket No. 281 (public), Docket No. 284-1 (sealed); Consolidated Defendants' Reply in support of Motion, Docket No. 310 (public), Docket No. 342 (sealed); Statement of Disputed/ and Undisputed Facts regarding Consolidated Defendants' Motion, Docket No. 310-1.

[4] *See also* BlackBerry's Opposition to Facebook Defendants' Motion, Docket No. 314 (public), Docket No. 316-1 (sealed); Facebook Defendants' Reply in support of Motion, Docket No. 343; Statement of Disputed and Undisputed Facts regarding Facebook Defendants' Motion, Docket No. 343-1.

AND 8,326,327, Docket No. 272.[5]

The § 101 motions involve the following asserted patents: U.S. Patent Nos. 8,296,351 ("the '351 Patent"); 8,676,929 ("the '929 Patent"); 9,349,120 ("the '120 Patent"); 8,279,173 ("the '173 Patent"); 8,326,327 ("the '327 Patent"); and 8,825,084 ("the '084 Patent"). The parties' § 101 disputes are addressed in turn.[6]

A. U.S. Patent No. 8,296,351

1. Background of the Patent and the Asserted Claims

The '351 Patent is titled "System and Method for Pushing Information to a Mobile Device." It issued on October 23, 2012.

BlackBerry argues that Facebook Defendants infringe Claims 1, 14, and 21 of the '351 Patent. *See* Statement of Disputed Facts regarding Consolidated § 101 Motion, Docket No. 310-1 ¶ 22. BlackBerry argues that Snap infringes Claims 1, 2, 14, 20, and 21 of the '351 Patent. *Id.* ¶ 24.

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.

'351 Patent, Claim 1. Claim 2 depends from Claim 1 and states:

2. The system of claim 1, wherein the feedback signal is generated by the mobile device.

Id. at Claim 2.

Claim 14 of the '351 Patent is the only other independent claim of the '351 Patent. It recites:

14. 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 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, 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.

Id. at Claim 14. Claims 20 and 21 depend from Claim 14 and state:

20. The system of claim 14, wherein the information source automatically transmits the information to the proxy content server.

21. The system of claim 14, further comprising:
the proxy content server database coupled to the proxy content server that stores data relating to the mobile device, wherein the data is also used by the proxy content server to select the channel for transmission over the wireless network to the mobile device.

Id. at Claims 20, 21.

2. *Mayo/Alice* Step One

At the motion to dismiss stage, the Court considered Defendants' arguments that both the

'351 and '929 Patent are invalid under § 101. As to the '351 Patent, the Court stated:

> Even assuming without deciding that the claims of the '351 Patent are drawn to an abstract idea, factual issues preclude dismissal. Considering the claims and allegations in the Complaint and First Amended Complaint in the light most favorable to BlackBerry, the parties have submitted a factual dispute regarding whether the "proxy content server" and its specific architecture as recited in the claims provide for a well-understood, routine, and/or conventional computer component. Courts have found, both in the context of step one and step two of the patent eligibility framework, that claims directed to an unconventional architecture for organizing data or computer components may be patent eligible. [*Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1261-62 (Fed. Cir. 2017)]; *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016); *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016). Here, as BlackBerry observes, the claims refer to organizing advertising information into a "plurality of memory location channels" based on pre-defined categories. Consolidated Opposition at 15-16.

Docket No. 68 at 11. But in a footnote, the Court further stated:

> If the proxy content server is a routine, conventional, and well-understood element, legal authority would suggest that at least the independent claims of the '351 Patent are drawn to patent-ineligible concepts. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015) ["*Capital One Bank*"] (finding claims drawn to providing tailored web pages patent ineligible and observing at step one, "[t]here is no dispute that newspaper inserts had often been tailored based on information known about the customer − for example, a newspaper might advertise based on the customer's location."); *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (finding claims regarding recording digital images, classifying them, and transmitting them to a server patent-ineligible and observing at step one that the claims are drawn to the "concept of classifying an image and storing the image based on its classification."); *Return Mail, Inc. v. United States Postal Serv.*, 868 F.3d 1350, 1368 (Fed. Cir. 2017) ("Encoding and decoding mail recipient information − including whether the sender wants a corrected address − are processes that can, and have been, performed in the human mind."). The Court declines to make a determination on the issue on the current record. *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012) ("[I]t will ordinarily be desirable − and often necessary − to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter."); *Berkheimer*, 881 F.3d at 1369 (declining to dismiss certain dependent claims at issue to the extent they presented a factual question as to whether they were drawn to improvements to computer functionality)[.]

Id. at 12 n.7.

During claim construction, the parties offered the following proposed claim constructions for proxy content server:

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

Docket No. 157 at 10. Notably, the parties' proposed modified constructions were very close. Both BlackBerry and Defendants agreed that a "proxy content server" was a server, and primarily disputed BlackBerry's proposal that it "aggregate" and "distribute" information. The Court concluded that the plain claim language itself already reflected that the proxy content server performed these functions, and it declined to construe the term. *Id.* at 11-12.

The Court also made the explicit point that nothing in the claim construction 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 components." *Id.* at 12. This clarification was in reaction to the arguments presented by the parties in their claim construction briefs and expert declarations, which purported to be driven by claim construction issues, but more often seemed to reflect the parties' § 101 disputes.

The parties carry on with their dispute regarding the "proxy content server" now in framing their arguments at both *Mayo/Alice* steps, but particularly in the context of *Mayo/Alice* Step Two.

As a legal matter at step one, the Court agrees with Defendants that the claims considered as a whole are directed to the ideas of saving and organizing information and choosing some of that information to send to a person based on the person's location or a "triggering event." These are concepts that the Federal Circuit has repeatedly held to be abstract.

As just one preliminary example in addition to the three cited by the Court in the motion to dismiss, in *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1256 (Fed. Cir. 2016), the Federal Circuit considered claims that were:

> directed to a broadcast system in which a cellular telephone located outside
> the range of a regional broadcaster (1) requests and receives network-based

content from the broadcaster via a streaming signal, (2) is configured to wirelessly download an application for performing those functions, and (3) contains a display that allows the user to select particular content.

Id. The Federal Circuit rejected the idea that tailoring content based on user location was patent-eligible, first explaining at *Mayo/Alice* Step One:

> The practice of conveying regional content to out-of-region recipients has been employed by nearly every form of media that has a local distribution. It is not tied to any particular technology and can be implemented in myriad ways ranging from the low-tech, such as by mailing copies of a local newspaper to an out-of-state subscriber, to the high-tech, such as by using satellites to disseminate broadcasts of sporting events.
> . . .
> The '379 patent claims the function of wirelessly communicating regional broadcast content to an out-of-region recipient, not a particular way of performing that function. While independent claim 1 refers to general components such as a cellular telephone, a graphical user interface, and a downloadable application, the claimed invention is entirely functional in nature . . . . There is nothing in claim 1 that is directed to *how* to implement out-of-region broadcasting on a cellular telephone. Rather, the claim is drawn to the idea itself.

Id. at 1258. Similarly here, the claims as a whole describe using the proxy content server to collect and organize information, then select certain of that information for transmission to a mobile device based on the mobile device's location (provided via a "feedback signal") or a "time triggering event." There is no information about how the proxy content server decides to organize information (*i.e.* how it selects "predefined information categories" for information storage) or how it subsequently chooses what information to send to a mobile device.

BlackBerry strenuously argues that the claims are non-abstract. It asserts that the '351 Patent claims are drawn to a technical solution necessarily rooted in computer technology, and thus survive *Mayo/Alice* Step One. It argues, for instance, that the '351 Patent "addresses an information synchronization problem between mobile devices and information sources." Docket No. 284-1 at 7. It further states that "the proxy content server operates as a specialized gateway between the many information sources and mobile devices." *Id.*

The same, however, could be said of the more detailed claims invalidated by the Federal Circuit in *Electric Power Group*, which related to compiling and processing large amounts of data as part of a streamlined, real-time method. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1352 (Fed. Cir. 2016) (claims required, among many other things, "accumulating and

updating the measurements from the data streams and the dynamic stability metrics, grid data, and non-grid data in real time as to wide area and local area portions of the interconnected electric power grid."). As part of an oft-cited paragraph, the Federal Circuit collected cases for the proposition that "collecting information, including when limited to particular content (which does not change its character as information), [is] within the realm of abstract ideas." *Id.* at 1354. The fact that the claimed methods related to processing a huge amount of information from many disparate sources did not seem to sway the Federal Circuit's analysis (and here, there is not necessarily a requirement that the claimed server indeed process data from even a plurality of sources). Similarly here, at least for purpose of *Mayo/Alice* Step One, BlackBerry's arguments simply relate to dressing up the abstract concept of collecting and compiling information. *See id.* at 1355 (stating at Step Two that "[m]erely requiring the selection and manipulation of information – to provide a 'humanly comprehensible' amount of information useful for users – by itself does not transform the otherwise-abstract processes of information collection and analysis." (citation omitted)). BlackBerry did not discuss *Electric Power* at the hearing, although it reiterated its argument that the proxy content server's ability to compile and organize data from thousands of sources supports the position that the claims are directed to a technological improvement.

Importantly, although with its "gatekeeper" argument BlackBerry emphasizes that the claimed steps result in savings in bandwidth and processing, these results of practicing the abstract idea cannot be used to support patent eligibility. *Capital One Bank*, 792 F.3d at 1367 (noting with respect to Step Two that "claiming the improved speed or efficiency inherent with applying the abstract idea on a computer [does not] provide a sufficient inventive concept."); *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1288 (Fed. Cir. 2018) ("These benefits, however, are not improvements to database functionality. Instead, they are benefits that flow from performing an abstract idea in conjunction with a well-known database structure."). Further, although BlackBerry makes these assertions about bandwidth and processing savings, there are no limitations in the claims that specifically address these problems or would necessarily support these improvements. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 (Fed. Cir. 2016) ("*Symantec*") ("Finally, IV argues that the '050 patent 'shrink[s] the protection gap and moot[s] the volume problem' . . . . However, the asserted claims do not contain any limitations that address the protection gap or volume problem, e.g., by requiring automatic updates

to the antivirus or antispam software or the ability to deal with a large volume of such software."). As Defendants observe, the claims simply require that the proxy content server collect information from "***an*** information source" to eventually be delivered to "***a*** mobile device." *See* Docket No. 342 at 3. It is also notable that although BlackBerry cites portions of the specification when it refers to its arguments about "avoiding the burden" of direct synchronization and "scarce transmission resources," *see* Docket No. 284-1 at 5-6, these concepts are not discussed in the '351 Patent specification.[7]

In attempting to distinguish the asserted claims from the many Federal Circuit cases cited by Defendants, BlackBerry also argues that the claims do not refer to simply compiling or filtering information, "but instead intelligently organiz[ing] each piece of information into a 'channel' based on a predefined 'category' and stor[ing] it in a memory location associated with that channel or category." Docket No. 284-1 at 9. Plaintiff refers at length to the specification to support its position, including embodiments that describe the proxy content server "mak[ing] intelligent choices . . . as to when to insert advertising into the content data stream to the mobile device user." *Id.* at 9 (citing '351 Patent at 5:44-47). But these concepts in the specification are not reflected in the claims, and cannot serve as a basis to find the claims drawn to a non-abstract concept.

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[7] The '351 Patent describes prior art server systems that would wait for a command from the mobile device, *i.e.* "pull," before sending information, as opposed to "some paging networks" that would "automatically 'push' small amounts of information." '351 Patent at 1:18-29. These prior art scenarios would suggest that the claimed system, which automatically pushes information in response to locations or time events, may not always lead to more efficient bandwidth usage than the prior art methods that generally relied on a user to request content, or only sent a small amount of content automatically. *See also* Docket No. 342 at 5.

At the hearing, BlackBerry argued that the fact that the claims do not explicitly refer to these benefits should not impact the § 101 analysis. Citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016), BlackBerry argued that by including all the necessary structure to achieve improvements in bandwidth and processing, the claims satisfy *Mayo/Alice* Step One. Whether the claims do indeed recite a technologically-improved "structure" is discussed further *infra*. But notably for purposes here, in *Enfish*, the specification itself espoused certain technological benefits of the structure explicitly claimed. *See id.*

The Court also notes that both in its briefing and at the hearing, BlackBerry emphasized statements in a provisional application that the '351 Patent (and '929 Patent) claim priority to. In discussing shortcomings with "pull" methods of transmitting information, the provisional asserted, "the amount of data to be reconciled between the service provider and the mobile device can become very large leading to bandwidth difficulties." Docket No. 281-11 at ECF6-7. This statement is not repeated in the '351 Patent (or '929 Patent) and BlackBerry does not argue that this portion of the provisional application was incorporated by reference into the '351 or '929 Patents. But even if it was, this general statement related to possible shortcomings in "pull" techniques is insufficient to support a conclusion that the '351 asserted claims are drawn to a technological improvement as opposed to an abstract idea. This language is not tied specifically to the claimed invention itself, and does not explain how the claims themselves would necessarily address these potential bandwidth problems. Similarly, BlackBerry emphasized language in the provisional regarding allowing "user control" over the "channels" in the proxy content server. Limitations to that effect are not included in the claims.

