

**APPENDIX A**

**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT**

November 1, 2017

Nos. 2016-2531, 2016-2532

TWO-WAY MEDIA, LTD.,  
Plaintiff-Appellant,

v.

COMCAST CABLE COMMUNICATIONS, LLC,  
COMCAST INTERACTIVE MEDIA LLC, VERIZON  
SERVICES CORP., VERIZON ONLINE LLC,  
Defendants-Appellees.

Appeals from the United States District Court  
for the District of Delaware in Nos. 1:14-cv-01006-  
RGA, 1:14-cv-01212-RGA, Judge Richard G. Andrews

\* \* \*

Before LOURIE, REYNA, and HUGHES, *Circuit Judges*.  
REYNA, *Circuit Judge*.

Two-Way Media Ltd. appeals from a decision of the United States District Court for the District of Delaware that found the claims of the asserted patents to be directed to patent ineligible subject matter under 35 U.S.C. § 101. Because the claims are directed to abstract ideas and contain no additional elements that transform the nature of the claims into a patent-eligible application of the abstract ideas, we affirm.

BACKGROUND

A. Technical Background

The patents-in-suit are related as a series of continuation applications, and thus share substantially

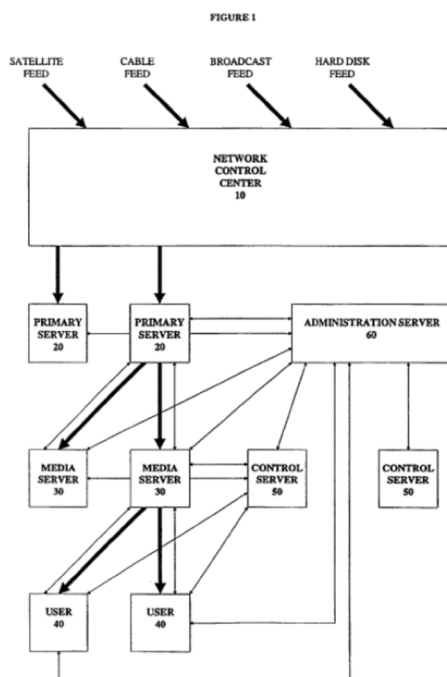
the same specification. U.S. Patent No. 5,778,187 (“187 patent”) issued first, followed by U.S. Patent Nos. 5,983,005 (“005 patent”), then 6,119,163 (not at issue here), then 6,434,622 (“622 patent”), and then 7,266,686 (“686 patent”). The patents are entitled “Multicasting Method and Apparatus,” and generally relate to a system for streaming audio/visual data over a communications system like the internet. Claim 1 of the ’187 patent is representative of all claims of the ’187 patent and ’005 patent, claims 1 and 29 of the ’622 patent, and claims 1, 22, 26, and 30 of the ’686 patent are representative of their respective patents.

The patents explain that internet systems typically operate on a point-to-point, or unicast, basis. In unicast systems, a message is converted into a series of addressed packets which are routed from a source node to a destination node. But these unicast systems lack the capability to broadcast a message from a source node to all the other recipients in a network, as this type of operation could easily overload the network.

IP Multicasting, in contrast, provides a way to transmit one packet of information to multiple recipients. In such a system, packets destined for several recipients are encapsulated in a unicast packet and forwarded from a source to a point in a network where the packets are replicated and forwarded on to all desired recipients. A multicast packet can be routed from a source node through a plurality of multicast routers to one or more devices receiving the multicast packets. The packet can then be distributed to all the host computers that are members of the multicast group. The patents explain that this technology had previously been used to provide internet-based

audio/visual conferencing servicing as well as radio-like broadcasts to interested parties.

The patents describe the invention as an improved scalable architecture for delivering real-time information. Embedded in the architecture is a control mechanism that provides for the management and administration of users who are to receive real-time information. Figure 1 provides a schematic diagram depicting an overview of the system:



J.A. 80. In this system, the Primary Servers and Media Servers are interconnected by the internet. The Control Servers connect users with Media Servers using a series of message exchanges. The patents also describe monitoring network conditions and generating records about the real-time streams.

The parties agree that claim 1 of the '187 patent is representative of the claims of the '187 patent and '005 patent. It recites:

1. A method for transmitting message packets over a communications network comprising the steps of:

converting a plurality of streams of audio and/or visual information into a plurality of streams of addressed digital packets complying with the specifications of a network communication protocol,

for each stream, routing such stream to one or more users,

controlling the routing of the stream of packets in response to selection signals received from the users, and

monitoring the reception of packets by the users and accumulating records that indicate which streams of packets were received by which users, wherein at least one stream of packets comprises an audio and/or visual selection and the records that are accumulated indicate the time that a user starts receiving the audio and/or visual selection and the time that the user stops receiving the audio and/or visual selection.

J.A. 111 at col. 18 ll. 17-34; J.A. 114 (certificate of correction). Two-Way Media asserts that the claims of the '622 patent are directed to the features described in the specification, but are claimed more broadly. For example, claim 29 recites:

29. A method for forwarding real-time information to one or more users having access to a communications network comprising:

processing one or more streams of audio or visual information into one or more streams of packets for forwarding over the communications network, wherein at least one stream of packets comprises audio or video information,

forwarding the digital packets to the users in response to information selection signals received from the users,

verifying the operational status of the users' access to the communications network during delivery of the real-time information, and

updating a database with indications of: (i) which streams of packets were received by which users, (ii) the time when delivery of each stream to each user commenced, and (iii) the time when delivery of each stream to each user terminated.

J.A. 202 at col. 20 ll. 19-36. Claim 30 of the '686 patent includes certain "commercial purposes" and recites:

30. A method for metering real-time streaming media for commercial purposes, said method comprising:

selecting an intermediate server from multiple intermediate servers;

forwarding at least one copy of a real-time media stream from said intermediate server toward a user device;

detecting a termination of said forwarding;

after said termination, determining an extent of said real-time media stream forwarded toward said user device; and

logging said extent for commercial purposes.

J.A. 248 at col. 20 ll. 6-16; J.A. 251 (certificate of correction).

#### B. District Court Decision

The district court granted Appellees<sup>1</sup> motion for judgment on the pleadings and held that the '187 patent, '005 patent, '622 patent, and '686 patent were ineligible under § 101. *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, Nos. 14-1006-RGA, 14-1212-RGA, 2016 WL 4373698 (D. Del. Aug. 15, 2016). The district court first addressed claim construction, then addressed evidentiary arguments, and finally addressed the patents' eligibility under the two-step framework espoused in *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014).

