Nos. 2019-1808, -1812, -1813, -1814

IN THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

VOIP-PAL.COM, INC.,

Plaintiff-Appellant,

v.

TWITTER, INC.,

Defendant-Appellee.

(*Caption Continued on Inside Cover*)

On Appeal from the United States District Court for
the Northern District of California,
Nos. 5:18-cv-04523-LHK, 5:18-cv-06054-LHK,
5:18-cv-06177-LHK, and 5:18-cv-06217-LHK

JOINT RESPONSIVE BRIEF FOR DEFENDANTS-APPELLEES

Gene W. Lee
PERKINS COIE LLP
1155 Avenue of the Americas
22nd Floor
New York, NY 10036
(212) 262-6900
GLee@perkinscoie.com

Nathan K. Kelley
PERKINS COIE LLP
700 Thirteenth Street N.W.
Suite 600
Washington, D.C. 20005
(202) 654-6200
NKelley@perkinscoie.com

Counsel for Defendant-Appellee Twitter, Inc.

(*Additional Counsel for Defendants-Appellees Listed on Signature Page*)

VOIP-PAL.COM, INC.,

Plaintiff-Appellant,

v.

CELLCO PARTNERSHIP, dba Verizon Wireless Services LLC,

Defendant-Appellee.

VOIP-PAL.COM, INC.,

Plaintiff-Appellant,

v.

AT&T CORP,

Defendant-Appellee.

VOIP-PAL.COM, INC.,

Plaintiff-Appellant,

v.

APPLE INC.,

Defendant-Appellee.

CERTIFICATE OF INTEREST

Counsel for Appellee Twitter, Inc., certifies as follows:

1. The full name of every party represented by us is: Twitter, Inc.

2. The name of the Real Party in interest represented by us is: None

3. Parent corporations and publicly held companies that own 10% or more of stock in the party represented by us is: None

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

Sarah Fowler (née Stahnke), Thomas V. Matthew, and Amisha K. Manek of PERKINS COIE LLP;
Michael D. Rounds of WATSON ROUNDS, P.C.

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal:

VoIP-Pal.com, Inc. v. Twitter, Inc., No. 19-1808 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Cellco Partnership, No. 19-1812 (Fed. Cir.);
VoIP-Pal.com, Inc. v. AT&T Corp, No. 19-1813 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Apple Inc., No. 19-1814 (Fed. Cir.);
Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1456 (Fed. Cir.);
Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1457 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Amazon.com, Inc., No. 5:18-cv-7020 (N.D. Cal.);
VoIP-Pal.com, Inc. v. Apple Inc., No. 5:18-cv-6216 (N.D. Cal.);
Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01198 (P.T.A.B.); and
Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01201 (P.T.A.B.).

Counsel for Appellee Cellco Partnership d/b/a Verizon Wireless certifies as follows:

1. The full name of every party represented by us is: Cellco Partnership d/b/a Verizon Wireless

2. The name of the Real Party in interest represented by us is: Cellco Partnership d/b/a Verizon Wireless

3. Parent corporations and publicly held companies that own 10% or more of stock in the party represented by us is: Verizon Communications Inc.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

Kelly H. Dove of SNELL & WILMER LLP;
Chad R. Fears of EVANS, FEARS & SHUTTERT LLP.

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal:

VoIP-Pal.com, Inc. v. Twitter, Inc., No. 19-1808 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Cellco Partnership, No. 19-1812 (Fed. Cir.);
VoIP-Pal.com, Inc. v. AT&T Corp, No. 19-1813 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Apple Inc., No. 19-1814 (Fed. Cir.);
Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1456 (Fed. Cir.);
Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1457 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Amazon.com, Inc., No. 5:18-cv-7020 (N.D. Cal.);
VoIP-Pal.com, Inc. v. Apple Inc., No. 5:18-cv-6216 (N.D. Cal.);
Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01198 (P.T.A.B.); and
Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01201 (P.T.A.B.).

Counsel for Appellee AT&T Corp:

1. The full name of every party represented by us is: AT&T Corp.

2. The name of the Real Party in interest represented by us is: AT&T Corp.

3. Parent corporations and publicly held companies that own 10% or more of stock in the party represented by us is:

AT&T Corp is a New York corporation and is a wholly owned subsidiary of AT&T Inc. AT&T Corp is not a publicly traded corporation. AT&T Inc. is a publicly traded company, and there is no one person or group that owns 10% or more of the stock of AT&T Inc.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

Wayne O. Stacy, Bryant C. Boren, Jr., Brian D. Johnston, Lauren M. Eaton, Susan Kennedy, Morgan Elizabeth Grissum, and Samir Bhavsar of BAKER BOTTS L.L.C.;
Michael D. Rounds of WATSON ROUNDS, PC.

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal:

VoIP-Pal.com, Inc. v. Twitter, Inc., No. 19-1808 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Cellco Partnership, No. 19-1812 (Fed. Cir.);
VoIP-Pal.com, Inc. v. AT&T Corp, No. 19-1813 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Apple Inc., No. 19-1814 (Fed. Cir.);
Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1456 (Fed. Cir.);
Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1457 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Amazon.com, Inc., No. 5:18-cv-7020 (N.D. Cal.);
VoIP-Pal.com, Inc. v. Apple Inc., No. 5:18-cv-6216 (N.D. Cal.);
Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01198 (P.T.A.B.); and

Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01201 (P.T.A.B.).