ChargePoint, Inc. v. SemaConnect, Inc., 920 F.3d 759, 769 (Fed. Cir. 2019) ("'[t]he § 101 inquiry must focus on the language of the Asserted Claims themselves,' [*Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016)], and the specification cannot be used to import details from the specification if those details are not claimed. Even a specification full of technical details about a physical invention may nonetheless conclude with claims that claim nothing more than the broad law or abstract idea underlying the claims, thus preempting all use of that law or idea."); *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1338 (Fed. Cir. 2017), *cert. denied*, 139 S. Ct. 378, 202 L. Ed. 2d 288 (2018) (stating at Step Two, "[t]he main problem that Two-Way Media cannot overcome is that the *claim* − as opposed to something purportedly described in the specification − is missing an inventive concept.").

Specifically, there is no information anywhere in the claims limiting or otherwise explaining how the proxy content server "intelligently" decides what "channel" to put information in. Nor is there information explaining who "pre-defines" the "predefined channels." The Court also notes that the parties did not request construction of the terms "channel" or "memory location." Indeed, the parties agreed to a construction of "channel" as equivalent to "memory location." Docket No. 157 at 9. Moreover, Defendants cite deposition testimony from BlackBerry's experts suggesting that these terms do not have any special meaning beyond just an identified and categorized location in memory. *See* SDF re Consolidated § 101 Motion, Docket No. 310-1 ¶¶ 56, 57, 58, 59. Even if the claimed proxy content server was limited in the manner BlackBerry asserts to "intelligent organization" based on the patent specification, the Court has some concerns about the ability to evade a § 101 determination simply be adding the word "intelligent" to the concept of organization. Presumably, humans have been "intelligently organizing" and selecting data for just as long as they have been unintelligently organizing and selecting it. But again and ultimately, the primary shortcoming with BlackBerry's position is that the claims provide no information regarding *how* such alleged "intelligent" organization would be achieved, or whether it could be achieved at all.

The fact that the claims specifically recite certain types of information that the proxy content server can send to mobile devices also does not change the outcome. (Of note, the claims do not put any requirement on the proxy content server to make any type of "intelligent selection" between the available information options, either.) *BSG*, 899 F.3d at 1287 ("regardless of how narrow 'summary comparison usage information' may be relative to the category of 'historical

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usage information,' this does not affect whether the claims are directed to an abstract idea at *Alice*'s step one . . . . a claim is not patent eligible merely because it applies an abstract idea in a narrow way."). At the hearing, BlackBerry emphasized the asserted claims' requirement for the classification, storage and transmission of static, dynamic, default, or content information as supporting patent eligibility. Of note, the claims do not actually include any requirements that the proxy content server indeed perform the information classification itself, nor requirements that it store the classified information in a particular way (for instance, if and whether the different types of information are mixed or separated into different memory locations), nor requirements for how certain types of information are selected out of a memory location as appropriate for transmission. In other words, the argument that this claim limitation shows that the claims "selectively transmit[ ] only relevant new information," as BlackBerry asserted in its hearing slides and at the hearing, is not supported by these generalized limitations. Moreover, and again, these categories of information are still information, and "collecting, analyzing, and displaying that information, without more, is an abstract idea." *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1344 (Fed. Cir. 2018).

Nor are the claims saved at Step One by their references to a "proxy content server" itself with "channels." Again, the parties agreed to a construction of "channel" as simply meaning "memory location." *See* Docket No. 157 at 9. Although BlackBerry broadly asserts that the "proxy content server" offers a "distributed architecture," Docket No. 284-1 at 15, it simply refers to the proxy content server's storage of information based on pre-defined categories into "channels" to support this claim. Notably, BlackBerry did not argue in its briefs or at the hearing that the proxy content server is a new, technologically improved piece of hardware (and indeed acknowledged at the hearing that it is not). Nor did BlackBerry argue in its briefs or at the hearing that the concept of using "memory locations" to store information in a server is itself a technological improvement. BlackBerry's suggestion appears to be that generic server hardware programmed to select a memory location for where to store data based on "pre-defined information categories" presents the technological advance (and the inventive concept). At least at Step One, the concept of categorizing information and storing information relating to the same category in the same place ("memory location") is still abstract. It does not become less so simply by using new terms like "proxy content server" and "channel," particularly after claim construction in this case. *See also Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed.

Cir. 2017) ("*Capital One Fin. Corp.*") ("[t]he mere fact that the inventor applied coined labels to conventional structures does not make the underlying concept inventive."). Ultimately, because of the abstract, result-oriented focus of the claims, including the "proxy content server," reference to these claim components does not change the outcome at Step One.

At the hearing, BlackBerry emphasized *Enfish* as supporting its argument that the claims are patent eligible. In particular, BlackBerry referred to a statement in *Enfish* regarding the patent-eligibility of software. The Federal Circuit stated:

> that the improvement is not defined by reference to "physical" components does not doom the claims . . . . Much of the advancement made in computer technology consists of improvements to software that, by their very nature, may not be defined by particular physical features but rather by logical structures and processes. We do not see in *Bilski* or *Alice,* or our cases, an exclusion to patenting this large field of technological progress.

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1339 (Fed. Cir. 2016). The issue at Step One in this case, however, is not that the asserted claims are relying on generic hardware. Instead, the issue is that the claims are not directed to a sufficiently "**specific implementation** of a solution to a problem in the software arts." *Id.* (emphasis added). The *Enfish* claims included specific requirements for the structure of the claimed self-referential table, *i.e. how* to implement the desired self-referential table. *See, e.g. id.* at 1336-37. Here, there is no structure for *how* to achieve the storage of classified data into "channels" (*i.e.* memory locations). Indeed, BlackBerry itself stated at the hearing that figuring out how to actually program a server to separate information into "channels" (*i.e.* memory locations) based on pre-defined categories is an "implementation issue." But the fact that this is an "implementation issue," in combination with the fact that a "channel" is simply a memory location, leads to significant preemption concerns and supports the conclusion of a lack of a "specific implementation of a solution to a problem" here.

Having concluded that the claims are drawn to the abstract idea of organizing information and selecting certain information to send to a mobile device based on how it has been organized, the Court proceeds to *Alice* Step Two.

2. *Mayo/Alice* Step Two

The critical question at *Alice* Step Two appears to be the same one that confronted the parties at the motion to dismiss stage: Is the "proxy content server" as claimed a routine, conventional, and well-understood component?

Notably, in Defendants' Statement of Undisputed Facts, they failed to include a fact for the proposition that the proxy content server is indeed routine and conventional. Perhaps Defendants opted not to include such a fact knowing that BlackBerry would indeed dispute it. *See* Docket No. 281-3 at BlackBerry's Statement of Genuine Issues ¶ 10. Defendants instead provide facts for the proposition that a proxy server (not a "proxy *content* server") is routine and conventional, which BlackBerry does not dispute. SDF ¶¶ 45-50. Defendants also provide the following assertion in their reply brief:

> BlackBerry does not argue that it invented a new server machine or device. Nor could it, as one of the named inventors of the ad patents testified: "Q. Did you and your co-inventors come up with a new device that you termed the proxy content server? A. No it wasn't it wasn't a new piece of hardware, no." [Deposition Transcript of Michael Brown, BlackBerry Rule 30(6)(6) Witness ("Brown Tr."), Docket No. 342-1 ¶ 96 (objection omitted).]

Docket No. 342 at 12; *see also* Brown Tr. ¶ 97 ("Q. So it was a piece of hardware that you programmed to operate in the ways that you described earlier? A. I believe that would be more accurate, yes." (objection omitted).)

Again, BlackBerry's argument is that the proxy content server, even if comprised of conventional, computer hardware, is somehow specially programmed or otherwise able to perform unconventional functions in a way that supplies an inventive concept. In particular, BlackBerry would seem to argue that by implementing the abstract idea of categorical data storage using a system of "channels" on a server, and subsequently transmitting information in those channels in response to an event or signal, the proxy content server becomes a claimed component that is not routine, conventional, or well-understood. But as noted, the parties have agreed that "channel" means "memory location." BlackBerry has not argued that a server with memory locations is non-routine.

Moreover, the fact that the claims require performing the abstract concept – the steps of organizing information into categories and storing information in the same category in the same place ("channel," *i.e.* "memory location") before subsequently sending information stored in a particular place to a user – on an otherwise generic computer component cannot save the claims. As explained in *BSG*:

> the relevant inquiry is not whether the claimed invention as a whole is unconventional or non-routine . . . .
>
> It has been clear since *Alice* that a claimed invention's use of the ineligible

concept to which it is directed cannot supply the inventive concept that renders the invention "significantly more" than that ineligible concept. In *Alice*, the Supreme Court held that claims directed to a computer-implemented scheme for mitigating settlement risks claimed a patent-ineligible abstract idea. [573 U.S. at 212, 217-221] . . . . Critically, the Court did not consider whether it was well-understood, routine, and conventional to execute the claimed intermediated settlement method on a generic computer. Instead, the Court only assessed whether the claim limitations other than the invention's use of the ineligible concept to which it was directed were well-understood, routine and conventional. *Id.* at [224-26].

Our precedent has consistently employed this same approach. If a claim's only "inventive concept" is the application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a patent-eligible application of an abstract idea. *See, e.g., Berkheimer*, 881 F.3d at 1370 (holding claims lacked an inventive concept because they "amount to no more than performing the abstract idea of parsing and comparing data with conventional computer components"); [*Affinity Labs*, 838 F.3d at 1262] (holding a claim lacked an inventive concept because it "simply recites the use of generic features . . . as well as routine functions . . . to implement the underlying idea"); *cf.* [*Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379-80 (Fed. Cir. 2015)] (rejecting the argument that a newly discovered natural phenomenon can supply an inventive concept).

Here, the only alleged unconventional feature of BSG Tech's claims is the requirement that users are guided by summary comparison usage information or relative historical usage information. But this simply restates what we have already determined is an abstract idea. At *Alice* step two, it is irrelevant whether considering historical usage information while inputting data may have been non-routine or unconventional as a factual matter. As a matter of law, narrowing or reformulating an abstract idea does not add "significantly more" to it. *See SAP Am., Inc. v. InvestPic*, LLC, No. 2017-2081, slip op. at 14, 898 F.3d 1161, 1168, 2018 WL 3656048, *6 (Fed. Cir. Aug. 2, 2018) ("What is needed is an inventive concept in the non-abstract application realm. . . . [L]imitation of the claims to a particular field of information . . . does not move the claims out of the realm of abstract ideas.").

BSG, 899 F.3d at 1290-91. As explained in Step One, it is again particularly relevant that nowhere in the claims or specification does the '351 Patent explain exactly *how* the proxy content server carries out the steps of storing information into "channels," selecting information in a particular "channel" for transmission, or subsequently transmitting certain information from that "channel" in response to an event or signal. There is no algorithm or other method described explaining how the proxy content server achieves these desired results; but, even if there was, it is not claimed.

In its briefs, BlackBerry also hints at some arguments regarding the relevance of the

claimed "feedback signal" (Claim 1) or "triggering event" (Claim 14) to the patent eligibility of the asserted claims of the '351 Patent by referring to those elements throughout its opposition. However, BlackBerry's arguments regarding these claim components are always wrapped up with arguments regarding other aspects of the claims. BlackBerry is very careful, for instance, to include compound assertions that the proxy content server's overall claimed process of: (1) storing information to a plurality of "channels,"[8] (2) selecting a channel for transmission, (3) and transmitting in response to a feedback signal or a triggering event was not routine or conventional. *See, e.g.* Docket No. 284-1 at 10, 20, 21. However, BlackBerry offers no independent evidence or argument seeking to establish the proposition that it was unconventional for a server to send information in response to an event or signal, including information saved at a particular memory location.[9] As the Federal Circuit has recently reiterated, "the relevant inquiry is not whether the claimed invention as a whole is unconventional or non-routine . . . . After identifying an ineligible concept at step one, we ask at step two '[w]hat else is there in the claims before us?'" *BSG*, 899 F.3d at 1290 ((citations omitted).