Two-Way Media argued before the district court that Appellees' motion was premature because claim construction was necessary to evaluate whether the representative claims were eligible under § 101. Two-Way Media provided proposed claim constructions for certain terms of the asserted patents. J.A. 599-602. Appellees agreed that the district court should adopt Two-Way Media's claim constructions, but argued that the constructions did not alter the § 101 analysis. The district court ultimately adopted Two-Way Media's

---

<sup>1</sup> Appellees are Comcast Cable Communications, LLC, Comcast Interactive Media LLC, Verizon Services Corp., and Verizon Online LLC.

proposed constructions for the purposes of the motion. *Two-Way Media*, 2016 WL 4373698, at \*3.

Two-Way Media also argued that the district court should take judicial notice of certain materials from prior proceedings before the U.S. Patent and Trademark Office and other federal courts. *Id.* at \*3-4. The materials, consisting of expert report excerpts, expert trial testimony, inventor trial testimony, and a press release, [BB45; RB31] purportedly related to other tribunals' evaluation of the novelty and nonobviousness of the claimed inventions. *Id.* The district court denied the request, reasoning that the proffered materials were irrelevant to a § 101 inquiry: "The novelty and nonobviousness of the claims under [35 U.S.C.] §§ 102 and 103 does not bear on whether the claims are directed to patent-eligible subject matter under § 101." *Id.* at \*4.

The district court then addressed the eligibility of the claims of the '187 patent and '005 patent and determined that the claims were directed to an abstract idea:

The '187 and '005 patents are directed to the abstract idea of (1) sending information, (2) directing the sent information, (3) monitoring receipt of the sent information, and (4) accumulating records about receipt of the sent information. The claims are thus directed to methods of sending and monitoring the delivery of audio/visual information.

*Id.* at \*5 (citations omitted). The district court determined that the claims did not recite a saving inventive concept under *Alice* step two. Although Two-Way Media had argued that the claims were directed to

computer architecture that solved the technical problems of load, bottlenecking, and inadequate records, the district court disagreed, holding that “[n]one of the claims, however, recite or refer to anything that could be described as an architecture.” *Id.* The district court expressly considered Two-Way Media’s proffered claim constructions when making this determination: “The claims cannot fairly be read to recite computer architecture even in light of [Two-Way Media’s] proposed claim constructions, some of which explicitly incorporate the words ‘intermediate computers.’” *Id.* at \*5 n.3 (citations omitted).

Having concluded that the claims of the ’187 patent and the ’005 patent were patent ineligible under § 101, the district court next addressed the ’622 patent and ’686 patent. The district court determined that the ’622 patent was directed to the abstract idea of monitoring the delivery of real-time information to a user or users, and the ’686 patent was directed to the abstract idea of measuring the delivery of real-time information for commercial purposes. *Id.* at \*6-7. The claims contained no saving inventive concept because although they recited some computer components, they required only ordinary functionality of these components. *Id.* at \*6-8.

Two-Way Media appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

#### STANDARD OF REVIEW

We review procedural aspects of the grant of judgment on the pleadings under Federal Rule of Civil Procedure 12(c) based on the law of the regional circuit, in this case the Third Circuit. *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1311 (Fed. Cir.



2016). The Third Circuit exercises plenary review of Rule 12(c) motions. *E.g.*, *CoreStates Bank, N.A. v. Huls Am., Inc.*, 176 F.3d 187, 193 (3d Cir. 1999). We also review de novo whether a claim is invalid under the judicially created exceptions to § 101. *McRO*, 837 F.3d at 1311.

#### DISCUSSION

Section 101 of the Patent Act defines patent eligible subject matter:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101. The Supreme Court has long held that there are certain judicial exceptions to this provision: laws of nature, natural phenomena, and abstract ideas. *Alice*, 134 S. Ct. at 2354 (collecting cases).

In *Alice*, the Court supplied a two-step framework for analyzing whether claims are patent eligible. First, we determine whether the representative claims are “directed to” a judicial exception, such as an abstract idea. *Id.* at 2355. If the claims are directed to eligible subject matter, the inquiry ends. *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1349 (Fed. Cir. 2017); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1339 (Fed. Cir. 2016). If the claims are determined to be directed to an abstract idea, we next consider whether the claims contain an “inventive concept” sufficient to “transform the nature of the claim into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (internal quotation marks omitted).

We conclude that the '187 patent, '005 patent, '622 patent, and '686 patent are patent ineligible under § 101. We discuss each in turn.

A. '187 Patent and '005 Patent

1. *Alice* Step One

Under *Alice* step one, “the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015). We look to whether the claims in the patent focus on a specific means or method, or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery. *McRO*, 837 F.3d at 1314. Claims directed to generalized steps to be performed on a computer using conventional computer activity are not patent eligible. *Internet Patents*, 790 F.3d at 1348-49.

The district court found that claim 1 of the '187 patent, which is representative of all of the claims of the '187 patent and '005 patent, is directed to the abstract idea of (1) sending information, (2) directing the sent information, (3) monitoring the receipt of the sent information, and (4) accumulating records about receipt of the sent information. *Two-Way Media*, 2016 WL 4373698, at \*5. Two-Way Media argues that the district court erred by oversimplifying the claim and ignoring claim limitations present in its proposed constructions. We disagree.

Claim 1 recites a method for routing information using result-based functional language. The claim requires the functional results of “converting,” “routing,” “controlling,” “monitoring,” and “accumulating

records,” but does not sufficiently describe how to achieve these results in a non-abstract way. *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258-59 (Fed. Cir. 2016) (holding that claims were directed to an abstract idea where they claimed “the function of wirelessly communicating regional broadcast content to an out-of-region recipient, not a particular way of performing that function”). Claim 1 is similar to other claims found to be directed to an abstract idea. In *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016), the challenged claims were directed to systems and methods for achieving real-time performance monitoring of an electric power grid. We held that the challenged claims were directed to the abstract idea of “gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.” *Id.* at 1354. In the same way, claim 1 manipulates data but fails to do so in a non-abstract way.