Counsel for Appellee Apple Inc.:

1. The full name of every party represented by us is: Apple Inc.

2. The name of the Real Party in interest represented by us is: N/A

3. Parent corporations and publicly held companies that own 10% or more of stock in the party represented by us is: None.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

Mark A. Perry, Ryan Iwahashi, Andrew Wilhelm of **Gibson, Dunn & Crutcher;** John M. Desmarais**,** Robert C. Harrits**,** Kerri-Ann Limbeek**,** Peter Curtis Magic**,** Michael J. McCue**,** Ameet Ap. Modi**,** Michael P. Stadnick of **Desmarais LLP;** Johnathan Fountain and Michael J. McCue **of Lewis Roca Rothgerber Christie LLP.**

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal:

VoIP-Pal.com, Inc. v. Twitter, Inc., No. 19-1808 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Cellco Partnership, No. 19-1812 (Fed. Cir.);
VoIP-Pal.com, Inc. v. AT&T Corp, No. 19-1813 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Apple Inc., No. 19-1814 (Fed. Cir.);
Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1456 (Fed. Cir.);
Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1457 (Fed. Cir.);
VoIP-Pal.com, Inc. v. Amazon.com, Inc., No. 5:18-cv-7020 (N.D. Cal.);
VoIP-Pal.com, Inc. v. Apple Inc., No. 5:18-cv-6216 (N.D. Cal.);
Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01198 (P.T.A.B.); and
Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01201 (P.T.A.B.).

TABLE OF CONTENTS

TABLE OF CONTENTS *(continued)*

Page

TABLE OF AUTHORITIES

Page(s)

CASES

TABLE OF AUTHORITIES *(continued)*

Page(s)

TABLE OF AUTHORITIES *(continued)*

Page(s)

TABLE OF AUTHORITIES *(continued)*

STATEMENT OF RELATED CASES

No other appeal in or from the same civil action or proceeding in the lower court or body was previously before this or any other appellate court.

The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal are:

VoIP-Pal.com, Inc. v. Twitter, Inc., No. 19-1808 (Fed. Cir.);

VoIP-Pal.com, Inc. v. Cellco Partnership, No. 19-1812 (Fed. Cir.);

VoIP-Pal.com, Inc. v. AT&T Corp, No. 19-1813 (Fed. Cir.);

VoIP-Pal.com, Inc. v. Apple Inc., No. 19-1814 (Fed. Cir.);

Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1456 (Fed. Cir.);

Apple Inc. v. VoIP-Pal.com, Inc., No. 18-1457 (Fed. Cir.);

VoIP-Pal.com, Inc. v. Amazon.com, Inc., No. 5:18-cv-7020 (N.D. Cal.);

VoIP-Pal.com, Inc. v. Apple Inc., No. 5:18-cv-6216 (N.D. Cal.);

Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01198 (P.T.A.B.); and

Apple Inc. v. VoIP-Pal.com, Inc., No. IPR2016-01201 (P.T.A.B.).

INTRODUCTION

This appeal presents a straightforward application of existing patent-eligibility jurisprudence. The asserted claims involve processing information in a communications environment. The claims are not directed to communications themselves or to any unconventional or inventive network hardware or software that route communications. Instead, they are directed to processing information about the communications with generic computers before routing the communications.

The district court concluded that the representative claims are directed to the abstract idea of routing a call based on information about the caller and callee and disclose no inventive concept. That conclusion followed naturally from this Court's precedent when applied to the generalized and functional limitations within the representative claims. The district court's analysis was true to precedent and the scope of the claims; VoIP-Pal's arguments are true to neither.

Throughout its opening brief VoIP-Pal refers to the claim limitations with various adjectives like *tangible* and *concrete*, but neither characterization is accurate. Even if it were, the claims as a whole are directed to the abstract idea of communications routing and are not saved by anything transformative at step two. The information that is processed by the claims (*e.g.*, telephone numbers and country codes) is conventional, and the components doing the processing (*e.g.*, generic computers or modules within a generic computer) are equally conventional,

performing functions described only at high levels of generality. Finally, there is nothing about the ordered combination of the disputed claims that amounts to an inventive concept beyond the abstract idea itself. Collecting, analyzing, and then storing or sending the result of the analysis is not an inventive concept that saves VoIP-Pal's claims. VoIP-Pal's argument that the district court's decision was premature or that it was too narrow is not supported by the record. There was no factual dispute that could have prevented dismissal, and VoIP-Pal points to none now. VoIP-Pal also did not dispute which claims were representative. The district court's decision should be affirmed.

STATEMENT OF THE ISSUE

Whether the district court correctly concluded that the asserted claims—which recite a method for routing communications based on information about the participants—are ineligible for patenting under 35 U.S.C. § 101.

STATEMENT OF THE CASE

I. Factual Background

In 2016, VoIP-Pal brought four complaints of patent infringement against Twitter, Inc.; Cellco Partnership, dba Verizon Wireless; AT&T Corp; and Apple Inc. (collectively, "Appellees"), asserting that all Appellees infringed U.S. Patent No. 9,179,005 ("the '005 patent") and all but Twitter infringed U.S. Patent No. 8,542,815 ("the '815 patent") (collectively, the "Asserted Patents"). The Asserted Patents

share a common specification because the '005 patent issued from a continuation of the application that issued as the '815 patent. For convenience and simplicity, Appellees cite to the specification of the '815 patent.