The Court otherwise rejects BlackBerry's assertion that the Step Two determination reached in *Bascom* is applicable here. *See Bascom*, 827 F.3d at 1350. Particularly after parsing out the abstract idea itself, BlackBerry does not provide an evidentiary basis to show that the combination of claim elements are arranged in a non-generic or non-conventional way. Instead, the claims follow typical, functional steps of collecting data, storing data in the same place ("memory location") based on an undefined, pre-defined categorization scheme, and selecting data from a particular category to send in response to a signal or event.

The result might have been different here if BlackBerry had sought and obtained a technologically-driven construction of the term "channel," particularly one demonstrating that it is significantly more than simply a memory location itself. The Court also notes that although BlackBerry emphasized at claim construction and now that "proxy content server" is a coined term, it did not seek to specifically limit the claimed proxy content server to be coextensive with

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[8] And again, BlackBerry also seems to carefully use the word "channel" rather than "memory location" in presenting many of its arguments, even though it has agreed that "channel" and "memory location" are one and the same.

[9] The Court also notes that neither party sought construction of the terms "triggering event" or "feedback signal."

the embodiments of a proxy content server disclosed in the specification (presumably because doing so would have resulted in clear noninfringement positions for Defendants). These litigation decisions may have significantly contributed to the outcome reached here that the components of the asserted claims of the '351 Patent, whether considered alone or as an ordered combination, fail to recite an inventive concept.

BlackBerry has failed to show that there is a genuine issue of fact at *Mayo/Alice* Step Two for the asserted claims of the '351 Patent. Because the asserted claims fail to disclose an inventive concept at *Mayo/Alice* Step Two, they are not patent-eligible under 35 U.S.C. § 101.

B. <u>U.S. Patent No. 8,676,929</u>

1. Background of the Patent and the Asserted Claims

The '929 Patent is a continuation of the '351 Patent and shares substantially the same specification as the '351 Patent. It also shares the same title, "System and Method for Pushing Information to a Mobile Device." The '929 Patent issued on March 18, 2014.

BlackBerry argues that Snap and Facebook Defendants infringe Claims 1, 9, and 16 of the '929 Patent. SDF re Consolidated § 101 Motion, Docket No. 310-1 ¶¶ 23, 25.

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.

'929 Patent, Claim 1.

Claim 9 of the '929 Patent is another independent claim that states:

> 9. A server, comprising:

a database organized into a plurality of memory location channels, each of the memory location channels storing information of a same category as a pre-defined category of each of the respective memory location channels,

wherein upon detection of

a triggering event comprising a time triggering event, determining the information relevant to the detected triggering event from among information stored in one of the plurality of memory location channels of the database, when the information relevant to the detected triggering event comprises content information, inserting into the content information a meta tag for one or more advertisements to be displayed with the content information, and transmitting the content information that includes the meta tag to a mobile device,

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.

Id. at Claim 9.

Claim 16 of the '929 Patent depends from Claim 9 and states:

16. The server of claim 9, wherein the one or more advertisement comprises static advertisement, dynamic advertisement, or default advertisement.

Id. at Claim 16.

2. *Mayo/Alice*

The asserted claims of the '929 Patent bear significant similarities to the asserted claims of the '351 Patent. Specifically, they refer to selecting relevant information out of a collection of organized, categorized information and sending that relevant information to someone at a particular time. In contrast to the '351 Patent asserted claims, the claims also require in certain circumstances, in addition to sending the selected information, also inserting a meta tag for advertising information to be sent along with the selected information. It is the asserted claims' reference to a meta tag that provides the parties' separate disputes for the patent-eligibility of these claims as compared to the claims of the '351 Patent.

During claim construction, the Court considered the parties' dispute regarding the term "meta tag" and stated in part:

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. [Docket No. 125-1] ¶ 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? MetaTags 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, [footnote omitted] 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.

Docket No. 157 at 15-16 (emphasis in original).

BlackBerry's primary argument for both steps is that "rather than sending the full advertisement, the ['929] Patent describes sending an embedded control sequence referencing the full advertisement to be timely delivered to the device later – e.g., when the device is actually accessing or displaying the content to which the advertisement corresponds, thereby ensuring that bandwidth is not consumed sending advertisements that a user may never see." Docket No. 284-

1 at 26.

At *Mayo/Alice* Step One, because the inquiry is on the overall "focus" of the claims and whether they are "directed to" an abstract idea, the Court finds that the recitation of transmitting a meta tag to a mobile device in some, but not all, circumstances where information is sent to the mobile device does not shift the Step One inquiry. The overall focus of the asserted claims of the '929 Patent continues to be on the organization of information into categories stored in the same place and the transmission of information from a particular category in response to an event. As with the asserted claims of the '351 Patent, these are abstract concepts. The additional recitation of a meta tag does not change this overall focus of the claims. A meta tag is simply a specific, narrower type of information sent to a wireless device in combination with other information. That, according to BlackBerry, sending a meta tag versus a full advertisement may decrease bandwidth usage or processing power is not necessarily required or reflected by either the claims or specification, including BlackBerry's proposed construction of "meta tag." *See Symantec*, 838 F.3d at 1316 ("Finally, IV argues that the '050 patent 'shrink[s] the protection gap and moot[s] the volume problem' . . . . However, the asserted claims do not contain any limitations that address the protection gap or volume problem, e.g., by requiring automatic updates to the antivirus or antispam software or the ability to deal with a large volume of such software.").

At *Alice/Mayo* Step Two, BlackBerry argues that "a fact issue remains as to whether BlackBerry's particular implementation of advertising meta tags served along with non-advertising content in response to a triggering event is an 'inventive concept.'" Docket No. 284-1 at 31. In presenting its position, BlackBerry continues to suggest that the term "meta tag" was "defined in the specification as 'an embedded control sequence inserted to indicate when advertising should be inserted,'" but further asserts there is not "anything in the construction that would limit [a meta tag] to text[, an HTML tag, [or] an XML tag]." *Id.* at 29-30; *see also id.* at 30 (citing '929 Patent at 8:32-35). Defendants, meanwhile, present evidence that:

> [a] named inventor of the '929 patent testified that he conceived the "meta tag" simply to "indicat[e] some meta information about an advertisement that should be included within the content,"–nothing about "tailoring" or "deferred choices." (See [Brown Tr., Docket No. 342-1] ¶ 288.) And the named inventor was clear: "Q. Do you believe that you and your co-inventors were the first to embed some type of control sequence in other information? A. No." (*Id.* ¶ 294.) Another named inventor agreed a "meta tag" was just "some kind of specific identifiable place holder, it holds the place that another piece of information will inhabit," not anything that "tailors" or "enabl[es] a

> deferred choice" of information. ([Deposition Transcript of Gary Mousseau, Third Party Witness, Docket No. 342-3] ¶ 318.) And he reinforced [that] the "meta tag" was nothing special: "the use of a tag to represent another piece of information, no we didn't invent that." (*Id.* ¶¶ 319–20.)

Docket No. 342 at 13.

Even if the Court were to accept a construction of "meta tag" as "embedded control sequence" (a proposed construction it previously rejected, Docket No. 157 at 15-16), both BlackBerry's assertions and the evidence cited by Defendants reveal the problem: The claimed meta tag is not limited to a particular technological format, but instead, even according to BlackBerry, is broad enough to cover any form of embedding instructions with other transmitted information. Nor is there information regarding how this technologically amorphous "meta tag" is inserted (or as BlackBerry says, "embedded") into content. Without this information, the "meta tag" as claimed merely represents another abstract, results-oriented component of the claimed invention. It is also relevant that a "meta tag" as claimed and interpreted by BlackBerry appears to be just a narrow type of information, and specifically, information that represents a set of instructions. But information in an intangible form is not inventive. *Cf. Elec. Power*, 830 F.3d at 1355 ("[m]erely requiring the selection and manipulation of information . . . by itself does not transform the otherwise-abstract processes of information collection and analysis." (citation omitted)).

At the hearing, notably, BlackBerry emphasized the importance of the meta tag, arguing that it is "unique" and "different from prior HTML tags and XML tags and WML tags." But again, BlackBerry did not explain what, exactly, from a technological standpoint, the claimed meta tag is. Instead, BlackBerry simply transitioned to a discussion of "how the meta tag is being used here" and a general assertion that such use is different from how other meta tags were previously used (presumably based on the specific fact that here, the meta tag is being inserted into advertising content).

Importantly, as it did with the proxy content server, BlackBerry does not seem to argue that the exact form of the meta tag claimed in the '929 Patent is itself a non-routine or unconventional component. Instead, BlackBerry focuses on the incorporation of the meta tag into the overall claimed method described by the '929 Patent. *See, e.g.* Docket No. 284-1 at 32 ("the recited meta tag enables a deferred selection of advertisement to be inserted to content, wherein the advertisement is relevant to a detected triggering event."). The Court rejects this formulation

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of the Step Two inquiry for reasons previously stated, including that it continues to rely on and incorporate the abstract idea itself into the analysis. *See BSG*, 899 F.3d at 1290. The fact that the meta tag is inserted into advertisement, *i.e.* limited to a particular technological field of use, does not support patent-eligibility, either.

BlackBerry has failed to show that there is a genuine issue of fact at *Mayo/Alice* Step Two for the asserted claims of the '929 Patent. Because the asserted claims fail to disclose an inventive concept at *Mayo/Alice* Step Two, they are not patent-eligible under 35 U.S.C. § 101.

C. <u>U.S. Patent No. 9,349,120</u>

1. Background of the Patent and the Asserted Claims

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

BlackBerry argues that Facebook Defendants infringe Claims 9, 13, and 20 of the '120 Patent. SDF re Consolidated § 101 Motion, Docket No. 310-1 ¶ 118.

Claim 9 depends from Claim 1 of the '120 Patent. Both claims state:

> 1. A communication system configured to silence notifications for incoming electronic messages, the system comprising a data processor, non-transitory media readable by the data processor and a communications subsystem:
>> the communication subsystem adapted for receiving the incoming electronic messages; and
>> the non-transitory media readable by the data processor comprising coded program instructions adapted to cause the processor to:
>> receive a selected message thread for silencing;
>> in response to receiving the selected message thread, activate a flag stored in the non-transitory media in association with the selected message thread, wherein the flag indicates that the selected message thread has been silenced;
>> determine that a new incoming electronic message is associated with the selected message thread;
>> determine that the selected message thread has been flagged as silenced using the flag stored in the non-transitory media;
>> override a currently-enabled notification setting to prevent a receipt notification pertaining to new incoming electronic messages associated with the selected message thread from being activated; and
>> display 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.

9. The system of claim 1, wherein the system comprises a wireless device.

'120 Patent, Claims 1, 9.

Claim 13 is another independent claim of the '120 Patent that states:

13. A method for silencing notifications for incoming electronic messages to a communication system, the communication system comprising a data processor, media readable by the data processor and a communications subsystem, the communications subsystem adapted to receive the incoming electronic messages, 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.

Id. at Claim 13. Claim 20 is a multiple-dependent claim from Claims 13 and 19. Claims 19 and 20 recite:

19. The method of claim 13, further adapted to allow the message thread to be unflagged by deactivating the flag.

20. The method of claim 19, further comprising, after determining that the message thread has been unflagged, retaining the new incoming message associated with the inbox while allowing notifications pertaining to receipt of any subsequent new incoming message for the message thread, and associating any subsequent new incoming message with the inbox.

Id. at Claims 19, 20.

> 2. *Mayo/Alice*

At the motion to dismiss stage, the Court denied Facebook Defendants' bid to invalidate the claims of the '120 Patent. The Court stated:

Facebook Defendants make similar arguments regarding the '120 Patent to the arguments they made for the '634 Patent. *See* Facebook Reply at 10-15 (grouping together analysis for '120 and '634 Patents). They assert that "the idea of 'silencing' a message notification is certainly not unique to the digital context . . . , nor is the ability to 'un-silence.'" *Id.* at 13. In their arguments, the Facebook Defendants do not address the '120 Patent's recitation of displaying silenced messages "in a different manner" except to say that this limitation is "generic" and "high-level." *See id.* at 12. This limitation, however, in combination with a flag and override system for automatically identifying and silencing particular messages, is sufficient at the pleading stage to demonstrate that the claims are drawn to a technological improvement over other communication device messaging systems rather than being drawn to an abstract idea. [Footnote 16 regarding *Mayo/Alice* Step Two omitted.] The '120 Patent explains that someone receiving electronic messages "may receive a notification each time a message or comment is sent or posted to a group site of which they are a member." '120 Patent at 43-46. BlackBerry argues that the claims of the '120 Patent "create[ ] an improved electronic user interface that evaluates incoming messages according to user selection, allows certain messages to trigger the device's standard notification behavior, but processes other messages in a specialized manner where they do not trigger notifications and are not displayed in the normal way." Opposition to Facebook at 3. Unlike the '713 Patent, which fails to provide any specifics about how a time stamp is displayed or the system for assigning time stamps (beyond the predetermined duration of time rule), the '120 Patent claims, at least on their face, include some specifics about how to process a silenced message when it is received (including by "overriding at least one currently-enabled notification setting") and requiring that it is displayed differently from other messages. [*Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1362 (Fed. Cir. 2018)] ("Although the generic idea of summarizing information certainly existed prior to the invention, these claims are directed to a particular manner of summarizing and presenting information in electronic devices."). The Court finds this sufficient at the pleading stage.

