

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

U.S. Patent No. 9,762,692 (“the ’692 patent”) is entitled “Handling long-tail content in a content delivery network (CDN).” These ineligibility contentions are based on Defendant’s present understanding of the Asserted Claims (claims 1, 2, 4, 5, 7, 8, 15, 17, and 18) and Sandpiper’s apparent construction of the Asserted Claims in its Infringement Contentions (“Infringement Contentions”).

The Asserted Claims of the ’692 patent are directed to an unpatentable, abstract idea because they claim no more than the “longstanding,” “routine,” and “conventional” concept of organizing and delivering content based on its popularity. *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) – automating a price based on customer response (a demand-based decision rule) was abstract.; *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (“The advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.”); *Miller Mendel, Inc. v. City of Anna, Texas*, 107 F.4th 1345, 1352 (Fed. Cir.), cert. denied, 145 S. Ct. 593, 220 L. Ed. 2d 231 (2024) (“These steps demonstrate that the claims are directed to receiving, storing, transmitting, determining, selecting, and generating information, which place them in the ‘familiar class of claims directed to a patent-ineligible concept.”); *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1362 (Fed. Cir. 2023); *Elec. Comm’n Techs., LLC v. ShoppersChoice.com, LLC*, 958 F.3d 1178, 1182 (Fed. Cir. 2020) (finding “gathering, storing, and transmitting information” abstract); *Trading Techs. Int’l, Inc. v. IBG, LLC*, 921 F.3d 1084 (Fed. Cir. 2019); *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759 (Fed. Cir. 2019); *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161 (Fed. Cir. 2018); *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335 (Fed. Cir. 2018); *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121 (Fed. Cir. 2018); *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329 (Fed. Cir. 2017), cert. denied, 139 S. Ct. 378 (2018); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332 (Fed. Cir. 2017); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (Fed. Cir. 2016); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016); *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369 (Fed. Cir. 2016); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363 (Fed. Cir. 2015); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343 (Fed. Cir. 2015); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343 (Fed. Cir. 2014); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (Fed. Cir. 2011); *Automated Tracking Sols., LLC v. Coca-Cola Co.*, 723 F. App’x 989 (Fed. Cir. 2018); *EasyWeb Innovations, LLC v. Twitter, Inc.*, 689 F. App’x 969, 971 (Fed. Cir. 2017). Further, because they are altogether devoid of any “inventive concept,” the Asserted Claims of the ’692 patent are patent ineligible under § 101. *See Alice*, 573 U.S. at 224–25.

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

The *Alice* test requires the Court to look at the “focus of the claimed advance over the prior art to determine if the claim’s character as a whole is directed to excluded subject matter.” *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quotation and citation omitted). Here, the purported “advance” claimed in the ’692 patent relates to the abstract idea of organizing and delivering content based on its popularity.

The Asserted Claims lack an inventive concept because they rely on conventional methods and routine operations already widely used. The ’692 patent’s specification describes the use of generic components in carrying out the steps recited in the Asserted Claims. For example, the specification explains that “many content providers now subscribe to so-called content delivery networks (CDNs).” ’692 patent at 2:15–16. The ’692 patent specification further provides that “[u]sing a CDN, some (or all) of a content provider’s content can be served to clients from the CDN (i.e., from one or more servers in the CDN) instead of from the content provider’s server(s).” ’692 patent at 2:16–19. Further, the ’692 patent’s specification explains that “[i]n a caching CDN, content that is served may also be cached on some or all of the CDN servers, either before being served or in response to specific requests for that content.” ’692 patent at 2:19–22.