Two-Way Media’s proposed constructions do not change this outcome. Though Two-Way Media argues that its proposed claim constructions sufficiently tie the claims to particular scalable network architecture, the constructions recite only conventional computer components. For example, Two-Way Media proposed a construction of “controlling the routing of the stream of packets in response to selection signals received from the users” as “directing a portion of the routing path taken by the stream of packets from one of a designated group of intermediate computers to the user in response to one or more signals from the user selecting the stream.” J.A. 600. This construction fails to indicate how the claims are directed to a scalable network

architecture that itself leads to an improvement in the *functioning* of the system. *Enfish*, 822 F.3d at 1338. Nor does the construction provide any parameters for the “signals” purportedly dictating how the information is being routed. At best, the constructions propose the use of generic computer components to carry out the recited abstract idea, but that is not sufficient. *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (holding that, despite reciting “concrete, tangible components,” the claims were directed to an abstract idea where “the physical components merely provide[d] a generic environment in which to carry out the abstract idea”). The claim is therefore directed to an abstract idea.

Because the claim is directed to an abstract idea, we proceed to *Alice* step two to determine whether the representative claims disclose a saving inventive concept.

## 2. *Alice* Step Two

In *Alice* step two, we consider the elements of the claim, both individually and as an ordered combination, to assess whether the additional elements transform the nature of the claim into a patent-eligible application of the abstract idea. *Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Merely reciting the use of a generic computer or adding the words “apply it with a computer” cannot convert a patent-ineligible abstract idea into a patent-eligible invention. *Alice*, 134 S. Ct. at 2358; *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1332 (Fed. Cir. 2015). To save a patent at step two, an inventive concept must be evident in the claims. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017).

The district court found no saving inventive concept in claim 1 of the '187 patent. While acknowledging that the specification of the '187 patent describes a system architecture as a technological innovation, the district court concluded that the claim does not recite this architecture, even taking into account Two-Way Media's proposed constructions. *Two-Way Media*, 2016 WL 4373698, at \*5. We agree with the district court. The 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. *RecogniCorp*, 855 F.3d at 1327. While the specification may describe a purported innovative “scalable architecture,” claim 1 of the '187 patent does not. J.A. 103 at col. 2 ll. 1-5.

The lack of an inventive concept recited in claim 1 precludes eligibility here. For example, the claim refers to certain data “complying with the specifications of a network communication protocol” and the data being routed in response to one or more signals from a user, without specifying the rules forming the communication protocol or specifying parameters for the user signals. Neither the protocol nor the selection signals are claimed, precluding their contribution to the inventive concept determination. *See Clarilogic, Inc. v. FormFree Holdings Corp.*, 681 F. App'x 950, 954-55 (Fed. Cir. 2017) (holding claim ineligible where it recited an “unknown and unclaimed process” to allegedly transform data).

Two-Way Media asserts that the claim solves various technical problems, including excessive loads on a source server, network congestion, unwelcome variations in delivery times, scalability of networks, and lack of precise recordkeeping. But claim 1 here only

uses generic functional language to achieve these purported solutions. “Inquiry therefore must turn to any requirements for *how* the desired result is achieved.” *Elec. Power Grp.*, 830 F.3d at 1355. Nothing in the claims or their constructions, including the use of “intermediate computers,” requires anything other than conventional computer and network components operating according to their ordinary functions. *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1319-21 (Fed. Cir. 2016) (holding ineligible a claim directed to a method of virus screening even where the method required use of an “intermediary computer in forwarding information”).

We likewise see no inventive concept in the ordered combination of these limitations. *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (“[A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.”). The claim uses a conventional ordering of steps—first processing the data, then routing it, controlling it, and monitoring its reception—with conventional technology to achieve its desired result. As the court in *BASCOM* noted, merely reciting an abstract idea performed on a set of generic computer components, as claim 1 does here, would “not contain an inventive concept.” *Id.* (citing *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011)). We thus find that claim 1 here fails to transform the abstract idea into something more. *Elec. Power Grp.*, 830 F.3d at 1355-56.

Two-Way Media argues that the claims of the ’187 and ’005 patents are not preemptive, and therefore are patent eligible, because many methods of sending and

monitoring the delivery of audio/visual remain available. However, where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Alice* framework, as they are in this case, preemption concerns are fully addressed and made moot. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

Finally, Two-Way Media argues that the district court erred by excluding its proffered evidence from prior cases relating to the purported technological innovations of its invention. We find no error in the district court's determination to reject Two-Way Media's proffered material, as the court correctly concluded that the material was relevant to a novelty and obviousness analysis, and not whether the claims were directed to eligible subject matter. Eligibility and novelty are separate inquiries. *Affinity Labs*, 838 F.3d at 1263 (holding that "even assuming" that a particular claimed feature was novel does not "avoid the problem of abstractness"). Accordingly, the district court correctly determined that the patents were ineligible under § 101 on the basis of the representative claims and Two-Way Media's proposed constructions, which the district court expressly adopted.

## B. '622 Patent and '686 Patent

### 1. *Alice* Step One

The district court also concluded that the '622 patent was directed to the abstract idea of monitoring the delivery of real-time information to a user or users, and the '686 patent was directed to the abstract idea of measuring the delivery of real-time information for commercial purposes. *Two-Way Media*, 2016 WL 4373698, at \*6-7. Two-Way Media argues that the

district court erred by oversimplifying the claims down to merely their preamble and failing to recognize the claims solve technical problems. We disagree.

First, we see no error here in the district court citing to the preamble in its review of whether the claims are directed to an abstract idea. *See, e.g., BASCOM*, 827 F.3d at 1348 (citing preamble for distillation of abstract idea). The district court’s inquiry centered on determining the “focus” of the claims, and was thus in accord with our precedent. *E.g., Elec. Power Grp.*, 830 F.3d at 1353.

Second, these claims suffer from the same ineligibility infirmity as claim 1 of the ’187 patent. Two-Way Media admits that the representative claims of the ’622 patent and ’686 patent are broader in several respects than claim 1 of the ’187 patent. Appellant Br. 46, 53. We agree with the district court that the claims here—directed to monitoring the delivery of real-time information to user(s) or measuring such delivery for commercial purposes—are similar to other concepts found to be abstract. *BASCOM*, 827 F.3d at 1348 (filtering content is an abstract idea); *Elec. Power Grp.*, 830 F.3d at 1351-53 (collecting information, analyzing it, and displaying results is an abstract idea, even when undertaken in “real-time”); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (using advertising as an exchange or currency is an abstract idea). For these reasons, we conclude that the representative claims of the ’622 patent and ’686 patent are directed to abstract ideas. Accordingly, we proceed to *Alice* step two.



## 2. *Alice* Step Two

The district court found that that the claims of the '622 patent and '686 patent did not contain an inventive concept under *Alice* step two. *Two-Way Media*, 2016 WL 4373698, at \*6-8. Two-Way Media argues that the district court erred by failing to account for a central aspect of Two-Way Media's invention, the system architecture, and failing to credit Two-Way Media's nonconventional arrangement of components. We disagree.