At the hearing, Facebook Defendants again urged that the claims of the '120 Patent fail to provide the "how." In other words, according to the Facebook Defendants, the claims are so result-oriented that a person of skill in the art would have no information about how to carry out the claimed concepts. The Facebook Defendants stated, for example, that the claims are drawn to patent-ineligible concepts because they do not describe how to override a currently-enabled notification setting. Like many defendants, Facebook Defendants ask for too much. Particularly at the pleading stage, the point is that the "overriding" step does provide some information about how the claimed concept – silencing incoming messages – is carried out.

Instead of just claiming "incoming message is silenced," the claims state that the incoming message is silenced, in part, by relying on a system of flags and by overriding a currently-enabled notification setting. The common refrain of Defendants stating that claims are lacking in describing the "how" begins to ring hollow in these circumstances. [Footnote 17: Facebook Defendants' arguments may be better suited to an enablement or written description challenge.] There are different levels of "how" information, and how much "how" is necessary may ultimately be dependent on the level and knowledge of a person of skill in the art at the time of the invention. At least at this stage, on the pleadings alone with no factual evidence to support or refute the claim language, the Court finds the amount of "how" claimed in the '120 Patent is sufficient for patent eligibility purposes at the motion to dismiss stage. The Court would **DENY** without prejudice Facebook Defendants' Motion as to the '120 Patent.

Docket No. 68 at 23-24.

The critical dispute for purposes of the § 101 analysis for the '120 Patent (as well as for the '173, '327, and 084 Patents) remains the same: are the claims more closely aligned with *Core Wireless* and cases involving improvements to graphic user interfaces, or are they more closely aligned with *Electric Power Group* and other cases involving the generic display of otherwise abstract concepts? *See Enfish*, 822 F.3d at 1334 ("both this court and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.").

In *Core Wireless*, the Federal Circuit considered the following representative claim:

1. A computing device comprising a display screen, the computing device being configured to display on the screen a menu listing one or more applications, and additionally being configured to display on the screen an application summary that can be *reached directly* from the menu, wherein the application summary displays a limited list of data offered within the one or more applications, each of the data in the list being selectable to launch the respective application and enable the selected data to be seen within the respective application, and wherein the application summary is displayed while the one or more applications are in an *un-launched state*.

Core Wireless, 880 F.3d at 1359 (emphasis in original). The Federal Circuit concluded the asserted claims were "directed to an improved user interface for computing devices." *Id.* at 1362. It stated:

Although the generic idea of summarizing information certainly existed prior to the invention, these claims are directed to a particular manner of summarizing and presenting information in electronic devices. Claim 1 of the '476 patent requires "an application summary that can be reached directly from the menu," specifying a particular manner by which the summary window must be accessed. The claim further requires the application

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summary window list a limited set of data, "each of the data in the list being selectable to launch the respective application and enable the selected data to be seen within the respective application." This claim limitation restrains the type of data that can be displayed in the summary window. Finally, the claim recites that the summary window "is displayed while the one or more applications are in an un-launched state," a requirement that the device applications exist in a particular state. ***These limitations disclose a specific manner of displaying a limited set of information to the user, rather than using conventional user interface methods to display a generic index on a computer***. Like the improved systems claimed in *Enfish*, *Thales*, *Visual Memory*, and *Finjan*, these claims recite a specific improvement over prior systems, resulting in an improved user interface for electronic devices.

Id. at 1362-63 (emphasis added). The Federal Circuit further explained that certain language in the specification "clearly indicates that the claims are directed to an improvement in the functioning of computers, particularly those with small screens." *Id.*

In *Data Engine*, the Federal Circuit reconfirmed that specific limitations related to improving user interfaces are patent eligible. A representative disputed claim included the following limitations:

> displaying on said screen display a first spreadsheet page from a plurality of spreadsheet pages, each of said spreadsheet pages comprising an array of information cells arranged in row and column format, at least some of said information cells storing user-supplied information and formulas operative on said user-supplied information, each of said information cells being uniquely identified by a spreadsheet page identifier, a column identifier, and a row identifier;
>
> while displaying said first spreadsheet page, displaying a row of spreadsheet page identifiers along one side of said first spreadsheet page, each said spreadsheet page identifier being displayed as an image of a notebook tab on said screen display and indicating a single respective spreadsheet page, wherein at least one spreadsheet page identifier of said displayed row of spreadsheet page identifiers comprises at least one user-settable identifying character;
>
> receiving user input for requesting display of a second spreadsheet page in response to selection with an input device of a spreadsheet page identifier for said second spreadsheet page;
>
> in response to said receiving user input step, displaying said second spreadsheet page on said screen display in a manner so as to obscure said first spreadsheet page from display while continuing to display at least a portion of said row of spreadsheet page identifiers; and
>
> receiving user input for entering a formula in a cell on said second spreadsheet page, said formula including a cell reference to a particular cell on another of

said spreadsheet pages having a particular spreadsheet page identifier comprising at least one user-supplied identifying character, said cell reference comprising said at least one user-supplied identifying character for said particular spreadsheet page identifier together with said column identifier and said row identifier for said particular cell.

Data Engine Techs. LLC v. Google LLC, 906 F.3d 999, 1005 (Fed. Cir. 2018). The Federal Circuit found the claim was "directed to a specific method for navigating through three-dimensional electronic spreadsheets." *Id.* at 1008. It explained that previous techniques were not "user-friendly" because "[u]sers had to search through complex menu systems to find appropriate commands to execute simple computer tasks . . . . This was burdensome and hindered a user's ability to find or access the many commands and features available." *Id.* The Federal Circuit found the patents:

> solved this known technological problem in computers in a particular way – by providing a highly intuitive, user-friendly interface with familiar notebook tabs for navigating the three-dimensional worksheet environment. The improvement allowed computers, for the first time, to provide rapid access to and processing of information in different spreadsheets, as well as easy navigation in three-dimensional spreadsheets . . . . [T]he claims require a specific interface and implementation for navigating complex three-dimensional spreadsheets using techniques unique to computers.

Id. at 1008-09. In another notable passage, the Federal Circuit rejected the notion that the claims were patent-ineligible because they could be analogized to real-world practices:

> Google avers that humans have long used tabs to organize information. It cites tabbed notebooks, binder dividers, file folders, and sticky Post-it notes as well-known examples of organizing information using tabs. We agree that tabs existed outside the context of electronic spreadsheets prior to the claimed invention. It is not enough, however, to merely trace the invention to some real-world analogy. The eligibility question is not whether anyone has ever used tabs to organize information. That question is reserved for §§ 102 and 103. The question of abstraction is whether the claim is "directed to" the abstract idea itself. *Id.* We must consider the claim as a whole to determine whether the claim is directed to an abstract idea or something more. Google fails to appreciate the functional improvement achieved by the specifically recited notebook tabs in the claimed methods.

Id. at 1011.

In the same opinion, however, the Federal Circuit found other representative claims were not patent-eligible The Federal Circuit found another claim for an electronic spreadsheet that required partitioning a plurality of cells, associating each cell with a user-settable page identifier, creating in a first cell on a first page a formula referencing a second cell in a second page, and

storing the pages so they appeared to be stored in a single file as "cover[ing] any means for identifying electronic spreadsheet pages" that was "not limited to the specific technical solution and improvement in electronic spreadsheet functionality the rendered representative claim 12 of the '259 patent eligible." *Id.* at 1012. The Federal Circuit emphasized that there was no reference to "the specific implementation of a notebook tab interface" in reaching its determination at *Mayo/Alice* Step One and moving on to Step Two. *Id.* Perhaps also notably, this second representative claim did not include reference to displaying information at all.

Also in juxtaposition to the patent-eligible *Core Wireless* and *Data Engine* claims, the Federal Circuit has consistently reiterated that the generic display of information collected and organized is still abstract. In *Interval Licensing*, the claims at issue referred to a "computer readable medium" for displaying generated images on a graphic user interface using an "attention manager" that would avoid overlapping acquired content with already-displayed content "with which the user is actively engaged." *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1341 (Fed. Cir. 2018). The Federal Circuit found the claims abstract, stating, "[s]tanding alone, the act of providing someone an additional set of information without disrupting the ongoing provision of an initial set of information is an abstract idea." *Id.* at 1345. The Federal Circuit concluded that the "attention manager" "simply demands the production of a desired result (non-interfering display of two information sets) without any limitation on how to produce that result." *Id.* Collecting cases, the Federal Circuit further explained:

> [w]e have recognized that "[i]nformation as such is an intangible" and that collecting, analyzing, and ***displaying that information***, without more, is an abstract idea. *Elec. Power Grp.*, 830 F.3d at 1353-54; *see also id.* at 1355 (noting claim requirement of "'displaying concurrent visualization' of two or more types of information" was insufficient to confer patent eligibility) . We have also held that claims directed to ***displaying two different information sets*** sequentially are abstract. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (claims directed to abstract idea of "showing an advertisement before delivering free content"). Similarly, we have held that claims directed to a ***single display of information*** collected from various sources are abstract. *See* [*Capital One Fin. Corp.*, 850 F.3d at 1341-42] (holding claims which recited creating a "dynamic document" using content from multiple electronic records ineligible under § 101). Recitation, as in this case, of the collection, organization, ***and display of two sets of information*** on a generic display device is abstract absent a "specific improvement to the way computers [or other technologies] operate." *Enfish*, 822 F.3d at 1336.

Id. at 1344-45 (emphasis added).

But even moreso than these cases, Defendants heavily stress the Federal Circuit's determination in *Trading Technologies Int'l, Inc. v. IBG LLC*, 921 F.3d 1084, 1091 (Fed. Cir. 2019) ("*Trading Tech. II*"). In this recent case, the Federal Circuit found a "method of facilitating trade order entry" that involved the following claim limitations to be patent-ineligible:

> displaying, by the computing device, a plurality of graphical locations aligned along an axis, where each graphical location is configured to be selected by a single action of a user input device to send a trade order to the electronic exchange, where a price of the trade order is based on the selected graphical location;
>
> mapping, by the computing device, the plurality of sequential price levels to the plurality of graphical locations, where each graphical location corresponds to one of the plurality of sequential price levels, where each price level corresponds to at least one of the plurality of graphical locations, and where mapping of the plurality of sequential price levels does not change at a time when at least one of the current highest bid price and the current lowest ask price changes[.]

Id. at 1090. Without much explanation, the Federal Circuit panel[10] rejected an analogy to *Core Wireless*, stating:

> [t]he fact that this is a "computer-based method" does not render the claims non-abstract. The specification indicates the claimed GUI is displayed on any computing device . . . . The claims of the '999 patent do not improve the functioning of the computer, make it operate more efficiently, or solve any technological problem. Instead, they recite a purportedly new arrangement of generic information that assists traders in processing information more quickly. We conclude that the claims are directed to the abstract idea of graphing bids and offers to assist a trader to make an order.