The four cases were stayed based on *inter partes* review ("IPR") petitions. Two petitions filed by Apple were instituted and resulted in final written decisions, each concluding that Apple's grounds did not show anticipation or obviousness by a preponderance of the evidence. Apple has separately appealed those decisions. *See Apple Inc. v. VoIP-Pal.com, Inc.*, Nos. 18-1456, 18-1457 (Fed. Cir.).

Following the final written decisions in the IPRs, the four cases were transferred to the U.S. District Court for the Northern District of California before Judge Koh. Appellees moved for dismissal under Federal Rule of Civil Procedure 12(b)(6), arguing the asserted claims were directed to patent ineligible subject matter under § 101. On March 25, 2019, the district court granted the motion, dismissing each complaint, and entering final judgment against VoIP-Pal. Appx1-4.

II. The Asserted Patents

Both Asserted Patents are titled "Producing Routing Messages For Voice Over IP Communications." They describe the field of the invention as "voice over IP communications and methods and apparatus for routing and billing." Appx150 (1:10-13). Voice-over-IP ("VoIP") generally involves sending telephone calls over an Internet Protocol ("IP") network, such as the Internet. Appx150 (1:15-28).

Before VoIP, calls typically occurred over an analog system, such as the public switched telephone network ("PSTN"), which lets callers make "landline" telephone calls to one another. The PSTN has existed since the early days of telephony and includes switches or nodes within a network or multiple networks. Appx150 (1:29-39); VoIP-Pal's Corrected Opening Brief ("Br.") 5-6. PSTN calls are routed between two users through a circuit established by such switches. Initially, the switches were operated by human operators using physical switchboards to route calls. By the mid-to-late 20th century, telephone providers had replaced most of the manual switching with automated electronic switching, doing away with the need for human switchboard operators.

VoIP involves routing communications over the Internet instead of the traditional PSTN. Appx150 (1:15-28). But VoIP-Pal did not invent VoIP systems or routing. The common specification's "Background of the Invention" acknowledges preexisting VoIP systems using VoIP software to enable the sending and receiving of voice, data, or video calls. Appx150 (1:15-46). Those VoIP systems were already prevalent in 2006, the alleged priority date for the Asserted Patents.

Instead, VoIP-Pal's purported invention involves routing such preexisting communications between two different types of networks—*i.e.*, public and private networks. Appx150 (1:15-21). The Background, however, acknowledges that

routing calls between public networks (either the Internet or the PSTN) and private networks (an internal network of a large organization such as a private branch exchange ("PBX")) was also well known at the time. Appx150 (1:15-39). VoIP-Pal admits as much in its brief. Br. 5-8. By 2006, the corporate world had a long-standing practice of using internal (*i.e.*, private) numbering schemes for its employees, such as personal extensions, with the option of reaching an outside line, such as by dialing the prefix "9," to place calls to another network (*i.e.*, a public network). *See* Br. 6-8. The Asserted Patents establish that routing between these different networks was conventional in 2006.

VoIP-Pal contends that its technology improves this inter-network routing "by improving on the limited dialing options that were conventional at the time, such as routing a call solely based upon the dialed phone number." Br. 8. As VoIP-Pal explains it, "[w]hat is unique about the patented inventions is that it became unnecessary for the user to do anything special to 'trigger' such user-specific call processing," in that the user no longer needed to dial a country code to make an international call. Br. 11-12. Similarly, VoIP-Pal contends that the patented invention obviated the need to dial "9" to call from a PBX to the PSTN because it would "automatically cause[] a call to be routed." Br. 13. VoIP-Pal now dubs these two purported improvements "user-specific call handling" and "routing transparency." Br. 11-12 (capitalization omitted).

The Asserted Patents do not refer to "user-specific call handling" or "routing transparency." More importantly, the claim language and the specification demonstrate that the *claims* are directed to a broader idea: classifying calls as either private network calls or public network calls in order to route them to one of those networks. *See, e.g.*, Appx167 ('815 patent claim 1); Appx156 (14:24-34); Appx234 ('005 patent claim 74); Appx219 (14:32-43).

The asserted claims fall into two groups: (1) multi-network claims, and (2) single-network claims. The difference between the two groups is immaterial to patent eligibility, as there is no meaningful distinction in the difference between routing between two different networks versus two portions of one network. *See* Br. 9-15 (addressing the two patents collectively).

The representative claims recite a process for: (1) receiving caller and callee identifiers; (2) locating a caller dialing profile; (3) matching the information in the dialing profile with information in the callee identifier; (4) classifying the call as either public or private based on classification criteria; and (5) generating the appropriate public network or private network routing message. Appx167; Appx234.