As of the alleged priority date for the ’692 patent (April 4, 2008), the relevant industry was well-developed. Content delivery networks and related server architectures had been around for years. Further, all individual elements disclosed and recited in the ’692 patent were conventional, routine, and well-known in the industry. *See generally* Exhibits E1–E8. By way of example, “[i]t is well-known to deliver digital content (e.g., HTTP content, streaming media and applications) using an Internet content delivery network (CDN).” *See, e.g.*, Exhibit E1 (Dilley) at 1[Pre]. It was further well known for a CDN to “employ[] a tiered infrastructure using two or more tiers: a set of edge servers and a hierarchical set of ‘parent’ or hub regions that service the edge servers.” Exhibit E1 (Dilley) at 1[d][i]. It was further well known that edge servers would “handle[] a request for an object.” *See, e.g.*, Exhibit E1 (Dilley) at 1[a]. As another example, it was well-known that CDN systems were capable of handling “very popular content.” Exhibit E1 (Dilley) at 1[b]. It was further obvious that “[i]f the edge servers do not have the appropriate file when it is requested, the servers in the tiered distribution hubs will provide the edge servers with the requested content.” *See, e.g.*, Exhibit E1 (Dilley) at 1[c]. It is also obvious to that “where the requested object is not available at the handling edge server, the client’s request is redirected directly to the parent server that can provide the requested object to the client or indirectly via one or more parent servers to a parent server that can provide the requested object to the client.” *See, e.g.*, Exhibit E3 (Seed) at 1[Pre]

Indeed, none of these concepts was new or merely on the verge of development as of the alleged priority date of the ’692 patent. Instead, these concepts had been known for years and were the subject of many published articles and/or patents from around the world.

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

The ’692 patent contributed nothing beyond what was already conventional, routine, well-known technology as of the relevant time period.

The Primary “Advance”: Organizing and Delivering Content Based on Its Popularity

The main purported advance of the ’692 patent over the prior art is to handle “serving content that is popular, or not popular, in a network with multiple servers.” Complaint at ¶ 84 (citing ’692 Patent at 2:46-51). But the ’692 patent does not purport to have invented or improved the concept of “popularity.” Further, the Asserted Claims recite purely functional terms that fail to transform the claimed abstract idea beyond the conventional computer tasks. *Bot M8 LLC v. Sony Corp. of Am.*, 465 F. Supp. 3d 1013, 1025 (N.D. Cal. 2020) (“Though given special names, each part remains a generic computer part invoked to effect the conventional computer task of gathering, manipulating, transmitting, and using data.”); *AI Visualize, Inc. v. Nuance Commc’ns, Inc.*, 97 F.4th 1371, 1378 (Fed. Cir. 2024) (“We have explained that the steps of obtaining, manipulating, and displaying data, particularly when claimed at a high level of generality, are abstract concepts.”); *Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed Cir. 2016) (finding “a process of gathering and analyzing information of a specified content, then displaying the results” abstract); *Intell. Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015) (finding “tailoring content based on the [user’s] location” abstract); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (claiming “a computer receiv[ing] and send[ing] information over a network – with no further specification – is not even arguably inventive”).

Further, the claims are drafted using largely (if not entirely) result-focused functional language, containing no specificity about how the purported invention achieves those results. Claims of this nature are almost always found to be ineligible for patenting under Section 101. *See Beteiro, LLC v. DraftKings Inc.*, 104 F.4th 1350, 1356 (Fed. Cir. 2024) (finding subject matter ineligible a patent “using largely (if not entirely) result-focused functional language, containing no specificity about how the purported invention achieves those results” because “[c]laims of this nature are almost always found to be ineligible for patent under Section 101”). Yet the ’692 patent’s specification offers no guidance as to what claim terms mean or how to make sense of its illustrative embodiments and figures. Because the claims stand in isolation and are untethered to any disclosure in the specification, their terms are abstract monikers rather than concrete descriptions of the claimed invention. Additionally, the ’692 patent does not disclose motivations behind the alleged invention.