Id. at 1093. In comparison, in a nonprecedential decision two years earlier, the Federal Circuit found Trading Technologies' asserted claims for "[a] method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange" patent-eligible. *Trading Techs. Int'l, Inc. v. CQG, INC.*, 675 F. App'x 1001, 1004 (Fed. Cir. 2017) ("*Trading Tech. I*"). In that case, the Federal Circuit concluded that claims involving, among other detailed requirements, "dynamically displaying" first and second indicators in a "bid display region," as well as "displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis" were non-abstract. *Id.* at 1003 ("In the patented

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[10] At the hearing, Defendants emphasized that Judge Moore penned both *Core Wireless* and *Trading Tech. II*.

system bid and asked prices are displayed dynamically along the static display, and the system pairs orders with the static display of prices and prevents order entry at a changed price."). The representative claim discussed also included a limitation requiring, "in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the commodity and sending the trade order to the electronic exchange." *Id.* The Federal Circuit stated:

> The claims require a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface's structure that is addressed to and resolves a specifically identified problem in the prior state of the art [relating to the speed, accuracy, and usability of prior art graphical user interfaces]. The district court concluded that the patented subject matter meets the eligibility standards of *Alice* Step 1. We agree with this conclusion, for all of the reasons articulated by the district court, including that the graphical user interface system of these two patents is not an idea that has long existed

Id. at 1004. Although somewhat difficult to reconcile, the Tentative Ruling posited that the differing preambles for the claims in these cases involving Trading Technologies patents appear to held the key. The Court observed that while the "focus" of the representative claim in *Trading Tech. II* was on "facilitating trade order entry," *Trading Tech. I* specifically claimed "a method for *displaying*" information for facilitating trade order entry. It further speculated that it is possible the "dynamic display" requirements of the claims in *Trading Tech. I* also played a role, as *Trading Tech. I* suggests that graphical user interfaces involving graphical locations displayed long an x-y axis otherwise existed before the relevant patent was filed. *See Trading Tech. I* at 1004 (explaining district court found claims "are directed to improvements in existing graphical user interface devices that have no 'pre-electronic trading analog,' and recite more than 'setting, displaying, and selecting' data or information that is visible on the [graphical user interface] device.'").

It becomes increasingly difficult to wade through the vast number of appellate decisions regarding § 101 and discern a dividing line between cases that are found drawn to an abstract idea, and those that are not. The asserted claims of the '120 Patent present a close call. They do not seem to include the same level of detail found in the patent-eligible *Data Engine* and *Trading Tech. I* claims. But certainly, the Court finds there is more to these claims than *Interval Licensing*, *Electric Power*, and related generic display cases. Indeed, although Facebook Defendants complain about BlackBerry's common refrain to *Core Wireless*, *Core Wireless* still appears to be the most analogous case here. Like *Core Wireless*, Claims 1 and 13 of the '120 Patent refer to

certain requirements for the display of information on a graphical user interface, *i.e.* the different appearance of an incoming, silenced message compared to other messages. But also like *Core Wireless*, the claims address a backend, computer-focused system leading to that display, *i.e.* a system of flags used such that a computer can override at least one currently-enabled notification setting to permit the unique treatment of silenced messages compared to other incoming messages.

The Court is also particularly persuaded by BlackBerry's explanation as to why Facebook Defendants' attempt at a real-world long-standing human practice analogy (to an assistant holding their boss's phone calls) breaks down. BlackBerry explains, "[t]he '120 patent claims require that the new message is displayed in an inbox in a different manner from those message threads which are not silenced. In Facebook's analogy, however, the person never learns of the call at all because the assistant is 'holding' it. This is in some ways the opposite of the invention of the '120 patent." Docket No. 2841 at 35. The Court agrees that the particular problem addressed by the '120 Patent claims relates to managing receipt of incoming electronic messages in a way that specifically arises in the computer electronic messaging context. Facebook Defendants' arguments to the contrary are rejected. In the same way *Core Wireless* and *Data Engine* found the recited claim limitations' improvements permitted a user to more efficiently navigate a graphical user interface environment, the Court finds the claims here are directed to a technological improvement that permits a computer to manage the receipt and display of incoming messages so that a user may more efficiently interact with an electronic messaging system.

At the hearing, Facebook Defendants posited one way to reconcile the various Federal Circuit decisions, including the two *Trading Tech.* cases. They argued that a common thread between the claims found patent-eligible is that they require some type of interaction between the user and graphical user interface, particularly based on unique features of the interface itself, so that the user interaction causes the computer to function differently. Facebook Defendants' argument does highlight an interesting, common thread between the cases involving patent-eligible claims. But as BlackBerry observed at the hearing in discussing other patents at issue, the asserted claims are like *Core Wireless* in that they seem focused on *decreasing* the amount of interaction required between computer and user, and having the computer work in a different way based on that decreased interaction. Even under Facebook Defendants' position, these claims also implicitly require some user interaction in that a user must first select a message thread to be silenced, such that the claimed steps of flagging an incoming message and overriding normal settings can be

performed.

Although a close call, the Court maintains its determination from the motion to dismiss stage that the asserted claims of the '120 Patent are drawn to a technological improvement under *Core Wireless*, not an abstract idea. Facebook Defendants' § 101 challenge to these claims is rejected at *Mayo/Alice* Step One.

D. U.S. Patent No. 8,279,173

1. Background of the Patent and the Asserted Claims

The '173 Patent issued October 2, 2012 and is titled "User Interface for Selecting a Photo Tag."

BlackBerry argues that Facebook Defendants infringe Claim 14 of the '173 Patent, which depends from unasserted Claim 13. Docket No. 267-1 at 4; *see also* Docket No. 249-1 at 13. Claim 13 of the '173 Patent states:

> 13. A computer readable medium storing computer code that when loaded into a device adapts the device to select a photo tag for a tagged photo, the computer readable medium comprising:
>   code for displaying a tag list including tags from one or more tag sources matching a search string;
>   code for displaying a tag type indicator for each tag appearing in the tag list, said tag type being indicative of a tag source associated with the tag.

'173 Patent, Claim 13. Claim 14 states:

> 14. The computer readable medium of claim 13, further comprising code for providing a tag entry field for entering the search string.

Id. at Claim 14.

2. *Mayo/Alice*

Facebook Defendants have not previously challenged the '173 Patent under § 101 in this case. Like the '120 Patent, the parties' § 101 disputes present an even closer call for the '173 Patent. The same Federal Circuit cases are largely applicable.

Here, the Court believes one relevant question is whether the claims are more closely analogous to the patent-eligible claims or patent-ineligible claims in *Data Engine*. The Court has some concerns that, like the patent-ineligible *Data Engine* claims, the "displaying" steps in Claims 13 and 14 of the '173 Patent are more generalized. The asserted claims do not require any particular types of "tags," "tag sources," "tag type indicators," or "tag entry fields," and the parties

did not ask the Court to construe any of these terms in a particular way.[11] Because of this, unlike the patent-eligible *Data Engine* claims, which required a very specific spreadsheet tab design, the claims' references to broader "tag" concepts may offer less in the way of a technological improvement.

On the other hand, however, the Court again agrees with BlackBerry that there are some holes in Facebook Defendants' analogies to real-world long-standing human practice. Even in its very brief Background section, the '173 Patent explains that photo "tagging" is "popular in many **online contexts**."[12] *See* '173 Patent at 1:21-29 (emphasis added); *see also id.* ("Identifying people or objects in photographs is popular in many online contexts, such as photo sharing, social networking, etc. Selecting a "tag" to associate with an identified point in a photograph can be a complicated task if there are many potential tags to choose from. In addition, wireless mobile communication device where there are constraints on the size of the display and the flexibility of the input method, some of these common techniques used on desktops and laptops with full sized screens do not work as well."). Although Facebook Defendants offer up colorful analogies, they seem largely hindsight-driven. It is not necessarily clear that photo tagging, at least in the way disclosed in the '173 Patent (including by entering a search string to pull up a list of tag options with corresponding tag type indicators) has a true pre-computer analogue. Certainly, as Facebook Defendants propose, a person *could* take a stack of sticky notes with pre-written, pre-categorized names and places and manually search through the stack of "tags" before slapping a desired tag on a hard-copy photo, but the same convenience and benefit of doing so in the computer context – and particularly through a system of icons ("tag type indicators") that make the system work for a small computer screen are lost. As BlackBerry notes, the Federal Circuit explained when discussing the patent-eligible claims in *Data Engine*, "[i]t is not enough . . . to merely trace the

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[11] In addition to the other discussion provided in this section leading the Court to conclude the asserted claims are not abstract, the Court questions whether § 101 analysis is even appropriate at this point without construction for certain terms in the asserted claims of the '173 Patent.

[12] Indeed, notably, disclosed embodiments in the '173 Patent offer up examples specific to Facebook, with figures depicting the Facebook logo at the top of the images. *See* '173 Patent at Figures 3A-3E, 4A-4F. BlackBerry provides some additional discussion in its opposition about this point, including the assertion that "Facebook sought out BlackBerry" regarding user interface technology for small screen devices, including the technology disclosed in the '173 Patent. Docket No. 316-1 at 1-2. The fact that the embodiments disclosed in the '173 Patent directly and explicitly refer to Facebook is an interesting data point, particularly in the context of the "real-world analogue" question. The Court otherwise does not place much weight, if any, on BlackBerry's discussion regarding the parties' previous interactions.

invention to some real-world analogy. The eligibility question is not whether anyone has ever used tabs to organize information . . . . [D]efendants fail[ ] to appreciate the functional improvement achieved by the specifically recited notebook tabs in the claimed methods." *Data Engine*, 906 F.3d at 1011; *see also DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258 (Fed. Cir. 2014) (rejecting analogy of claims to a brick and mortar "store within a store" because "[w]hile that concept may have been well-known by the relevant timeframe, that practice did not have to account for the ephemeral nature of an Internet "location" or the near-instantaneous transport between these locations made possible by standard Internet communication protocols, which introduces a problem that does not arise in the 'brick and mortar' context."). Here, the claims appear to similarly offer up a functional improvement specific to the technological field by streamlining a process for a social-media-driven function of "tagging" digital photos, rather than an abstract idea limited to a particular technological environment.

As noted, Claim 14 requires code to "select a photo tag for a tagged photo" that can be loaded onto a device, where the code provides for a tag entry field for entering a search string, such that a tag list for tags with tag sources matching that search string is displayed, where a tag type indicator is also displayed for each tag. It is particularly relevant that Claim 14 includes a requirement for a "tag entry field" on a display where a search string can be entered to pull up a list of relevant potential tags. A reasonable real-world analogue does not exist, and for that reason and others, the claim's requirements more closely resemble an "improvement in computers as tools, [than] . . . independently abstract ideas that use computers as tools." *Elec. Power Grp.*, 830 F.3d at 1354.

The Court also notes that, although the '173 Patent was not really discussed at the hearing, for similar reasons provided for the '120 Patent, the claims again implicitly require some interaction between human and computer (in that a human would presumably be able to type desired information into the tag entry field contemplated by Claim 14, and select a tag to electronically "tag" a photo). Facebook Defendants' "test" for graphic user interface claim eligibility would thus also seem to be at least somewhat satisfied by the requirements of the claims.

Facebook Defendants separately bring their § 101 challenge against the '173 Patent based on a narrow line of Federal Circuit cases finding claims covering "transitory electrical and electromagnetic signals propagating through some medium, such as wires, air, or a vacuum" patent-ineligible because "[t]hose types of signals are not encompassed by any of the four

enumerated statutory categories: 'process, machine, manufacture, or composition of matter.'" *In re Nuijten*, 500 F.3d 1346, 1352 (Fed. Cir. 2007). This concept and line of cases was reconfirmed in *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1294 (Fed. Cir. 2017), *cert. dismissed*, 139 S. Ct. 44 (2018). In that case, "the specification defined the claimed machine-readable medium as including read-only memory, random-access memory, CD-ROMs, magnetic tape, optical data storage devices, and carrier waves." *Id.* Because the claimed "machine-readable medium" covered "carrier waves," the Federal Circuit affirmed the district court's determination finding the claims patent-ineligible under *Nuijten*. *Id.* at 1294-95.

As Facebook Defendants note, the parties' dispute rests on a purely legal claim construction determination: the meaning of the term "computer readable medium" as used in the preamble of the asserted patent claims of the '173 Patent. Based on the Court's review of the parties' arguments and the intrinsic record, the Court first agrees with BlackBerry that the preamble of Claim 13 of the '173 Patent is limiting because it is "necessary to give life, meaning, and vitality to the claim." *Eaton Corp. v. Rockwell Int'l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003) (internal quotations omitted). Second, at least on the current record and when balanced against the intrinsic evidence cited by BlackBerry, the Court is not persuaded by Facebook Defendants' citations to extrinsic evidence for the proposition that transitory waves can "***store***" computer code, as required by the claims. *See* Docket No. 316-1 at 20-21, Docket No. 343 at 15-16. Based on the record as currently framed by the parties, Facebook Defendants' contrary claim construction positions, and thus their challenge under *Nuijten*, are rejected.

Ultimately, the Court concludes that the claims are not invalid under 35 U.S.C. § 101 under either the *Mayo/Alice* or *Nuijten* framework. Facebook Defendants' challenges to the contrary are rejected.

E. U.S. Patent Nos. 8,326,327 and 8,825,084

1. Background of the Patents and the Asserted Claims

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.