These functions are apparent from the plain language of claim 1 of the '815 patent, which is representative of the multi-network claims:

Claim 1 of the ’815 Patent	**Claimed function**
A process for operating a call routing controller to facilitate communication between callers and callees in a system comprising a plurality of nodes with which callers and callees are associated, the process comprising:	Process for call routing
in response to initiation of a call by a calling subscriber, receiving a caller identifier and a callee identifier	Receiving data (about the caller and callee)
locating a caller dialing profile comprising a username associated with the caller and a plurality of calling attributes associated with the caller	Collecting data (locating data about the caller)
determining a match when at least one of said calling attributes matches at least a portion of said callee identifier	Analyzing the data (determining a match between caller and callee)
classifying the call as a public network call when said match meets public network classification criteria and classifying the call as a private network call when said match meets private network classification criteria	Analyzing the data (classifying the call as public or private based on the match)
when the call is classified as a private network call, producing a private network routing message for receipt by a call controller, said private network routing message identifying an address, on the private network, associated with the callee	Generating a response (producing a private network routing message)
when the call is classified as a public network call, producing a public network routing message for receipt by the call controller, said public network routing message identifying a gateway to the public network. Appx167 (36:14-38).	Generating a response (producing a public network routing message)

Likewise, claim 74 of the '005 patent is representative of the single-network claims and recites essentially the same functionality as claim 1 of the '815 patent:

Claim 74 of the '005 Patent	**Claimed function**
A method of routing communications in a packet switched network in which a first participant identifier is associated with a first participant and a second participant identifier is associated with a second participant in a communication, the method comprising:	Method of routing communications (*e.g.*, calls)
after the first participant has accessed the packet switched network to initiate the communication, using the first participant identifier to locate a first participant profile comprising a plurality of attributes associated with the first participant;	Collecting data (locating data about the caller)
when at least one of the first participant attributes and at least a portion of the second participant identifier meet a first network classification criterion, producing a first network routing message for receipt by a controller, the first network routing message identifying an address in a first portion of the packet switched network, the address being associated with the second participant, the first portion being controlled by an entity; and	Analyzing the data and generating a response (determining a match for a first criterion and producing a first network routing message)
when at least one of the first participant attributes and at least a portion of the second participant identifier meet a second network classification criterion, producing a second network routing message for receipt by the controller, the second network routing message identifying an address in a second portion of the packet switched network, the second portion not controlled by the entity. Appx234 (43:41-65).	Analyzing the data and generating a response (determining a match for a second criterion and producing a second network routing message)

The specification describes the claimed process for operating a "call routing controller" (or just "routing controller") to facilitate communication between callers and callees. *See, e.g.*, Appx118 (Fig. 1); Appx150 (1:50-64). The routing controller checks the information in a dialing profile retrieved from a database to classify the call as directed to a public or private network. *E.g.*, Appx158-159 (17:17-20:25); Appx160 (22:58-61); Appx124 (Fig. 8B). The specification describes the dialing profile as "a record identifying calling attributes of the caller," with examples including user name, domain, national dialing digits, international dialing digits, and country code. *E.g.*, Appx158-59 (17:59-19:3); Appx127-128 (Figs. 9-12).

After classifying the call as either public or private, the routing controller generates a "routing message" that contains information about the classification and routing of the call and sends the routing message to a "call controller." *E.g.*, Appx159-160 (20:26-22:60) (subscriber-to-subscriber calls between different nodes); Appx160-161 (22:61-24:67) (subscriber to non-subscriber calls); Appx162 (25:1-26:45) (subscriber-to-subscriber calls within the same node); Appx130, Appx133, Appx134 (Figs. 15, 16, 25, 32) (showing routing messages). The specification provides an example of a "generic routing message." Appx159 (20:61); Appx130 (Fig. 15). The call controller receives the routing message as a request to establish a call. *E.g.*, Appx162-163 (26:46-27:43).

The "call controller" and "routing controller" are described in generic computer terms as items that "may be implemented as separate modules on a common computer system or by separate computers, for example." Appx156 (13:10-14). The specification explains that the routing controller has generic computer components: a processor, program memory, a table memory, buffer memory, and an I/O port. *E.g.*, Appx158 (17:16-37); Appx122 (Fig. 7). It also explains that "[t]he program memory 204 includes blocks of codes for directing the processor 202 to carry out various functions of the [routing controller] (16)." Appx158 (17:38-44). The call controller likewise consists of generic computer components. Appx157 (15:62-16:5); Appx120 (Fig. 4).

III. The District Court's Order

In a 44-page opinion, the district court thoroughly analyzed the claims, the specification, and VoIP-Pal's purported improvements described in the pleadings, and correctly concluded that the asserted claims are ineligible for patenting under the § 101 framework set forth in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014). Appx5-49.

As a threshold matter, the district court agreed with Appellees that claim 1 of the '815 patent and claim 74 of the '005 patent are representative of the multi-network and single-network claims, respectively. Appx8. It recognized that VoIP-Pal never challenged the identification of representative claims. *Id.*

At *Alice* step one, the district court determined that the claims were "directed to the abstract idea of routing a call based on characteristics of the caller and callee." Appx25 ('815 patent); Appx39 (same for '005 patent). It then analyzed each limitation in the representative claims and concluded that the claims "recite[] a generalized solution in broad, functional language—namely, 'locating,' 'determining,' and 'classifying,' a call based on a caller identifier and a callee identifier." Appx29. Because the claim language failed to provide a specific implementation for *how* the classification and routing functionality was achieved in a non-abstract way, the district court concluded that the claims were akin to numerous other cases where this Court has found similar claims patent ineligible. Appx29-30. The court also looked to longstanding analogous practices of, for example, human switchboard operators or personal assistants directing calls, as further demonstrating that these claims recited abstract practices for collecting and processing information. Appx30-31.