As with claim 1 of the '187 patent, the problem is that no inventive concept resides in the claims. Claim 29 of the '622 patent requires processing data streams, transmitting them from "an intermediate computer," and then confirming certain information about the transmitted data. J.A. 202 at col. 20 ll. 19-36; J.A. 600. Claim 30 of the '686 patent requires receiving and transmitting a real-time media stream from an intermediate server, detecting the termination of the stream, and recording certain information about the stream. J.A. 248 at col. 20 ll. 6-16; J.A. 251; J.A. 601. We agree with the district court that nothing in these claims requires anything other than conventional computer and network components operating according to their ordinary functions. *Intellectual Ventures*, 838 F.3d at 1319-21; *Elec. Power Grp.*, 830 F.3d at 1355-56.

Nor do we see any inventive concept in the ordered combination of these steps. The steps are organized in a completely conventional way—data are first processed, sent, and once sent, information about the transmission is recorded. The claims thus fail to describe a "specific, discrete implementation of the

18a

abstract idea” sufficient to qualify for eligibility under § 101. *BASCOM*, 827 F.3d at 1350.

CONCLUSION

We have considered Two-Way Media’s other arguments but do not find them persuasive. For the foregoing reasons, we affirm the district court’s judgment that the ’187 patent, ’005 patent, ’622 patent, and ’686 patent are ineligible under § 101.

**AFFIRMED**

**APPENDIX B**

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

August 15, 2016

Civil Action No. 14-1006-RGA

TWO-WAY MEDIA, LTD.,  
Plaintiff,

v.

COMCAST CABLE COMMUNICATIONS, LLC,  
COMCAST INTERACTIVE MEDIA LLC,  
NBCUNIVERSAL MEDIA LLC, and  
NBCUNIVERSAL, LLC

Defendants.

---

Civil Action No. 14-1212-RGA

TWO -WAY MEDIA, LTD.,  
Plaintiff,

v.

VERIZON SERVICES CORP. and  
VERIZON ONLINE LLC,  
Defendants.

MEMORANDUM OPINION

\* \* \*

**ANDREWS, U.S. DISTRICT JUDGE:**

Pending before the Court is Defendants' joint Motion for Judgment on the Pleadings pursuant to Federal Rule of Civil Procedure 12(c). (D.I. 37; C.A. No.

14-1212 D.I. 28).<sup>1</sup> The matter has been fully briefed. (D.I. 38, 43, 45; C.A. No. 14-1212 D.I. 29, 34, 36). The Court heard oral argument on October 29, 2015. (D.I. 54). For the reasons stated below, the Court will grant in part Defendants’ motion with respect to the asserted claims of the ’187, ’005, ’622, and ’686 patents and dismiss in part as moot Defendants’ motion with respect to the asserted claims of the ’237 patent.

## **I. BACKGROUND**

Plaintiff Two-Way Media Ltd. (“Two-Way”) filed these patent infringement actions against Comcast Cable Communications, LLC, Comcast Interactive Media, LLC (collectively, “Comcast”), NBCUniversal Media LLC, and NBCUniversal, LLC (collectively, “NBCUniversal”) on August 1, 2014, (D.I. 1), and against Verizon Services Corp. and Verizon Online LLC (collectively, “Verizon”) on September 19, 2014, (C.A. No. 14-1212 D.I. 1). Two-Way alleged that Comcast, NBCUniversal, and Verizon infringed U.S. Patent Nos. 5,778,187 (“the ’187 patent”); 5,983,005 (“the ’005 patent”); 6,434,622 (“the ’622 patent”); 7,266,686 (“the ’686 patent”); and 8,539,237 (“the ’237 patent”). On August 1, 2016, the Court granted a stipulation of dismissal without prejudice of the claims between Two-Way and NBCUniversal. (D.I. 151). On August 4, 2016, the Court granted a stipulation of partial dismissal with prejudice of Two-Way’s ’237 patent infringement claims against Comcast and Verizon (collectively, “Defendants”). (D.I. 150). The § 101 motion

---

<sup>1</sup> Citations to “D.I. \_\_” are citations to the docket in C.A. No. 14-1006 unless otherwise noted.

presently under consideration is therefore dismissed as moot with respect to the '237 patent claims.

The '187, '005, '622, and '686 patents (the “asserted patents”) are each entitled “Multicasting Method and Apparatus.” ('187 patent, (54); '005 patent, (54); '622 patent, (54); '686 patent, (54)). The asserted patents have a common parent application and are directed to a “scalable architecture . . . for delivery of real-time information over a communications network.” ('187 patent, (Abstract); '005 patent, (Abstract); '622 patent, (Abstract); '686 patent, (Abstract)).

## **II. LEGAL STANDARD**

### **A. Motion for Judgment on the Pleadings**

A Rule 12(c) motion for judgment on the pleadings is reviewed under the same standard as a Rule 12(b)(6) motion to dismiss when the Rule 12(c) motion alleges that the plaintiff failed to state a claim upon which relief can be granted. *See Turbe v. Gov't of the Virgin Islands*, 938 F.2d 427, 428 (3d Cir. 1991); *Revell v. Port Auth.*, 598 F.3d 128, 134 (3d Cir. 2010). The court must accept the factual allegations in the complaint and take them in the light most favorable to the non-moving party. *See Erickson v. Pardus*, 551 U.S. 89, 94 (2007); *Christopher v. Harbury*, 536 U.S. 403, 406 (2002). “When there are well-ple[d] factual allegations, a court should assume their veracity and then determine whether they plausibly give rise to an entitlement to relief.” *Ashcroft v. Iqbal*, 556 U.S. 662, 679 (2009). The Court may also consider matters of public record and authentic documents upon which the complaint relies if those documents are attached to the complaint or as an exhibit to the motion. *See Oshiver*

*v. Levin, Fishbein, Sedran & Berman*, 38 F.3d 1380, 1384 n.2 (3d Cir. 1994). Additionally, the Court may take judicial notice of the factual record of a prior proceeding. *See Oneida Motor Freight, Inc. v. United Jersey Bank*, 848 F.2d 414, 416 n.3 (3d Cir. 1988). The court must “draw on its judicial experience and common sense” to make the determination whether plaintiff failed to state a claim upon which relief can be granted. *See id.*

## **B. Patent-Eligible Subject Matter**

Section 101 of the Patent Act defines patent-eligible subject matter. It provides: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. The Supreme Court has recognized an implicit exception for three categories of subject matter not eligible for patent protection: laws of nature, natural phenomena, and abstract ideas. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). The purpose of these carve outs is to avoid preemption of the “basic tools of scientific and technological work.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012) (internal quotation marks omitted); *Alice Corp.*, 134 S. Ct. at 2354. Still, “a process is not unpatentable simply because it contains a law of nature or a mathematical algorithm,” as “an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Mayo Collaborative Servs.*, 132 S. Ct. at 1293-94 (emphasis and internal quotation marks omitted).