BlackBerry argues that Snap infringes Claims 1, 2, 3, and 9 of the '327 Patent. Docket No. 272-2 at 3. 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.

'327 Patent, Claim 1. Claims 2, 3, and 9 are dependent claims that depend from Claim 1 of the '327 Patent. They state:

2. The 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.

3. The mobile device as recited in claim 1, wherein the level of activity is based upon at least one of a number of images being captured, a number of videos being captured, or a number of messages being transmitted within a predetermined distance from the at least one action spot.

9. The mobile device as recited in claim 1, wherein the processor module is further configured to receive executable instructions to:
    run an image acquisition application on the mobile device;
    display an image from a camera module on the display screen; and
    display the image with the at least one activity spot.

Id. at Claims 2, 3, 9.

BlackBerry also argues that Snap infringes Claims 1, 2, and 6 of the '084 Patent. Docket No. 272-2 at 3. Claim 1 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;

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> 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.

'084 Patent, Claim 1. Claims 2 and 6 depend from Claim 1 and state:

> 2. The server as recited in claim 1, wherein the at least one action spot corresponds to a location where at least one other mobile device has engaged in a documenting action is within a predetermined period of time.
>
> 6. The server as recited in claim 1, wherein the indication comprises one or more graphical icons identifying a relative level of documenting action occurring at the at least one action spot.

Id. at Claims 2, 6.

2. *Mayo/Alice* Step One

Past the pleading stage and after claim construction, it is clear that the asserted claims of the '327 and '084 Patents are unlike the asserted claims of the '120 and '173 Patent and instead more akin to the asserted claims of the '351 and '929 Patents. Although BlackBerry again cites *Core Wireless* in defending these claims, of note, the asserted claims of the '084 Patent do not even mention a display. Instead, Claim 1 of the '084 Patent simply requires "determining" an action spot and "transmitting" it to the mobile device along with an "indication" of an activity level. *Core Wireless* does not even come into play for these claims.

The asserted claims of the '351 Patent do refer to display of information on a graphical user interface, but they do so broadly. For instance, Claim 1 of the '351 Patent requires a processor to "display" a generic "graphical user interface," "signify" an action spot on the graphical user interface and "provide an indication of activity level at the at least one action spot" (with no requirement that this "indication of activity level" even occur in the same graphical user interface screen where the action spot is "signified").

Contrary to BlackBerry's argument, these generalized requirements do not provide a "specific structure for depicting relevant information," Docket No. 309 at 1, but instead recite generic display requirements similar to those rejected in *Interval Licensing* and its collected cases. *See Interval Licensing*, 896 F.3d at 1344-45 ("'[i]nformation as such is an intangible' and . . . collecting, analyzing, and ***displaying that information***, without more, is an abstract idea . . . . Similarly, we have held that claims directed to a ***single display of information*** collected from

various sources are abstract."); *see also Affinity Labs*, 838 F.3d at 1256 (claims invalid that related to providing a display on a mobile device that a user could use to select content from regional broadcasting channels, and requiring certain steps if the "wireless cellular telephone device is outside of a broadcast region of the regional broadcasting channel").

This conclusion is reinforced by certain claim constructions reached in this case, as well as BlackBerry's affirmative infringement theory against Snap for these patent claims. The Court sided with BlackBerry during claim construction in finding that the claims: (1) require not all, but simply "at least one" action spot be determined; (2) and are not limited to "specific" distances; (3) but found the claimed "predetermined distance" must be set before the at least one action spot is determined. *See* Docket No. 157 at 36-38. As Snap notes, the fact that the claims simply require the identification of "at least one action spot" would also mean that they may not necessarily solve shortcomings with prior art methods of manually searching for nearby events and activities. The asserted claims of the '327 Patent also require that an "action spot" relate to a "documenting action" that has occurred within a "predetermined duration of time," but the parties did not seek construction of the term "predetermined duration of time," and its plain meaning supports that it could cover durations of time of undefined length, so long as they are "predetermined." There are no similar requirements for the asserted claims of the '084 Patent, which simply state that an action spot is corresponds to a location where a user "has engaged" in documenting activity, with no limits in time. In other words, as broadly interpreted, the Court would find that the claims themselves do not on their face require "automatic," "periodic," or otherwise timely updates of action spot information.

In addition, at least according to Snap, BlackBerry is arguing that Snap infringes the asserted claims with algorithms identifying purported "action spots" worldwide and without regard to the relative, current locations of mobile devices to one another.[13] Docket No. 364 at 9-10. Snap further argues that "[a]ccording to BlackBerry's infringement allegations, ***no precision is***

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[13] It is clear BlackBerry agrees that the claims require, for instance, "receiv[ing] data indicative of a current location of the mobile device," but beyond that, particularly when the "predetermined distance" between the devices can be worldwide, the relative locations of the two wireless devices loses relevance.

At the hearing, BlackBerry argued that Snap's system will display different "action spots" for different users depending on the time that they are searching for other "action spots." Although the Court agrees this appears to be somewhat contrary to some of Snap's assertions, ultimately this fact about Snap's accused system provides no information about whether *the claims* require adjustments or updates to what action spots are shared with a mobile device based on the passage of time.

required." *Id.* at 9.

This broad claim scope – lacking sufficient limits in space, time, or any relevance to the current, relative locations between the first and second mobile devices – means, among other things, that Snap's long-standing real-world analogies become significantly more relevant and applicable. The claimed concepts of identifying and documenting the level/location of nearby (or faraway) activities is encapsulated in heat maps, news reporters chasing traffic patterns, and generals studying the location and size of nearby troop formations. Similarly, the broad claim scope reveals the result-oriented nature of the claims. There is no information about how to "determine" an action spot[14] or (for the '327 Patent claims) how to display information related to the action spot on a graphical user interface (beyond requirements in dependent Claims 2 and 9 which − although providing further details about the display of action spot information − the Court finds are insufficient to change the analysis). Instead, all that is left at Step One are abstract concepts of relaying information about someone else's actions or activities to a user.

At the hearing, BlackBerry argued that just because a claim is "unbounded" in certain respects should not mean it is necessarily abstract. As a general proposition, the Court agrees. But this position must be balanced against preemption concerns, including avoiding patents that "too broadly preempt the use of a natural law [or abstract idea]." *Mayo*, 566 U.S. at 73; *see also id.* at 85 (patent law should "not inhibit further discovery by improperly tying up the future use of laws of nature [or abstract ideas]."). Here, like the '351 and '929 Patent claims, the "action spot patents" relate to a concept, and – particularly in Claim 1 of the '351 Patent and Claim 1 of the '929 Patent – do so in such a way that any implementation of that concept would be covered by the claims. The fact that the asserted claims lack meaningful limits in space, time, and relative location is simply a data point that reinforces the pre-emption concerns for these patents and shows their abstract nature.

In its opposition to Snap's motion, BlackBerry argues that Snap glosses over the dependent claims of the '327 and '084 Patents at Step One. Docket No. 309 at 24-25. Snap does not really respond to this point in its reply. At Step One, it urges that the "claims recite no detail on what an 'indication' of activity level is beyond an informational result." Docket No. 347-1 at 4. Snap refers to the independent claims and Claim 6 of the '084 Patent. Snap also observes that "[t]he

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[14] The claims on their face do not appear to even fully exclude the possibility that an action spot could be "determined" manually.

indication of the level of activity includ[ing] coloring the graphical item in accordance with a range of activity,' ['327 Patent] at 6:47-50[; *see also id.* at Claim 2], mirror[s] the age-old concept of 'heat maps' discussed in Snap's motion." *Id.* at 5. The Court agrees that for purposes of the Step One analysis, the additional detail recited by the dependent claims is insufficient to change the "focus" of the claims.

Having considered the parties' arguments, the Court finds the asserted claims of the '327 and '084 Patents are drawn to the abstract idea of locating and mapping activity of interest at *Mayo/Alice* Step One.

3. *Mayo/Alice* Step Two

In one of its Step One arguments, BlackBerry suggests that the asserted claims of the '327 and '084 Patents are patent-eligible because "[t]he inventors had to coin a new term to describe aspects of their invention – 'action spots.'" Docket No. 309 at 16. The tenor of this assertion repeats for BlackBerry's arguments at Step Two. *See id.* at 19. In the context of claim construction, however, the parties agreed that "action spot" meant "location or event where at least one activity is occurring relative to the current location of another mobile device." Docket No. 157 at 9. In addition, the Court found that "activity level" means "level of actions taken by one or more other mobile devices." *Id.* at 38-41. Beyond tethering these claim terms to mobile devices (and "documenting activity" that can be undertaken by a mobile device), the claim constructions show that these terms have meanings generally related to nearby actions or activities. And that tethering, *i.e.* "limiting the claims to [a] particular technological environment[,] . . . is, without more, insufficient to transform [the claims] into patent-eligible applications of the abstract idea at their core." *Elec. Power*, 830 F.3d at 1354; *Affinity Labs*, 838 F.3d at 1258-59 ("To be sure, the '379 patent claims the wireless delivery of regional broadcast content only to cellphones . . . . That restriction, however, does not alter the result. All that limitation does is to confine the abstract idea to a particular technological environment − in this case, cellular telephones.").

In addition, beyond further reinforcing that the asserted claims are limited to technological field of mobile devices, the concepts of "action spots" and "activity levels" are wrapped up in the abstract idea itself. As previously explained, "narrowing or reformulating an abstract idea does not add 'significantly more' to it." *BSG*, 899 F.3d at 1291; *see also id.* at 1290 ("it has been clear since *Alice* that a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible

concept."). Here, by their very constructions, the "action spots" and "activity levels" at their core simply relate back to locations of events where activities are occurring and "levels" of those activities (with "levels" not even limited to numeric values). The terms are not limited to particular types of graphic icons, color heat indicators, or other specific embodiment that might go above and beyond the abstract idea itself. *See also Data Engine*, 906 F.3d at 1012 (for claims that did not recite "the specific implementation of a notebook tab interface," concluding that "[t]hese limitations merely recite the method of implementing the abstract idea itself and thus fail under *Alice* step two."). Instead, as those terms have been construed, where the abstract idea is itself mapping activity levels, the asserted claims' use of "action spot" and "activity level" cannot supply the inventive concept as a matter of law. Indeed, as Snap notes in its reply brief, an "action spot" as construed is, in essence, a natural phenomenon in that it simply represents some other mobile device's activity. That mobile device activity would be occurring whether or not it is tracked or noticed by another mobile device, and the other mobile device played no role in its occurrence. For these additional reasons, the claimed action spots and activity levels cannot save the claims from abstraction. *See also Capital One Fin. Corp.*, 850 F.3d at 1342 ("[t]he mere fact that the inventor applied coined labels to conventional structures does not make the underlying concept inventive.").

The parties did not address the limitations added by the dependent claims of the '327 and '084 Patent at the hearing, but again, there has been no showing of a genuine factual dispute regarding whether any of the claim components disclosed in the dependent claims, when considered separate from the abstract ideas themselves, are drawn to non-routine or unconventional components.

Aside from its arguments regarding action spots and activity levels, BlackBerry's only argument is that under *Bascom*, the ordered combination of claim elements is inventive. Docket No. 309 at 23 (citing *Bascom*, 827 F.3d at 1350). BlackBerry does not offer sufficient evidence to support an assertion that there is something inventive in the particular combination of claim components. Nor is BlackBerry's position supported by the claim language itself, which refers to generic steps of receiving, transmitting, and displaying information performed in an order anyone would expect. The facts of *Bascom* are distinguishable, and no evidence shows that the result of *Bascom* is appropriately applied here.

Because the asserted claims fail to disclose an inventive concept at *Mayo/Alice* Step Two,

they are not patent-eligible under 35 U.S.C. § 101.

IV. Discussion Regarding Patent Infringement

BlackBerry moves for summary judgment of infringement as to five of the asserted patents. Three of those – U.S. Patent No. 8,677,250 ("the '250 Patent"), the '120 Patent, and the '173 Patent – are addressed in this section.[15] *See* BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patents 8,677,250; 8,279,173; and 9,349,120 against Facebook Defendants, Docket No. 247 (public), Docket No. 249-1 (sealed).[16] The parties did not address their disputes regarding patent infringement at the hearing.

Before turning to the parties' specific infringement dispute, the Court notes that in reviewing the parties' positions, they continuously lead to the same question: Is it a factual infringement dispute, or is it a legal claim construction dispute?[17] Based on the parties' arguments as framed and their competing positions, the answer was not always clear. To the extent not further discussed herein, as litigation continues, if any of the parties' disputes more clearly crystallizes as a critical claim construction dispute, the parties are expected to timely seek the Court's resolution of that dispute before trial.