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

Ordered Combination of the Claims Does Not Confer Eligibility

The ordered combinations of limitations does not shelter the claims from ineligibility because each of the Asserted Claims simply uses “conventional ordering of steps . . . with conventional technology to achieve [their] desired result.” *Two-Way*, 874 F.3d at 1339. The combination of elements in the Asserted Claims do not result in an inventive concept because “the claims do not recite particular features to yield” the advantages of any purported combination. *See Intell. Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017). “[T]he claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it.” *Id.*

Claim 1 of the ’692 patent is representative of all claims in the ’692 patent. *See, e.g., Phoenix Licensing, LLC v. Consumer Cellular, Inc.*, No. 2:16-cv-152-JRG-RSP, 2017 WL 1065938, at *8–9 (E.D. Tex. Mar. 8, 2017); *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014). When claims are “substantially similar and linked to the same” ineligible concept, it is proper to treat a single claim as representative. *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017) (internal quotation marks omitted); *see also Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). Indeed, the other claims of the ’692 patent are substantially and substantively similar to Claim 1 of the ’692 patent, and they are therefore not patent eligible for the same reasons. Independent Claim 15 is almost identical to Claim 1—Claim 15 merely describes the use of a hash function to identify a server. Using hashing to identify a sever was well known. *See, e.g., Exhibit E2 (Karger)* at 15[d][ii], 7.

The dependent claims add only post-solution activity and well-known, conventional concepts that do not confer patent eligibility. *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1244 (Fed. Cir. 2016) (“[A]ppending preexisting practice[s] to [] independent claims does not make them patentable.”); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 132 S. Ct. 1289, 1297–98, 1300–01 (2012); *Bilski v. Kappos*, 561 U.S. 593, 610 (2010); *see also Clear with Computers, LLC v. Dick’s Sporting Goods, Inc.*, 21 F. Supp. 3d 758, 763 (E.D. Tex. 2014) (noting limitations must “do more than recite pre- or post-solution activity, they [must be] central to the solution itself” to be meaningful) (quotations omitted).

Similar to the claim limitations in the representative Claim 1, the added claim limitations consist of generic components used for their conventional purpose, and thus they do not alter the § 101 analysis. Claim 1 is thus representative for the § 101 analysis. *See PPS Data, LLC v. Jack Henry & Assocs., Inc.*, No. 2:18-cv-00007-JRG, 2019 WL 1317286, at *5 (E.D. Tex. Mar. 21, 2019) (articulating that defendants first bear the burden of demonstrating a claim is representative, which then shifts to the plaintiff to identify a difference material to the § 101 analysis); *see also Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014).

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

This chart is subject to all reservations, objections, and disclaimers in Defendant’s Invalidity Contentions and any amendment, supplement, or modification thereof, which are incorporated by reference in their entirety. Nothing stated herein will be treated as an admission or suggestion that Defendant agrees with Sandpiper regarding the scope of the Asserted Claims, Sandpiper’s apparent claim constructions, or the accuracy of any particular claim construction. Defendant reserves all rights to challenge any of the claim terms herein under 35 U.S.C. § 112, including by arguing that they are indefinite, are unsupported by the written description, and/or are not enabled. Defendant further reserves all rights to amend this invalidity claim chart without leave of court under the Court’s Scheduling Order, or upon a showing of good cause.

This disclosure is not an admission that Defendant concedes any claim construction implied or suggested by Sandpiper’s apparent positions as to the scope of the patent’s claims, nor is it an admission by Defendant that any of its products are covered by or infringe the patent’s claims, particularly when they are properly construed and applied. Defendant is not taking any claim construction positions through this disclosure, including whether the preamble is a limitation.

Defendant reserves the right to rely on additional citations or sources of evidence that also may be applicable, or that may become applicable in light of claim construction, changes in Sandpiper’s infringement contentions, and/or information obtained during discovery as the case progresses. Defendant further reserves the right to amend or supplement this claim chart at a later date as more fully set forth in the Invalidity and Subject Matter Eligibility Contentions.

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

'692 patent	Support for Ineligibility
1[Pre] A method of content delivery in a content delivery network comprising at least a first tier of servers, the method comprising:	Claim 1 is directed to an abstract idea. Claim 1 (and similar claims) of the ’692 patent relates “a server obtaining a client request may choose to redirect that request, e.g., based on popularity.” ’692 patent at 7:42–43. At the most basic level, the claims of the ’692 patent are directed to organizing and delivering content based on its popularity. Under <i>Alice</i> Step 1, that idea is abstract, as it relates to a fundamental long prevalent practice. <i>See Intellectual Ventures I LLC v. Symantec Corp.</i>, 838 F.3d 1307, 1314 (Fed. Cir. 2016). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” <i>Content Extraction & Transmission LLC v. Wells Fargo Bank, NA</i>, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment “do[es] not render an otherwise abstract concept any less abstract.” <i>Intellectual Ventures I LLC v. Capital One Fin. Corp.</i>, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to transmission of information, it is likewise abstract, as “information is . . . an intangible.” <i>Electric Power Group, LLC v. Alstom S.A.</i>, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ’692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ’692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ’692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [1pre]; Appendix E at Element [1pre].