In *Alice*, the Supreme Court reaffirmed the framework laid out in *Mayo* for distinguishing “patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” 134 S. Ct. at 2355. Under the first step of the *Alice* framework, the court must determine whether the claims are directed to a patent-ineligible concept. *Id.* “The dispositive inquiry is whether the concept to which a claim is drawn has ‘no particular concrete or tangible form.’” *Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1014 (C.D. Cal. 2014) (quoting *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014), *cert. denied sub nom. Ultramercial, LLC v. WildTangent, Inc.*, 135 S. Ct. 2907 (2015)), *aff’d*, 622 F. App’x 915 (Fed. Cir. 2015); see also *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013) (“[T]he court must first identify and define whatever fundamental concept appears wrapped up in the claim.” (internal quotation marks omitted)). To evaluate whether an invention is directed to an “abstract idea,” courts “compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). “[F]undamental economic and conventional business practices are often found to be abstract ideas, even if performed on a computer.” *Id.* at 1335. Not “all improvements in computer-related technology are inherently abstract,” however. *Id.* Nor are “claims directed to software, as opposed to hardware, . . . inherently abstract and therefore only properly analyzed at the second step of the *Alice* analysis.” *Id.* Thus, in analyzing claims directed to computer-related technology under the first step of the *Alice* framework, a relevant question is “whether the

focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1335-36.

If the court concludes that the claims are drawn to a patent-ineligible concept under the first step of the *Alice* framework, it must next look to “the elements of each claim both individually and as an ‘ordered combination,’” *id.* at 1334, to see if there is an “‘inventive concept’—*i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Alice Corp.*, 134 S. Ct. at 2355 (alteration and internal quotation marks omitted). “[T]he prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant postsolution activity.” *Bilski v. Kappas*, 561 U.S. 593, 610-11 (2010) (internal quotation marks omitted). Similarly, “[s]imply appending conventional steps, specified at a high level of generality, . . . [i]s not enough to supply an inventive concept.” *Alice Corp.*, 134 S. Ct. at 2357 (internal quotation marks and emphasis omitted). Further, “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Id.* at 2358.

### III. ANALYSIS

#### A. Claim Construction

Two-Way argues that Defendants’ motion is premature because claim construction is necessary to determine patent eligibility under § 101. (D.I. 43 at 14-15). In accordance with an order of the Court (D.I. 54 at 34-



35; D.I. 64), Two-Way identified the claim terms it contends need construction and offered its proposed constructions. (D.I. 61, 70). Defendants do not dispute that the Court should consider this motion in light of Two-Way's proposed claim constructions. Defendants maintain that Two-Way's proposed constructions do not alter the § 101 analysis. (See D.I. 71-1 at 1).

The validity of asserted claims under § 101 is a "threshold inquiry" for the court to decide as a matter of law. *In re Bilski*, 545 F.3d 943, 950 (Fed. Cir. 2008), *aff'd*, *Bilski v. Kappas*, 561 U.S. 593, 602 (2010). At the pleading stage, to the extent the § 101 question of law is informed by subsidiary factual issues, those facts are to be construed in the light most favorable to Plaintiff. See *TriPlay, Inc. v. WhatsApp Inc.*, 2015 WL 1927696, at \*5 n.5 (D. Del. Apr. 28, 2015), *adopted in part, rejected in part*, 2015 WL 4730907 (D. Del. Aug. 10, 2015); *Shortridge v. Found. Constr. Payroll Serv., LLC*, 2015 WL 1739256, at \*7 (N.D. Cal. Apr. 14, 2015), *aff'd*, 2016 WL 3742816 (Fed. Cir. July 13, 2016). Because "the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter," it is often necessary to resolve claim construction disputes prior to a § 101 analysis. *Bancorp Servs., LLC v. Sun Life Assurance Co. of Canada (US.)*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012). Still, the Federal Circuit has "never set forth a bright line rule requiring district courts to construe claims before determining subject matter eligibility." *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323, 1325 (Fed. Cir. 2011), *vacated on other grounds sub nom. WildTangent, Inc. v. Ultramercial, LLC*, 132 S. Ct. 2431 (2012). Early resolution of § 101 issues, where appropriate, is desirable. *I/P Engine, Inc. v. AOL Inc.*,

576 F. App'x 982, 996 (Fed. Cir. 2014) (Mayer, J., concurring), *cert. denied*, 136 S. Ct. 54 (2015); *see also* *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 2016 WL 3514158, at \*4 (Fed. Cir. June 27, 2016) (“Courts may therefore dispose of patent-infringement claims under § 101 whenever procedurally appropriate.”). *But see* *BASCOM Global*, 2016 WL 3514158, at \*8 (Newman, J., concurring) (“[I]nitial determination of eligibility often does not resolve patentability, whereas initial determination of patentability issues always resolves or moots eligibility.”). Thus, resolution of a § 101 dispute at the pleading stage is proper if claim construction is unnecessary, *see Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988, 991 n.1 (Fed. Cir. 2014), or if there is “no reasonable construction that would bring [the asserted claims] within patentable subject matter.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 719 (Fed. Cir. 2014) (Mayer, J., concurring) (internal quotation marks omitted), *cert. denied sub nom. Ultramercial, LLC v. WildTangent, Inc.*, 135 S. Ct. 2907 (2015); *see also* *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014) (construing claims in the manner most favorable to patentee on § 101 motion decided before formal claim construction), *cert. denied*, 136 S. Ct. 119 (2015).

For the reasons stated above, I adopt Two-Way's proposed constructions for purposes of this motion. (*See* D.I. 61, 70).