At *Alice* step two, the district court analyzed both the individual claim limitations and the ordered combination for an inventive concept. Appx34-38 ('815 patent); Appx43-45 ('005 patent). The court determined that each of the individual limitations—such as the caller or callee identifiers, locating a dialing profile, matching information in the profile with the identifier, and classifying the call—were either well-known or generic computer functions that did not amount to

"significantly more" under *Alice*. Appx34-36. Looking at the ordered combination, the district court found little difference between VoIP-Pal's asserted claims and those found ineligible in *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, 874 F.3d 1329 (Fed. Cir. 2017), which were directed to "first processing the data, then routing it, [and] controlling it." Appx37 (alteration in original) (quoting *Two-Way Media*, 874 F.3d at 1339).

Finally, the district court disposed of VoIP-Pal's contention that "user-specific call handling" and "transparent routing" precluded resolution of Appellees' motion. The court determined that the claims neither recite such benefits, nor specify what the caller dials to place a call. Appx47-48. The district court also noted that the specification fails to disclose those concepts, and even if it did, disclosures in the specification that are absent from the claims would not save claims from ineligibility. Appx47. The district court also noted that mere "attorney argument in the complaint cannot save the claims." Appx48.

SUMMARY OF ARGUMENT

I. The district court properly applied the established two-step eligibility framework to the representative claims, concluding both that: (i) the claims are directed to the abstract idea of routing a call based on characteristics of the parties; and (ii) they lack an inventive concept that is significantly more than that abstract idea.

A. At step one, the district court looked to the focus of the claims and concluded that the steps of receiving information, locating more information, matching information, classifying a call as public or private based on that matching, and producing a message that conveys that classification amount to the abstract idea of routing a call based on information about the caller and callee. In reaching that conclusion, the district court considered the claim elements in detail. Those limitations are generalized steps with generic functions. The claimed information is referred to generically as caller and callee "identifiers," caller "attributes," as well as the caller's "dialing profile." The common specification explains that those terms encompass the conventional types of information associated with callers and callees. "Identifiers" and "attributes" can be anything; examples include phone numbers or names. "Profiles" are just records containing the attributes of parties and can likewise include phone numbers, area codes, country codes, etc. "Matching" is equally generic and can include the simple comparison of area codes. The produced "message" is just the output of the match.

While limitations in the representative claims might serve to limit the abstract idea to call-specific information or might limit the overall process to the realm of communication routing, neither saves the claims at step one. This Court's precedent is clear that limiting information collection and analysis to particular content or a particular source does not make the process any less abstract. The same conclusion

follows from limitations that might limit the claims to a particular environment or field of use.

Furthermore, the claims do not address a technological problem. According to VoIP-Pal, the claims relieve a caller from herself signaling how a call should be routed—*e.g.*, by dialing country codes when necessary or dialing "9" to reach a callee outside a private network. That is not a technological process, much less an improvement of a technological process. The "problem" addressed by VoIP-Pal appears to be the source of the routing information that precedes call routing. Because the claims at most automate a process formerly done by switchboard operators or callers, and do so in purely general and functional terms, they are directed to an abstract idea and the analysis proceeds to *Alice*'s step two.

B. At step two, nothing in the claims adds an inventive concept that is significantly more than the abstract idea of call routing based on information about callers and callees. The information is conventional. VoIP-Pal did not invent phone numbers or country codes. The Asserted Patents do not claim or describe the matching of information in any way more specific than the word "matching" itself conveys. The component that performs the claimed steps is the routing controller, which VoIP-Pal describes as a generic computer. The call controller, the intended recipient of the message produced by the claim, is also a generic computer and can even be the *same* generic computer as the routing controller. The claims require

nothing more than a conventional computer operating according to its ordinary function.

When considered as an ordered combination, the claims are not transformed. In order to do anything with data, it must be collected, analyzed, and then stored or sent. That is what VoIP-Pal's claims require—and nothing more. The district court correctly concluded that VoIP-Pal's claims are directed to the abstract idea of call routing based on caller/callee information, and that they contain no additional details that transform those claims into patent eligible subject matter.

II. In the face of that straightforward analysis rooted in § 101 precedent, VoIP-Pal offers arguments divorced from the proceedings below that fail to show error by the district court.

VoIP-Pal argues that the district court reached its conclusion only by ignoring the limitations in the representative claims. Not so. The district court carefully analyzed each limitation as well as the supporting discussion from the specification. VoIP-Pal attempts to defend its claims by repeatedly referring to a *tangible product*, which is both incorrect and irrelevant. VoIP-Pal also argues that the court ignored limitations that are *technological*, *highly specific*, *concrete*, and *critical*. But missing from VoIP-Pal's argument is a showing that any limitation here can be described in those terms. The district court's analysis was true to the claims; VoIP-Pal's attack on the district court is not.