In its reply brief, BlackBerry also makes the repeated argument that testimony from Facebook Defendants' fact witnesses regarding certain technical concepts related to the asserted patents should be fully disregarded because those witnesses have no familiarity with the asserted patents themselves. *See, e.g.*, Docket No. 320-1 at 5, 9, 15, 22, 25. BlackBerry never offers a legal citation for this assertion, and because it is made in BlackBerry's reply, Facebook Defendants have not had a (Court-sanctioned) opportunity to respond to it. BlackBerry also cites the sham affidavit rule as a basis to fully disregard some of Facebook Defendants' witness declarations, arguing that declaration statements are inconsistent with prior deposition testimony. *Id.* at 8, 22

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[15] As later discussed, because the Court has found the asserted claims of the '327 and '084 Patents invalid, it declines to address the parties' infringement dispute relating to those patents as moot.

[16] *See also* Facebook Defendants' Opposition to BlackBerry's Infringement Motion, Docket No. 280 (public), Docket No. 279-1 (sealed); BlackBerry's Reply in support of Infringement Motion, Docket No. 317 (public), Docket No. 320-1 (sealed); Statement of Disputed and Undisputed Facts regarding Infringement Motion, Docket No. 324 (public), Docket No. 326-1 (sealed).

[17] Specifically, this question arose for the following claim terms/limitations: "contact list" ('250 Patent); "enabling a game application on the electronic device to utilize a contact list for an instant messaging application for playing games with contacts in the contact list by identifying game play in the contact list" ('250 Patent); "tag type indicator" ('173 Patent); "tag source" ('173 Patent); and "flag" ('120 Patent).

n.11. Again, Facebook Defendants have not had an opportunity to respond to BlackBerry's arguments, and it is not entirely clear that the witnesses' declaration statements are indeed directly contrary to their previous testimony. Instead, the parties' disputes on these issues appear to highlight that factual disputes exist regarding the application of the asserted claims to the accused products.

The parties' literal infringement[18] disputes regarding the '250 Patent, '120 Patent, and '173 Patent are addressed with these comments in mind.

A. The '250 Patent

In its summary judgment motion, BlackBerry argues that Facebook Defendants infringe Claims 9 and 14 of the '250 Patent through the Facebook Website and Messenger platforms. Docket No. 249-1 at 6. Claim 9 is an independent claim that recites:

> 9. A non-transitory computer readable storage medium comprising computer executable instructions for enabling a game to be played on an electronic device, the computer readable medium comprising instructions for:
> [9.a] enabling a game application on the electronic device to utilize a contact list for an instant messaging application for playing games with contacts in the contact list by identifying game play in the contact list;
> [9.b] during a game in progress with a particular contact in the contact list, preparing game messages to be sent to the particular contact by including game progress data in an instant messaging message and an identifier to associate the data with the game application;
> communicating at least one game message during the game in progress with the particular contact using an instant messaging system used by the instant messaging application;
> displaying at least one instant message in an instant messaging conversation user interface associated with the particular contact indicative of game progress, the instant messaging conversation user interface enabling additional instant messages to be sent to the particular contact in addition to instant messages indicating game play; and
> displaying a game in progress user interface associated with the game play, after detecting a selection in the instant messaging conversation user interface to switch to the game in progress.

'250 Patent, Claim 9 (labels in brackets added). Claim 14 is a dependent claim with multiple dependencies from Claims 9, 12, and 13.

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[18] BlackBerry does not appear to raise any infringement theories based on the doctrine of equivalents in its summary judgment motion.

It seems Facebook Defendants "do not dispute that all of the limitations of the asserted claims are met by the accused systems except for limitations 9.a and 9.b." Docket No. 320-1 at 1. First, the parties dispute whether the "Chat Lists" in the accused instrumentalities satisfy the requirements of a "contact list" in limitation 9.a. Second, the parties dispute whether Facebook has met its burden of showing that certain aspects of the accused instrumentalities satisfy limitation 9.b's requirement of "including game progress data in an instant messaging message and *an identifier to associate the data with the game application*."

The parties' dispute regarding whether the accused instrumentalities' chat lists satisfy the "contact list" limitation presents questions of fact. Facebook Defendants argue that the chat lists are not contact lists because they are not intended to supply a list of contacts, but instead simply provide both groups and individuals a person is chatting with. *See* Docket No. 279-1 at 4 ("Although the Chats list can include the names of individuals, as shown, the list is oriented around conversations, not individual contacts. Thus, the names of other users may be missing from, or included multiple times in, the Chats list . . . , and contacts who are not in those chats will not be listed at all." (citations omitted)). BlackBerry argues that Facebook Defendants are impermissibly limiting the plain meaning of the term "contact list" with this position. Docket No. 320-1 at 3-4. However, particularly as framed by Facebook Defendants, the parties' dispute appears to more closely relate to a factual dispute over the application of the claims to the accused instrumentalities than to a claim construction dispute.

In addition to the parties' high-level dispute regarding contact lists, the parties also dispute whether the accused instrumentalities satisfy the overall limitation of "enabling a game application on the electronic device to utilize a contact list for an instant messaging application for playing games with contacts in the contact list by identifying game play in the contact list." It is not clear that the parties are on the same page regarding the contours of BlackBerry's infringement theory, and their highly-technical dispute is not easy to follow. In their opposition, Facebook Defendants appear to believe that BlackBerry's infringement theory for this limitation relies on a certain API ("Application Programming Interface") function called "GetConnectedPlayersAsync()." Docket No. 279-1 at 5. Facebook Defendants argue that "[t]he GetConnectedPlayersAsync() API function merely allows an Instant Game to obtain a list of select users who play a particular game. The API function does not allow an Instant Game to access the Chats list . . . nor does it provide access to the information in the Chats list." *Id.* at 5-6 (citations omitted). In reply, BlackBerry begins by

suggesting that it is not this API function, but the "game application" itself that satisfies the limitation. *See* Docket No. 320-1 at 6. BlackBerry asserts, "[t]here is no genuine issue of material fact that the GetConnectedPlayersAsync() function accesses contact related information, ***and that this accessing of contact information <u>ultimately results</u> in the display of game play indicators in the accused Chat list***. This is all that the claim requires." *Id.* at 7-8 (emphasis added); *see also id.* at 8 ("the visual identifiers of 'game play' that the accused systems display . . . are the result of the GetConnectedPlayersAsync() function, which allows the game application to retrieve information about certain contacts appearing in the 'Chat list.' In other words, the GetConnectedPlayersAsync() function is the mechanism by which the game application accesses user contact information, which then ***results in Facebook-provided code*** rendering visual icons 'identifying game play' in the contact list." (emphasis added)). More information and explanation from the parties regarding their positions are required, including whether a claim construction dispute is inherent in their positions, before a legal determination could possibly be made regarding this dispute.

Finally, the parties present some dispute over the sufficiency of BlackBerry's infringement theory for the term "identifier." BlackBerry's initial motion states that "for example, a banner including the name of the game being played" satisfies this limitation. *See* Docket No. 249-1 at 7-8. After Facebook Defendants challenged this aspect of BlackBerry's infringement theory in their opposition (Docket No. 279-1 at 8-9), BlackBerry's reply pivots to asserting that the "contextID" and "gameID" in the accused instrumentalities satisfy the claim limitation of "preparing game messages to be sent to the particular contact by including game progress data in an instant messaging message ***and an identifier to associate the data with the game application***." Based on the Court's review of BlackBerry's expert declaration, the Court agrees with Facebook Defendants it is not apparent that the expert indeed clearly identified these components as satisfying this claim limitation. For this reason as well and lacking adequate information to show that BlackBerry met its initial burden of proof on this issue, summary judgment is not appropriate.

B. The '120 Patent

As previously provided, BlackBerry argues that Facebook Defendants infringe Claims 9, 13, and 20 of the '120 Patent with various accused instrumentalities.[19] Docket No. 249-1 at 19. It

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[19] BlackBerry states, "Facebook infringes these claims by making, using, and providing to the public Messenger, Messenger Lite, Workplace Chat, and the Facebook Website. Instagram infringes by making, using, and

seems Facebook Defendants "do not dispute that any of the limitations are met by the accused systems except for limitations 1.d/13.b and 1.g/13.e." Docket No. 320-1 at 17. The relevant portions these claims (with annotations in brackets) are repeated again here:

> 1. A communication system configured to silence notifications for incoming electronic messages, the system comprising a data processor, non-transitory media readable by the data processor and a communications subsystem:
>
> . . .
>
> the non-transitory media readable by the data processor comprising coded program instructions adapted to cause the processor to:
> receive a selected message thread for silencing;
> > [1.d] in response to receiving the selected message thread, activate a flag stored in the non-transitory media in association with the selected message thread, wherein the flag indicates that the selected message thread has been silenced;
>
> . . .
>
> > [1.g] display 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[.]
>
> 13. A method for silencing notifications for incoming electronic messages to a communication system, the communication system comprising a data processor, media readable by the data processor and a communications subsystem, the communications subsystem adapted to receive the incoming electronic messages, the method comprising:
> receiving one or more selected message threads for silencing;
> > [13.a] 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;
>
> . . .
>
> > [13.b] 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[.]

'120 Patent, Claims 1, 13 (labels in brackets added).

The parties dispute whether the accused instrumentalities use "flags" to "indicate that the associated one or more selected message threads have been silenced." They also dispute whether

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the accused instrumentalities "silenc[e] *any* further notifications pertaining to receipt of the new incoming electronic message."

The parties' disputes regarding whether the accused instrumentalities use "flags" presents questions of fact.[20] As to the accused instrumentalities, Facebook Defendants argue:

███████████████████████████████████████
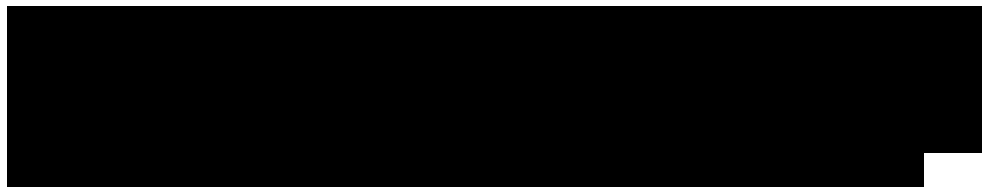
Docket No. 279-1 at 20 (citations omitted). BlackBerry challenges Facebook Defendants' assertion that the recited flag in the claims must "indicate whether (or not) the selected chat has been silenced." *See* Docket No. 320-1 at 23 (arguing this aspect of Facebook Defendants' argument is contrary to the plain and ordinary meaning of "flag"). But this language comes straight from the claim language itself, which requires "wherein the one or more flags indicate that the associated one or more selected message threads have been silenced." *See* '120 Patent, Claim 13 (limitation 13.a); *see also id.* at Claim 1. In addition, the parties' competing evidence regarding this dispute makes summary judgment inappropriate.[21]

Regarding the parties' second dispute, the Court previously construed "notification" in the '120 Patent as "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." Docket No. 157 at 31. In reaching this construction, the Court explained:

> 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

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[20] In reply, BlackBerry states, "Defendants . . . do not contest that Instagram includes a 'flag' even under [their] own construction." Docket No. 320-1 at 25 n.15.

[21] The Court reaches this determination without considering the arguments and evidence raised in Facebook Defendants' *ex parte* application seeking to file a sur-reply to BlackBerry's Infringement Motion and BlackBerry's opposition to the *ex parte* application. *See* Docket No. 353, 356. Thus, in addition to concerns about the alleged exigent circumstances supporting the filing of the application, Facebook Defendants' *ex parte* application is **DENIED AS MOOT** on the merits as to the "flag" dispute. The Court also declines to make a determination at this time regarding the admissibility of testimony from the '120 Patent's sole inventor regarding his understanding of the plain and ordinary meaning of "flag" as used in the claims of the '120 Patent.

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.

Id. The Court did not adopt BlackBerry's proposal that "notification" be construed as "user alert," but instead relied on language elsewhere in BlackBerry's opening claim construction brief to arrive at its construction for the term "notification."