## **B. Prior §§ 102 and 103 Analyses**

Two-Way urges the Court to consider materials that relate to the asserted patents from prior proceedings before the PTO and in federal courts. (D.I. 43 at

14 & n.6). Two-Way argues that the proffered materials “demonstrate[] how [its] invention[s] solved specific technical problems and added significant inventive concepts over the prior art.” (*Id.* at 14). Two-Way encourages the Court to take judicial notice of the proffered materials because patentability under § 101 is a question of law that may be informed by subsidiary factual issues and because the Court must accept all factual allegations in Two-Way’s complaint as true and view them in the light most favorable to Two-Way. (*Id.* at 10, 14). If the Court decides not to consider the proffered factual materials in deciding the § 101 motion for judgment on the pleadings, Two-Way requests in the alternative that the Court either convert the motion to a motion for summary judgment or grant Two-Way leave to file a Fourth Amended Complaint attaching the proffered materials. (*Id.* at 15 & n.7).

The proffered materials are irrelevant to the § 101 motion for judgment on the pleadings. None of the materials addresses a § 101 challenge to claims of the asserted patents. (See D.I. 44-1–D.I. 44-24). The novelty and nonobviousness of the claims under §§ 102 and 103 does not bear on whether the claims are directed to patent-eligible subject matter under § 101. *See Diamond v. Diehr*, 450 U.S. 175, 188-92 (1981); *see also Genetic Techs. Ltd. v. Bristol-Myers Squibb Co.*, 72 F. Supp. 3d 521, 529 n.7 (D. Del. 2014) (not considering reexaminations, which evaluate invalidity based only on prior art, in deciding § 101 motion), *aff’d sub nom. Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369 (Fed. Cir. 2016). The history of conception of the invention and commercial embodiments of the invention are also irrelevant to the issues to be decided under § 101. *See Alice Corp. Pty. Ltd. v. CLS Bank Int’l*,

134 S. Ct. 2347, 2355-60 (2014) (examining “the claims at issue” and “the elements of the claims” in deciding patent eligibility under § 101). Because the proffered materials are irrelevant to the instant § 101 issue, I have not considered them.

Further, I will not convert the motion to a motion for summary judgment. Conversion to summary judgment is generally not appropriate where, as here, only the nonmoving party has introduced evidentiary exhibits in response to a motion to dismiss or a motion for judgment on the pleadings. *See Kenexa BrassRing, Inc. v. HireAbility.com, LLC*, 2015 WL 1943826, at \*4 (D. Mass. Apr. 28, 2015) (declining to convert a motion for judgment on the pleadings to a motion for summary judgment where only the nonmovant submitted documents outside the pleadings); *Crockett & Myers, Ltd. v. Napier, Fitzgerald & Kirby, LLP*, 401 F. Supp. 2d 1120, 1122 (D. Nev. 2005) (declining to convert a motion to dismiss for the same reason). Additionally, Two-Way’s request to file a Fourth Amended Complaint is denied without prejudice. Two-Way’s request is premised on the view that, if it were part of the record under consideration, the proffered evidence would be relevant to the instant decision. (*See* D.I. 43 at 15 n.7). Because the proffered evidence is irrelevant to the § 101 determination, however, I see no reason to grant Two-Way’s request for leave to file an amended complaint.

**C. '187 and '005 Patents**

Claim 1 of the '187 patent is representative of the '187 and '005 patent claims and reads:<sup>2</sup>

1. A method for transmitting message packets over a communications network comprising the steps of:

converting a plurality of streams of audio and/or visual information into a plurality of streams of addressed digital packets complying with the specifications of a network communication protocol,

for each stream, routing such stream to one or more users,

controlling the routing of the stream of packets in response to selection signals received from the users,

and

monitoring the reception of packets by the users and accumulating records that indicate which streams of packets were received by which users, wherein at least one stream of packets comprises an audio and/or visual selection and the records that are accumulated indicate the time that a user starts

---

<sup>2</sup> The Federal Circuit has held that the district court is not required to individually address claims not asserted or identified by the non-moving party, as long as the court identifies a representative claim and “all the claims are substantially similar and linked to the same abstract idea.” *Content Extraction*, 776 F.3d at 1348 (internal quotation marks omitted). Two-Way acknowledges that claim 1 of the '187 patent is representative of the claims of the '187 and '005 patents. (D.I. 43 at 15).

receiving the audio and/or visual selection and the time that the user stops receiving the audio and/or visual selection.

(’187 patent, 18:17-34; D.I. 26 at 53; *see also* ’005 patent, 18:44-59 (replacing “a plurality of streams” with “at least one stream” in the “converting” step)).

Defendants argue that the ’187 and ’005 patents “are directed solely to the abstract idea of monitoring the delivery of information.” (D.I. 38 at 17). In Defendants’ view, that idea represents a fundamental business practice “similar to the idea of tracking a user’s spending, which this Court has deemed abstract.” (*Id.* at 10-11). Regarding step two, Defendants contend that the claimed “converting,” “routing,” “controlling,” “monitoring,” and “recording” steps do not, separately or as an ordered combination, amount to significantly more than an instruction to apply the abstract idea using a generic computer. (*Id.* at 18-19).

Two-Way contends that the ’187 and ’005 patents are directed to the concrete task of “audio/visual streaming in a packet-switched architecture that facilitates efficient and reliable transmission, while also implementing specific forms of monitoring and record-keeping.” (D.I. 43 at 15). Two-Way argues that the claimed steps recite “a specific and concrete (*i.e.*, non-abstract) way of processing the streams [of audio/visual information].” (*Id.* at 15-17). Regarding step two, Two-Way argues that the patents supply an inventive concept because they claim elements that are directed to solving the technological problems of load, bottlenecking, and inadequate records. (*Id.* at 17-18).

The ’187 and ’005 patents are directed to the abstract idea of (1) sending information, (2) directing the

sent information, (3) monitoring receipt of the sent information, and (4) accumulating records about receipt of the sent information. (See '187 patent, 18:17-34; '005 patent, 18:44-59; *see also* D.I. 61 at 2 (describing “controlling the routing” as “directing a portion of the routing path”). The claims are thus directed to methods of sending and monitoring the delivery of audio/visual information. Although the claims are limited to the context of audio/visual streaming in a packet-switched communications network, they are not directed to an invention that improves streaming audio/visual content in a packet-switched network. (See, e.g., '187 patent, 18:17-34; '005 patent, 18:44-59; *see also* (D.I. 43 at 17)); *Electric Power Group, LLC v. Alstom S.A.*, No. 2015-1778, slip op. at pp. 8, 11-12 (Fed. Cir. Aug. 1, 2016) (holding that the claims at issue were directed to an abstract idea because “the focus of the claims [wa]s not on . . . an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools” and distinguishing between “ends sought and particular means of achieving them, between desired results (functions) and particular ways of achieving (performing) them”); *cf. Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016) (finding that the claims at issue were not directed to an abstract idea because “the plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity”). Thus, the '187 and '005 patents claim abstract ideas.