VoIP-Pal identified no plausible factual allegations that could prevent dismissal. The discussions of what is conventional are taken directly from VoIP-Pal's statements and admissions in its Asserted Patents and its own filings. There should also be no confusion about the representative claims. VoIP-Pal did not challenge Appellees' identification of representative claims, and the district court fully addressed the claims on the terms that VoIP-Pal argued them.

STANDARDS OF REVIEW

This Court applies the law of the regional circuit in reviewing motions to dismiss. *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015). The Ninth Circuit reviews such motions *de novo*. *Id.* In reviewing such motions, the Court must "accept factual allegations in the complaint as true and construe the pleadings in the light most favorable to the nonmoving party." *Manzarek v. St. Paul Fire & Marine Ins. Co.*, 519 F.3d 1025, 1031 (9th Cir. 2008).

Subject-matter eligibility under § 101 is a question of law reviewed *de novo*. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018). Sometimes eligibility may turn on underlying facts, such as whether a claim element or combination is well-understood, routine, and conventional under *Alice* step two, which must be proven with clear and convincing evidence. *Id.* at 1368. However, "not every § 101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry." *Id.* Dismissal on § 101 grounds remains appropriate where there

are no disputed facts material to patent eligibility. *See, e.g.*, *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1342 n.4 (Fed. Cir. 2018). And the Court is not required to "assume the truth of legal conclusions merely because they are cast in the form of factual allegations." *Fayer v. Vaughn*, 649 F.3d 1061, 1064 (9th Cir. 2011) (quotation omitted).

ARGUMENT

The district court correctly determined that the asserted claims are directed to patent ineligible subject matter under § 101. Appx5-48. The court first summarized the claim elements:

> Put in plain language, claim 1 discloses: (1) "receiving a caller identifier and a callee identifier" after a call is initiated; (2) "locating a caller dialing profile"; (3) matching the information in the "caller dialing profile" with information in the callee identifier; and (4) classifying the call either as a "public network call" or a "private network call" based on "classification criteria" and producing the appropriate public network or private network routing message to be received by a call controller.

Appx25-26 (quoting '815 patent, 36:14-38 (Appx167)); *see also* Appx39 (similar analysis of claim 74 of the '005 patent). The court determined that each representative claim "is directed to the abstract idea of routing a call based on characteristics of the caller and callee," only includes generalized steps to carry out generic functions, and is analogous to long-standing practices. Appx25-26 (claim 1 of the '815 patent); Appx39 (claim 74 of the '005 patent). The court also determined

that the claim limitations add nothing inventive to the abstract idea itself. Indeed, "the patent specification confirms that the '815 Patent did not invent the limitations found in claim 1." Appx35; *see also* Appx44 (same for claim 74 of the '005 patent).

VoIP-Pal's challenges to the ineligibility determination are without merit. Accordingly, the judgment of dismissal with prejudice should be affirmed.

I. The District Court Correctly Concluded That The Asserted Claims Are Not Patent-Eligible

Under the established framework for patent-eligibility, the Court "must first determine whether the claims at issue are directed to a patent-ineligible concept," such as an abstract idea. *Alice*, 573 U.S. at 218. This Court has described the step-one inquiry "as looking at the 'focus' of the claims, their 'character as a whole.'" *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (quoting *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335-36 (Fed. Cir. 2016)); *see also Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015). And the Court must "articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful." *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1347 (Fed. Cir. 2017).

Second, if the patent is directed to an abstract idea, it is ineligible unless the Court finds that the claims recite an "inventive concept." *Alice*, 573 U.S. at 217. The inventive-concept requirement asks whether the claims contain "*significantly*

more than a patent upon the ineligible concept itself." *Id.* at 218 (emphasis added) (alteration and quotation omitted). Adding "generic computer elements performing generic computer tasks" is insufficient to save an abstract idea. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1368 (Fed. Cir. 2015).

A. Step One: The Asserted Claims Are Directed To An Abstract Idea

The district court correctly determined that the representative claims are "directed to the abstract idea of routing a call based on characteristics of the caller and callee." Appx25; Appx39. The court further concluded, correctly, that each of the representative claims "is abstract because first, it only disclosed generalized steps to carry out generic functions, and second, because there are long-standing practices analogous to the claimed steps." Appx26; Appx39.

1. The Claims Are Generic And Functional

The representative claims involve routing communications based on information about the participants. That is the entirety of the purported "invention," even by VoIP-Pal's articulation. *See* Br. 33 ("route phone calls and messages between users associated with different types of networks").

This Court has held that routing data is an abstract idea. In *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016), for example, this Court held that claims covering *classifying and routing emails* were directed to an abstract idea, reasoning that classifying mail and routing into

categories (*e.g.*, junk mail) was a well-known and abstract process. Similarly, in *Two-Way Media*, 874 F.3d at 1335, this Court held that claims covering *routing data* to specific users were directed to an abstract idea. The Court reasoned that the claims recited "a method for routing information using result-based functional language" and "do[] not sufficiently describe how to achieve [the] results in a non-abstract way." *Id*. at 1337.

The preambles of the representative claims recite methods of routing calls or communications. The steps in the method, after communication is initiated, include *receiving* identifiers for the caller and callee, *locating* the caller's profile, *matching* one or more attributes of the caller with a portion of the recipient's identifier, *classifying* the communication by network type, and *producing* a routing message for receipt by a call controller. Appx167 (36:14-38); Appx234 (43:41-65). The claims do not disclose (or limit) *how* these functional steps are performed.