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

'692 patent	Support for Ineligibility
1[a] at a first server in the first tier of servers, obtaining a request from a client for a resource, wherein the resource is available as part of a content provider’s library;	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [1a]; Appendix E at Element [1a].
1[b] if the resource is not available at the first server or at a peer of the first server, determining if the resource is popular;	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [1b]; Appendix E at Element [1b].

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

'692 patent	Support for Ineligibility
1[c] if the resource is determined to be popular, then the first server obtaining the resource and the first server serving the resource to the client, otherwise,	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. C1-CXX at all disclosures for Element [1c]; Appendix E at Element [1c].
1[d][i] if the resource is determined not to be popular, directing the client to a second server in a second tier of servers distinct from the first tier of servers,	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [1d]; Appendix E at Element [1d].

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

'692 patent	Support for Ineligibility
1[d][ii] wherein the second server comprises a first portion of the content provider's library, the first portion comprising at least the resource, wherein at least one other server in the second tier comprises a second portion of the content provider's library,	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [1e]; Appendix E at Element [1e].
1[d][iii] wherein the first portion of the content provider's library is distinct from the second portion, and	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [1f]; Appendix E at Element [1f].

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

'692 patent	Support for Ineligibility
1[d][iv] wherein the second tier is any intermediate tier between the first tier and an origin server that stores resources associated with the content provider's library, and	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [1g]; Appendix E at Element [1g].
1[d][iv] the second server serving the resource to the client.	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 1 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 1. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [1h]; Appendix E at Element [1h].

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

‘692 patent	Support for Ineligibility
2. A method as recited in claim 1, wherein portions of the content provider's library are logically partitioned across servers in the second tier.	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 2 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 2. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [2]; Appendix E at Element [2].
4. A method as recited in claim 1, wherein the content provider's library comprises a plurality of content-types, each resource in the library being associated with one of the plurality of content-types.	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 4 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 4. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [4]; Appendix E at Element [4].

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

‘692 patent	Support for Ineligibility
5. A method as recited in claim 4 further comprising storing distinct portions of the content provider's library on two or more servers in the second tier, wherein the content-types on each of the two or more servers are proportionally distributed, the content-types comprising at least one of audio content, video content, gaming content, and software content.	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 5 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 5. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [5]; Appendix E at Element [5].
7. A method as recited in claim 1, wherein the step of directing the client to a second server in a second tier is performed in response to a step of using a hash to determine which second server in the second tier stores the first portion of the	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 7 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 7. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

’692 patent	Support for Ineligibility
content provider's library.	references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [7]; Appendix E at Element [7].
8. A method as recited in claim 1 wherein the step of determining whether the resource is popular comprises determining whether a current popularity value for the resource exceeds a popularity threshold.	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 8 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ’692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ’692 patent’s specification describes the use of generic components in carrying out the steps in Claim 8. <i>See, e.g.,</i> ’692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [8]; Appendix E at Element [8].
15[Pre] A method of content delivery in a content delivery network comprising a plurality of tiers of servers, including at least a first tier of servers and a second tier of servers, the method comprising:	Claim 15 is directed to an abstract idea. Claim 15 (and similar claims) of the ’692 patent relates “a server obtaining a client request may choose to redirect that request, e.g., based on popularity.” ’692 patent at 7:42–43. At the most basic level, the claims of the ’692 patent are directed to organizing and delivering content based on its popularity. Under <i>Alice</i> Step 1, that idea is abstract, as it relates to a fundamental long prevalent practice. <i>See Intellectual Ventures I LLC v. Symantec Corp.</i>, 838 F.3d 1307, 1314 (Fed. Cir. 2016). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” <i>Content Extraction & Transmission LLC v. Wells Fargo Bank, NA</i>, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment “do[es]