Two-Way argues that the inventive concept supplied by the '187 and '005 patents is the disclosed computer architecture, which solves the technological problems of load, bottlenecks, and inadequate

records. (D.I. 43 at 17-18). The patent specifications do, in fact, point to the architecture of the system as the technological innovation. (*See, e.g.*, '187 patent, 2:3-5, 3:55-59 (describing the patented invention as “a scalable architecture for delivery of real-time information over a communications network,” which is described further as “a distribution architecture integrated with a control architecture”); '005 patent, 2:6-9, 3:58-60 (same)). None of the claims, however, recite or refer to anything that could be described as an architecture.<sup>3</sup> (*See, e.g.*, '187 patent, 18:17-34; '005 patent, 18:44-59). Even if I accept that the architecture described in the patent specification is designed to solve the technological problems of load, bottlenecking, and inadequate records, the fact remains that the claims do not recite the mechanism by which those problems are solved. *See Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015) (holding that a claim directed to the abstract idea of “retaining information in the navigation of online forms” did not supply an inventive concept because the claim “contain[e]d no restriction on how the result is accomplished[, that is, t]he mechanism for maintaining the state [of data on a web page] is not described, although this is stated to be the essential innovation”). The claims therefore do not supply the inventive concept of a particular computer architecture. Further, the limitation regarding accumulating records about the receipt of sent information does not supply an inventive concept. (*See* '187 patent, 18:28-34; '005 patent, 18:55-

---

<sup>3</sup> The claims cannot fairly be read to recite computer architecture even in light of Two-Way's proposed claim constructions, some of which explicitly incorporate the words “intermediate computers.” (*See* D.I. 61 at 1-2; D.I. 70).



59); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363-64 (Fed. Cir. 2015) (holding that “gathering statistics” regarding customer responses was “routine, conventional data-gathering” that did not supply an inventive concept).

Because the ’187 and ’005 patents claim an abstract idea and the claims are not limited to a specific application of that abstract idea, the ’187 and ’005 patent claims are patent ineligible under § 101.

#### **D. ’622 Patent**

Claim 1 of the ’622 patent reads:<sup>4</sup>

1. A method for monitoring the forwarding of real-time information to at least one user having access to a communications network comprising:

generating delivery-commencement indications of real-time information forwarded to the user by means of the communications network, wherein the real-time information comprises a plurality of packets forwarded over the communications network to the user,

verifying the operational status of the user’s access to the communications network during delivery of the real-time information, and

---

<sup>4</sup> Two-Way does not concede that claim 1 of the ’622 patent is representative for purposes of this § 101 motion. (D.I. 43 at 18-19). In particular, Two-Way points to claim 29 as adding “further network-based limitations” that confirm that “the ’622 invention is limited to a specific implementation for streaming real-time information over a packet-switched network.” (*Id.* at 19).

generating delivery-termination indications of the real-time information forwarded to the user.

(’622 patent, 18:38-49; D.I. 1-1 at 44).

Defendants contend that the ’622 patent, like the ’187 and ’005 patents, is directed to the abstract idea of “monitoring the delivery of information.” (D.I. 38 at 10, 17). Regarding step two, Defendants assert that the claims at issue add only “routine and conventional computer functions.” (*Id.* at 13). Further, Defendants argue that the limitations are general, high-level functional descriptions that do not constitute inventive solutions. (*Id.*).

Two-Way contends that the ’622 patent claims are patent eligible at step one because they are “limited to a specific implementation for streaming real-time information over a packet-switched network.” (D.I. 43 at 19). Regarding step two, Two-Way asserts that the ’622 patent provides an inventive concept because it “overcomes the challenges of providing real-time streaming media over traditional packet-based networks.” (*Id.* at 20).

On their faces, claims 1 and 29 of the ’622 patent are directed to monitoring the delivery of real-time information to a user or users. (’622 patent, 18:38-49, 20:19-37). Monitoring the delivery of real-time information to a user or users is similar to concepts previously found to be abstract. For example, the Federal Circuit in *BASCOM Global* held that “filtering content on the Internet” is an abstract idea. 2016 WL 3514158, at \*5. The Federal Circuit has also held that claims focused “on collecting information, analyzing it, and displaying certain results of the collection and

analysis” were directed to an abstract idea. *Electric Power Group, LLC*, No. 2015-1778, slip op. at p. 6.

The claims do not disclose an inventive concept sufficient to render them patent eligible. Limiting the claims to the particular technological environment of “real-time stream delivery over packet-based networks” is insufficient to transform them into patent-eligible applications of the abstract idea to which they are directed. (D.I. 43 at 21); *see Alice Corp.*, 134 S. Ct. at 2358; *Electric Power Group, LLC*, No. 2015-1778, slip op. at pp. 9-10. Further, the claim 1 limitations that require verifying that information is being received by its intended recipient and noting when information delivery has ceased do not add anything to routine methods of delivering information. (*See* ’622 patent, 18:46-49; D.I. 43 at 20). Similarly, the claim 29 limitation requiring forwarding a stream from an intermediate computer only when the user selects it does not add anything inventive to the idea of sending information only to one who requests it. (*See* ’622 patent, 20:27-28; D.I. 43 at 20). Nothing in the claims requires anything other than conventional computer and network components operating according to their ordinary functions. (*See* ’622 patent, 1:26-65, 18:38-49, 20:19-37); *Electric Power Group, LLC*, No. 2015-1778, slip op. at p. 11 (holding that the claims “do not state an arguably inventive concept in the realm of application of the information-based abstract ideas” because the claims “do not include any requirement for performing the claimed functions of gathering, analyzing, and displaying in real time by use of anything but entirely conventional, generic technology”). Nor is the limitation to “real-time” information sufficient to supply an inventive concept rendering the claims patent

eligible. (See D.I. 70 at 4). In *LendingTree, LLC v. Zillow, Inc.*, the court held that “simultaneous competition” for loans over the internet did not supply an inventive concept sufficient to render claims to the abstract idea of a loan-application clearinghouse patent eligible. 2016 WL 3974203, at \*5; see also *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1318 (Fed. Cir. 2016) (holding that claims to a computer system that made it possible for multiple lenders to compete simultaneously for a potential borrower’s business did not amount to an inventive concept). Thus, the claims of the ’622 concept do not supply an inventive concept sufficient to render them patent eligible.

The ’622 patent claims at issue therefore fail to meet the standard for patent eligibility under § 101.