The representative claims are "directed to" the abstract idea of routing communications based on information about the participants because the steps simply describe, in generic and functional terms, *how* that idea can be carried out. Each of the steps—receiving, locating, matching, and classifying/producing—recites a well-known concept of information management. They are not arranged or performed in a unique way, nor are they limited to anything other than generic communications devices or generic network environments. The claim elements lack

any technical details and instead describe the steps in "purely functional terms." *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016).

"The concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions." *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Collecting information is an abstract idea that can be performed by any human doing research. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) ("obtaining information . . . can be performed by a human who simply reads records of . . . transactions from a preexisting database" (quotation omitted)). Analyzing information is also commonly performed by humans and, even if limited to a particular source, is likewise abstract. *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) ("As many cases make clear, even if a process of collecting and analyzing information is 'limited to particular content' or a particular 'source,' that limitation does not make the collection and analysis other than abstract."). Making classifications based on the information collected and analyzed also is abstract. *See TLI Commc'ns*, 823 F.3d at 611 (holding that "the concept of classifying an image and storing the image based on its classification" is an abstract idea).

The claims here include nothing but abstractions regarding these commonplace functions. For example, the claims require the receipt (collection) of a "caller identifier," but this can be nearly *anything*—including the phone number from which a call is placed or a message is sent. Appx158 (17:13-15). The claims also recite "locating a caller dialing profile," but the specification makes clear that the "caller dialing profile" is merely a record of the caller's calling attributes. Appx158 (18:1-4). Next, the claims recite matching the collected information of the caller and callee; that matching is done by simply comparing aspects of the caller's information with aspects of the callee's identifier. Appx150 (2:8-10, 17-19, 20-22); Appx160 (21:27-31). For example, the specification explains that the matching may compare the caller's area code with the callee's area code. Appx150 (2:17-19); Appx151 (4:21-25); Appx160 (21:27-31). Finally, the claims recite classifying the call as public or private and producing the appropriate routing message, which, according to the specification, can be generically implemented on "modules on a common computer system or by separate computers." Appx156 (13:13-14).

This Court has consistently held that claims like these, which recite the general functions of collecting and analyzing data and utilizing the results, are directed to an abstract idea. Examples include:

- Operating an electric power grid, detecting and analyzing events from that information, and deriving an indicator of reliability (*Elec. Power Grp.*, 830 F.3d at 1353);
- Analyzing information based upon predefined rules and notifying the user if there is improper access (*FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016));
- Collecting data, recognizing certain data within the collected data set, and storing that recognized data in memory (*Content Extraction*, 776 F.3d at 1347);
- Collecting information about a user and displaying a website based upon characteristics of the user (*Capital One Bank*, 792 F.3d at 1369-70);
- Collecting, displaying, and manipulating data in response to inputs (*Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017));
- Collecting input from the user and displaying information based upon that input (*BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1286 (Fed. Cir. 2018)); and

- Collecting, analyzing, manipulating, and displaying data (*Univ. of Fla. Research Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1368 (Fed. Cir. 2019)).

Claims that "merely require generic computer implementation, fail to transform [an] abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 221. This principle has been applied time and again by this Court. *See, e.g.*, *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014); *Elec. Power Grp.*, 830 F.3d at 1355 (collecting cases).

Here, nothing in the claims requires performance of the steps on specialized computing devices. The claims functionally recite an abstract routing process based on non-specific attributes and criteria that can be performed by a generic computing system. Nothing in the claims limits performance or requires a special computing system or environment; nor would such a specialized device be supported by the specification because there is no disclosure of any specialized device. The only computing devices disclosed in the specification are generic computing devices with generic components—*i.e.*, "controllers." *See Alice*, 573 U.S. at 226 ("communications controller" found to be generic).

To be sure, claim 1 of the '815 patent recites a "call routing controller" (or just "routing controller"), which performs the claimed steps, and a "call controller," which receives the routing message. Appx167 (36:14-38). Claim 74 of the '005

patent similarly recites a "controller" as the recipient of the routing message. Appx234 (43:41-65). Figure 1, on which VoIP-Pal relies extensively in its brief, shows that the routing message is sent from the routing controller to the call controller. Appx118.

Neither of the recited "controllers" is a specific device particularized in any way to the claimed method. On the contrary, the call controller and routing controller are generic computers or can be part of the same generic computer as "separate modules on a common computer system." Appx156 (13:10-14). The controllers have generic computer components, such as processors, memory, and input/output ports—components that all computers have. *See, e.g.*, Appx156 (13:10-14); Appx158 (17:16-37); Appx122 (Fig. 7); Appx157 (15:62-16:5); Appx120 (Fig. 4).

And even if the routing or call controllers were somehow more specific than a general computer (again, neither is), that still would not save the claims from being directed to an abstract idea. *See BSG Tech*, 899 F.3d at 1286 ("We have consistently held, however, that claims are not saved from abstraction merely because they recite components more specific than a generic computer."). The controller elements therefore cannot save the claims from abstractness.