Now, the parties argue whether new, silenced messages that arrive in an electronic message inbox with bolded text and a blue dot next to them satisfy the claim limitation requiring "silencing any further notifications pertaining to receipt of the new incoming electronic message." *See* Docket No. 279-1 at 16. Although BlackBerry would characterize this dispute as a renewed claim construction dispute, from the Court's perspective, the disagreement is factual. Whether these visual differences for incoming messages satisfy the requirements for the term "notification," including that it be some "cue to draw attention to an incoming message that would not otherwise have been noticed," presents jury question. In reaching this determination, the Court observes that BlackBerry's reliance on portions of the intrinsic record in crafting its arguments appears somewhat irrelevant, given that the bolding and blue dot in Facebook Defendants' example from the accused instrumentalities is different than simply adding a numeric counter.[22] *See* Docket No. 320-1 at 20. Particularly when considered along with the competing evidence submitted by the parties regarding this dispute, summary judgment is not warranted on this basis, either.

C. The '173 Patent

As previously provided, BlackBerry argues that Facebook Defendants infringe Claim 14 of the '173 Patent, which depends from unasserted Claim 13, through the Facebook Website and Instagram application. Docket No. 249-1 at 13. Again, Claim 13 of the '173 Patent states:

> 13. A computer readable medium storing computer code that when loaded into a device adapts the device to select a photo tag for a tagged photo, the computer readable medium comprising:
>> [13.a] code for displaying a tag list including tags from one or more tag sources matching a search string;
>> [13.b] code for displaying a tag type indicator for each tag appearing in the tag list, said tag type being indicative of a tag source

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[22] For these reasons, Facebook Defendants' *ex parte* application (filed ten days after BlackBerry's reply brief) is also **DENIED AS MOOT** on the merits as to the parties' "notification" dispute.

associated with the tag.

'173 Patent, Claim 13 (labels in brackets added).

It seems Facebook Defendants "do not dispute that any of the limitations are met by the accused systems except for limitation 13.b." Docket No. 320-1 at 12. The parties have two disputes regarding this limitation. First, they dispute whether the accused instrumentalities include "a tag type indicator for each tag appearing in the tag list." Second, to the extent there is a tag type indicator, they dispute whether that tag type indicator relates to a "tag type being indicative of a *tag source* associated with the tag."

BlackBerry includes annotated screenshots of the Facebook Website and Instagram showing what it contends satisfies this limitation:
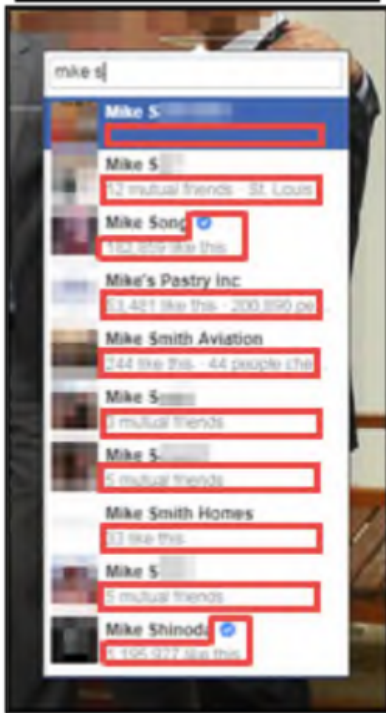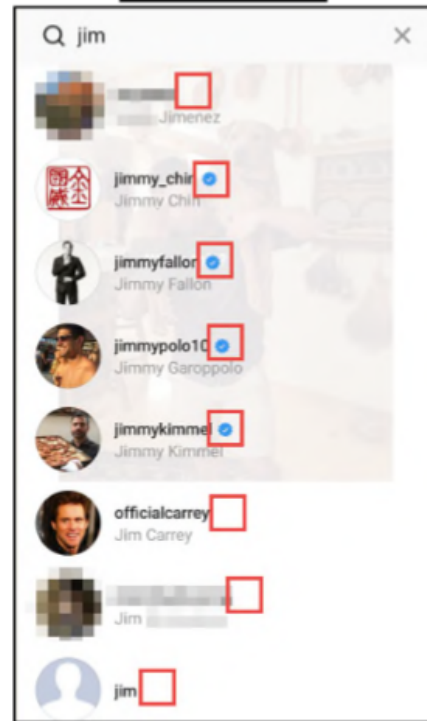
Docket No. 249-1 at 14.[23] Facebook Defendants argue that the absence of an indicator, which BlackBerry dubs a "blank indicator," cannot satisfy Claim 13's requirement of "displaying a tag type indicator for each tag appearing in the tag list." Docket No. 279-1 at 12. Facebook

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[23] BlackBerry cites the Schonfeld Declaration as the source of these images, but the screenshot in BlackBerry's brief for Instagram does not match the screenshot in the Schonfeld Declaration at paragraph 105. Facebook Defendants do not appear to challenge the screenshots.

Defendants also argue that in the context of, for example, the Facebook Website, the "additional information displayed with a tag suggestion (such as the number of 'Likes' or a checkmark to indicate whether a profile belongs to a celebrity or public figure) . . . does not indicate a *type* of tag, but rather, provides contextual information about the popularity, prominence, or closeness of the tag suggestion." *Id.* at 14-15 (emphasis in original).

The Court agrees with Facebook Defendants that no reasonable jury could conclude that the absence of a tag type satisfies Claim 13's requirement of "***displaying*** a tag type indicator" under a plain and ordinary interpretation of that phrase. Rephrasing the absence of an indicator as a "blank indicator" does not support a different conclusion. There is nothing being displayed. Instead, there is just empty space next to many people's names. This cannot satisfy the claim language.

As to the issue of the descriptive text for the Facebook Website − such as information providing the number of "likes" or whether a profile belongs to a friend or mutual friend, factual questions preclude a summary judgment determination. Whether this information provides "a tag type indicator for each tag appearing in the tag list" is for the jury. While Facebook Defendants argue that this information fails to provide a "type of tag," BlackBerry argues that its position is consistent with the plain meaning of the phrase "tag type indicator" in the context of the intrinsic record, which, according to BlackBerry permits additional descriptive information to still satisfy this claim limitation. *See* Docket No. 320-1 at 14. The parties' dispute, which appears to relate to the application of the plain meaning of "tag type indicator" to the accused instrumentalities, cannot be resolved on the current record.

The parties also present a dispute regarding the scope of the claim term "tag source." Facebook Defendants state, "[t]he supposed 'tag type indicators' identified by BlackBerry, at best, correspond to *categories* of tag suggestions – not their *sources*." Docket No. 279-1 at 13 (emphasis in original). Facebook Defendants suggest that only databases and local caches would constitute a "source," and argue that the accused instrumentalities "do[ ] not display anything to indicate whether a tag suggestion came from the Instagram database or the local cache on the user device." Docket No. 279-1 at 14. BlackBerry refers to portions of the intrinsic record to show that Facebook Defendants' position is a narrowed interpretation of the claim language. *See* Docket No. 320-1 at 16. In particular, the '173 Patent states:

> as the matching tag list **412** includes possible tags that may be used from

various selected tag sources (such as the user's Facebook friends, the user's address book **142**, a list of the user's browser bookmarks from Internet browser **138**, a cache of the recent free-form text entries, etc.), the user is provided with a simple way to associate subjects or objects in a photo with a predefined "tag" from one of a number of selected tag sources, as may be defined by the user.

'173 Patent at 6:5-16. It also states that "another type of tag source may be landmark tags with associated geographic location information." '173 Patent at 6:27-29. Although it is unclear how relevant the meaning of "tag source" ultimately is to the parties' dispute given its use in context with the other limitations of the claims, the Court agrees with BlackBerry that Facebook Defendants' interpretation of the term is unduly narrow compared to how it is used in the patent specification.

Ultimately, because the parties have at least a factual dispute for whether the accused instrumentalities have "tag type indicators" as required by the claims, summary judgment of infringement is not appropriate.

V.   Impact of These Rulings on Other Pending Disputes and Order Setting Page Limits for Future Motion Practice in This Case

Four of the six motions identified at the outset of this ruling have been considered and resolved as stated herein. The Court finds the two remaining motions – *i.e.* BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patent 8,825,084 Against Snap (Docket No. 244) and Snap's Motion for Leave to File a First Amended Answer and Counterclaims (Docket No. 242-4) − are moot in light of the determination that the asserted claims of the '084 and '327 Patents are invalid.[24] The Court declines to address these disputes on the current record.

Finally, the Court reminds the parties that, given the many vacancies on this court, judicial resources in the Central District of California are stretched thin; and this is not the Court's only case. Filing six twenty-plus-page dispositive motions before the parties have even exchanged expert reports raises concerns about securing the just, speedy, and inexpensive determination of

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[24] Snap also filed an *ex parte* application requesting leave to file a supplemental brief in support of its Motion for Leave to File a First Amended Answer and Counterclaims on August 30, 2019. *See* Docket No. 369. In addition to shortcomings with the timing of Snap's filing (submitted over ten days after the collection of evidence purportedly forming the basis for the request), it is not necessary to consider the merits of this *ex parte* application because the motion it relates to will not be resolved on the current record. Thus, Snap's *ex parte* application is **DENIED**.

this action. *See* Rule 1. This is not to mention the *ex parte* briefing that has ensued[25] – including an "objection" to statements in an opposition to an *ex parte* application (Docket No. 359)[26] – since regular briefing on the motions was complete. *See* Docket Nos. 353, 369. For purposes of preserving party and judicial resources in this case, the Court hereby <u>ORDERS</u> as follows:

- Not including motions *in limine*,[27] BlackBerry may not file more than *75 pages total* in additional memoranda in support of motions noticed in this case (whether before the Magistrate Judge or this Court) and Defendants Facebook and Snap may each not file more than *50 pages total* in additional memoranda in support of motions in this case (whether before the Magistrate Judge or this Court).

  o Thus, for example, any further motion to strike contentions, motion to amend a complaint, motion for summary judgment, *Daubert* motions, etc will count against a party's page limit. So long as a party's motions are in compliance with the Local Rules of this Court, each party may choose how to divvy up its pages however it sees fit.

  o The Court will not count *ex parte* applications in this page limit at this time, but will consider doing so if the parties continue to abuse *ex parte* application procedures with untimely *ex parte* applications and/or applications that are not adequately supported by a showing of exigent circumstances. Further, any ex parte application may not exceed five pages.

- Each memorandum in opposition to a motion may be no longer than the other side's opening motion memorandum itself.

- Each reply in support of a motion may be no longer than half of the pages of the opening motion memorandum itself.

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[25] Three *ex parte* applications have been filed in the interim between the completion of motion briefing and the hearing on the motion. Two have been addressed briefly herein. *See* Docket Nos. 353, 369.

[26] The Court admonishes the parties, who at this point seem to regularly deem it necessary and appropriate to weave petty and accusatory rhetoric into almost every one of their filings, and moreover cannot help but "take the bait" the other side offers with its own over-the-top statements and accusations. The level of briefing on this *ex parte* application is just one part of the story. The "flair" that a party thinks it adds to a brief with sweeping jabs at the other side's positions is not helpful and indeed distracts from resolution of the parties' substantive patent law disputes. The Court will consider sanctioning a party a page off of its remaining page count for each sentence it throws in that wastes judicial *and party* resources with such unhelpful rhetoric.

[27] The parties have previously indicated that *Daubert* issues would be resolved prior to the pre-trial conference.

- The parties are separately limited to seven motions *in limine* each, with each motion *in limine* and opposition each not to exceed seven pages.

VI. Conclusion

For the reasons stated in this Order, the Court would rule as follows:

(1) **GRANT-IN-PART** and **DENY-IN-PART** Consolidated Defendants' Motion for Summary Judgment as to Motion for Summary Judgement of Invalidity Under 35 U.S.C. § 101 of US Patent Nos. 8,296,351, 8,676,929 and 9,349,120 (Docket No. 239**)**;

(2) **DENY** Facebook Defendants' Motion for Summary Judgment as to Invalidity Under 35 U.S.C. Section 101 (U.S. Patent No. 8,279,173) (Docket No. 267);

(3) **DENY** BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patents 8,677,250; 8,279,173; and 9,349,120 Against Facebook Defendants (Docket No. 247) and **DENY AS MOOT** Facebook Defendants' *ex parte* application to file a surreply regarding motion (Docket No. 353);

(4) **GRANT** Snap's Motion for Summary Judgment as to Invalidity Under Section 101 of U.S. Patent Nos. 8,825,084 AND 8,326,327 (Docket No. 272);

(5) **DENY AS MOOT** BlackBerry's Motion for Partial Summary Judgment as to Infringement of U.S. Patent 8,825,084 Against Snap (Docket No. 244); and

(6) **DENY AS MOOT** Snap's Motion for Leave to File a First Amended Answer and Counterclaims (Docket No. 242-4) and **DENY AS MOOT** Snap's *ex parte* application to file a supplemental brief regarding motion (Docket No. 369).