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

’692 patent	Support for Ineligibility
	not render an otherwise abstract concept any less abstract.” <i>Intellectual Ventures I LLC v. Capital One Fin. Corp.</i>, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to transmission of information, it is likewise abstract, as “information is . . . an intangible.” <i>Electric Power Group, LLC v. Alstom S.A.</i>, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ’692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ’692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ’692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [15pre]; Appendix E at Element [15pre].
15[a] at a first server in one tier of the tiers of servers, obtaining a request from a client for a resource, wherein the resource is available as part of a content provider's library;	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ’692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ’692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ’692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

'692 patent	Support for Ineligibility
	conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[a]; Appendix E at Element 15[a].
15[b][i] if the resource is not available at the first server or at a peer of the first server, then selectively redirecting the request from the client to a second tier server,	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[b][i]; Appendix E at Element 15[b][i].
15[b][ii] the second tier server being in a tier distinct from the tier containing the first server,	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

'692 patent	Support for Ineligibility
	conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[b][ii]; Appendix E at Element 15[b][ii].
15[b][iii] the redirecting being based, at least in part, on a current popularity value for the resource;	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[b][iii]; Appendix E at Element 15[b][iii].
15[c][i] wherein the second tier server comprises a first portion of the content provider’s library, the first portion comprising at least the resource,	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

'692 patent	Support for Ineligibility
	conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[c][i]; Appendix E at Element 15[c][i].
15[c][ii] wherein at least one other second tier server comprises a second portion of the content provider's library distinct from the first portion, and	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[c][ii]; Appendix E at Element 15[c][ii].
15[c][iii] wherein the second tier of servers is any intermediate tier between the first tier and an origin server that stores the content provider's library, and	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

'692 patent	Support for Ineligibility
	conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[c][iii]; Appendix E at Element 15[c][iii].
15[d][i] wherein the step of selectively redirecting the request from the client to a second tier server comprises determining to which second tier server the request should be directed,	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[d][i]; Appendix E at Element 15[d][i].
15[d][iii] the determining step using a hash function to identify a second tier server that stores the first portion of the content provider's library.	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 15 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 15. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ‘692 patent”)

‘692 patent	Support for Ineligibility
	conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element 15[d][ii]; Appendix E at Element 15[d][ii].
17. A method as recited in claim 15 wherein the first tier of servers comprises a plurality of edge servers and the second tier of servers comprises a plurality of parent servers, and wherein the first server is an edge server in the first tier and the second server is a parent server in the second tier.	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 17 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 17. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [17]; Appendix E at Element [17].
18. A method as recited in claim 15 wherein the first tier of servers comprises a plurality of edge servers and the second tier of servers comprises a plurality of parent servers, and wherein the plurality of tiers of servers further comprises an	At the time of the alleged invention, this element was well understood, routine, and/or conventional. Claim 18 lacks an inventive concept because it relies on conventional methods and routine operations already widely used. At the time of the alleged invention, the elements of the Asserted Claims were well understood, routine, and/or conventional in the field of wireless communications. The ‘692 patent Asserted Claims employ well-known components or functionality which is not enough to impart patent eligibility of an abstract idea. The ‘692 patent’s specification describes the use of generic components in carrying out the steps in Claim 18. <i>See, e.g.</i>, ‘692 patent at 2:15–19. In addition, the prior art references cited in Defendants’ Invalidity Contentions cover pleadings—including prior art

EXHIBIT E101

Subject Matter Ineligibility Contentions for U.S. Pat. No. 9,762,692 (“the ’692 patent”)

'692 patent	Support for Ineligibility
origin tier, and wherein the first server is a parent server in the second tier and the second server is a server in the origin tier.	references cited in Exs. E1-E9—establish the well-understood, routine, and conventional nature of the claims. <i>See</i> Exs. E1-E9 at all disclosures for Element [18]; Appendix E at Element [18].