#### **E. ’686 Patent**

Claim 1 of the ’686 patent reads:<sup>5</sup>

1. A method for metering real-time streaming media for commercial purposes, said method comprising:

forwarding a real-time media stream from an intermediate server toward a user device, wherein said forwarding of said real-time media stream from said intermediate server to said user device is via unicast,

---

<sup>5</sup> Two-Way does not concede that claim 1 of the ’686 patent is representative for purposes of this § 101 motion. (D.I. 43 at 22-23). Specifically, Two-Way points to claims 22, 26, 30, and 38 as confirming that the ’686 patent invention is a patent-eligible computer network implementation. (*Id.*).

multicast, broadcast or any combination of the aforementioned;  
detecting a termination of said forwarding;  
after said termination, determining an extent of said real-time media stream forwarded toward said user device; and  
logging said extent for commercial purposes.  
(’686 patent, 18:16-27; D.I. 1-2 at 42).

Defendants contend that, like the ’187, ’005, and ’622 patents, the ’686 patent is directed to the abstract idea of “monitoring the delivery of information.” (D.I. 38 at 10-12). Regarding step two, Defendants assert that the claims at issue merely recite generic, conventional technology and generic concepts “that are inherent in the very idea of monitoring transmitted information in any technological context.” (*Id.* at 14-15).

According to Two-Way, the claims are patent eligible at step one because they are directed to “specific computer architectures for metering the forwarding of real-time streaming media over a network.” (D.I. 43 at 21). Regarding step two, Two-Way asserts that the claims at issue supply an inventive concept in that they transform known media streaming by incorporating an intermediate server and using a specific network transmission mode in real-time, one-to-many media streams on a computer network. (*Id.* at 23-24).

Claim 1 of the ’686 patent is directed to measuring the delivery of real-time information for commercial purposes. (’686 patent, 18:16-17). Claims 22, 26, 30, and 38 are likewise directed to measuring the delivery of real-time information for commercial purposes. (*Id.* at 19:20-22, 19:39-52, 20:6-17, 21:16-30; *see* D.I. 43 at 22-23). Measuring the delivery of real-time informa-

tion for commercial purposes is a commercial practice akin to those previously found to be abstract. *See, e.g., Alice Corp.*, 134 S. Ct. at 2357 (holding that claims directed to intermediated settlement were abstract); *Ultramercial, Inc.*, 772 F.3d at 715-16 (holding that the claims at issue recited the abstract idea of using advertising as currency on the Internet). Further, measuring the delivery of information is analogous to the abstract idea of collecting and analyzing information. *See Electric Power Group, LLC*, No. 2015-1778, slip op. at p. 6 (holding claimed focused on “collecting information, analyzing it, and displaying certain results of the collection and analysis” to be directed to an abstract idea); *BASCOM Global*, 2016 WL 3514158, at \*5 (holding that claims to “filtering content on the Internet” “do not readily lend themselves to a step-one finding that they are directed to a nonabstract idea”); *see also supra* Part III.D (discussion of ’622 patent).

The ’686 patent claims do not disclose an inventive concept sufficient to render them patent eligible. Limiting the claims to the “realm of a computer network” is insufficient, on its own, to render the claims patent eligible. *Alice Corp.*, 134 S. Ct. at 2358; *Electric Power Group, LLC*, No. 2015-1778, slip op. at pp. 9-10. That the patent discusses the invention in the context of a specific network transmission mode in real-time, one-to-many media streams on a computer network does not supply an inventive concept because the claims do not specify a technological improvement to measuring information delivery using such a network. (*See* D.I. 43 at 23); *cf. BASCOM Global*, 2016 WL 3514158, at \*6 (finding inventive concept in “the installation of a filtering tool at a specific location, remote from the end users, with customizable filtering

features specific to each end user[,]” because it “gives the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server”). Further, although the steps recite computer components—for example, the intermediate server in the “forwarding” limitation of claim 1—those components merely perform their conventional functions. (See ’686 patent, 1:45-65, 18:16-27; D.I. 43 at 22; D.I. 54 at 21-23); *see also Electric Power Group, LLC*, No. 2015-1778, slip op. at p. 10 (“Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information.”); *cf. DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257-58 (Fed. Cir. 2014) (holding claims patent eligible because they modified conventional website display mechanics to produce hybrid website display). The additional limitations recited in claims 22, 26, 30, and 38 also include merely generic computer components and conventional steps, and therefore do not supply inventive concepts. (See ’686 patent, 19:20-22, 19:39-52, 20:6-17, 21:16-30).

For the reasons stated above, the ’686 patent claims fail to meet the standard for patent eligibility under § 101.

#### IV. CONCLUSION

For the reasons stated above, the asserted claims of the ’187, ’005, ’622, and ’686 patents are directed to patent-ineligible subject matter under 35 U.S.C. § 101. Defendants’ Motion for Judgment on the Pleadings (D.I. 37) is **GRANTED IN PART** with respect to the asserted claims of the ’187, ’005, ’622, and ’686 patents and **DISMISSED IN PART** as moot with respect to

40a

the asserted claims of the '237 patent. An appropriate order will be entered.



41a

**APPENDIX C**

NOTE: This order is nonprecedential.

**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT**

March 9, 2018

Nos. 2016-2531, 2016-2532

TWO-WAY MEDIA, LTD.,  
Plaintiff-Appellant,

v.

COMCAST CABLE COMMUNICATIONS, LLC,  
COMCAST INTERACTIVE MEDIA LLC, VERIZON  
SERVICES CORP., VERIZON ONLINE LLC,  
Defendants-Appellees.

Appeals from the United States District Court  
for the District of Delaware in Nos. 1:14-cv-01006-  
RGA, 1:14-cv-01212-RGA, Judge Richard G. Andrews

**ON PETITION FOR REHEARING EN BANC**

Before PROST, *Chief Judge*, NEWMAN, LOURIE, DYK,  
MOORE, O'MALLEY, REYNA, WALLACH, TARANTO,  
CHEN, HUGHES, and STOLL, *Circuit Judges*.

PER CURIAM.

**ORDER**

Appellant Two-Way Media Ltd. filed a petition for rehearing en banc. A response to the petition was invited by the court and filed by appellees Comcast Cable Communications, LLC, Comcast Interactive Media LLC, Verizon Online LLC and Verizon Services Corp. The petition was first referred as a petition for rehearing to the panel that heard the appeal, and thereafter

42a

the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on March 19, 2018.

FOR THE COURT

March 9, 2018

Date

/s/ Peter R. Marksteiner

Peter R. Marksteiner

Clerk of Court