2. The Claims Are Analogous To Long-Standing Practices

The claims use terms like "calling attributes," "classification criteria," "caller identifier" and "callee identifier," "caller dialing profile," and "routing message." Appx167 (36:18-38). Although those terms might limit the abstract idea to a broad field of use—*i.e.*, communication routing—that does not affect the § 101 analysis. *See Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016) ("[M]erely limiting the field of use of the abstract idea to a particular . . . environment does not render the claims any less abstract."); *SAP*, 898 F.3d at 1168 (same); *Capital One Fin.*, 850 F.3d at 1340 (same); *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 768 (Fed. Cir. 2019) (same).

Nor do the representative claims address any identified technological problem; at most, they purport to automate manual processes. *Compare Elec. Power Grp.*, 830 F.3d at 1354 (addressing power distribution problems within a power grid), *with DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (addressing the Internet-specific problem of retaining website visitors). The Court has "made clear that mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology." *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017).

In *Electric Power Group*, for example, the claims were drawn to using a computer to automate the manual process of monitoring and visualizing power distribution in a grid, not to any deficiencies in computer functionality. 830 F.3d at 1354. Similarly, here, the asserted claims are drawn to automating the manual process of entering information to route communications, not to any alleged technical deficiencies in the routing device functionalities. Specifically, VoIP-Pal argues that the alleged invention automatically performs steps that previously had to be performed manually by humans—*e.g.*, dialing country codes when calling someone in another country or dialing "9" to call outside a private phone network. *See* Br. 11-14. However, the claims say nothing about what numbers a user must or must not dial. Furthermore, the purported problem of automating manual steps is not a technological problem and further reinforces the claims' ineligibility under § 101. *See Credit Acceptance*, 859 F.3d at 1055.

Indeed, as the district court correctly recognized, routing a call using information about the caller and callee is analogous to the function of a switchboard operator. *See* Appx31. Since the early days of telephony, human switchboard operators have determined where to route calls based on information about the parties to the call. Telephone companies originally used manual switchboards, and switchboard operators connected calls by inserting a pair of phone plugs into the appropriate jacks. Switchboard operators received and analyzed call party attributes

(*e.g.*, phone numbers, area codes, or international dialing codes). Such "fundamental economic practice[s] long prevalent in our system of commerce," including "longstanding commercial practice[s]" and "method[s] of organizing human activity," are not patent-eligible. *Alice*, 573 U.S. at 219-20 (quotation omitted).

VoIP-Pal conceded below that telephone operators routed calls using a callee identifier. Appx1012. VoIP-Pal also conceded that "telephone operators might have used a caller's identity to properly attribute toll charges, or to record the caller's number for a call back in case the connection was lost." *Id.*; *see also* Appx31. VoIP-Pal's concessions confirm that the claims are drawn to longstanding routing practices and can be performed by a generic computing device. Indeed, this process is not materially different from the claims directed to analyzing, characterizing, and sorting email in *Symantec*, which also had a long-standing, non-computerized analog—people sorting through their postal mail. 838 F.3d at 1311, 1314.

In short, the representative claims are directed to the abstract idea of routing communications based on information about the participants. The district court therefore correctly concluded that they fail step one of the *Alice* framework.

B. Step Two: The Asserted Claims Include No Inventive Concept

Because the asserted claims are directed to an abstract idea, the Court "must examine the limitations of the claims to determine whether the claims contain an

'inventive concept' to 'transform' the claimed abstract idea into patent-eligible subject matter." *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (quoting *Alice*, 573 U.S. at 221). The asserted claims here do not add anything more—much less *significantly* more—to the abstract idea of routing communications based on information about the participants. *See Alice*, 573 U.S. at 217-18.

As the district court explained, "none of claim 1's elements are unique to the '815 Patent. In fact, the patent specification confirms that the '815 Patent did not invent the limitations found in claim 1." Appx35. The district court considered every limitation and cited admissions in the patents that confirm each limitation was not inventive. *See* Appx35-37. The district court also determined that, as an ordered combination, the claims did not include an inventive concept. *See* Appx37-38.

1. The Claims Do Not Recite A Technological Innovation In Computers Or Networking Functionality

This Court has "repeatedly held that . . . invocations of computers and networks that are not even arguably inventive are 'insufficient to pass the test of an inventive concept in the application' of an abstract idea." *Elec. Power Grp.*, 830 F.3d at 1355. The Court must therefore consider whether the claims "require[] anything other than conventional computer and network components operating according to their ordinary functions." *Two-Way Media*, 874 F.3d at 1341.

In *Two-Way Media*, for example, this Court held that, although the claims required the use of multiple computing devices, the claims only recited performance of the abstract idea on a set of generic computer components and therefore did not contain an inventive concept. 874 F.3d at 1339-41. Instead, the claims "only use[d] generic functional language" to perform the abstract idea. *Id*. at 1339.

Similarly, in *Electric Power Group*, the Court held that, although the claims invoked computers, networks, and displays, the mere use of those conventional well-known components did not transform the abstract idea into a patent-eligible claim. 830 F.3d at 1355. The Court explained: "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." *Id*.

Like the claims in *Two-Way Media* and *Electric Power Group*, nothing in the asserted claims here "requires anything other than conventional computer and network components operating according to their ordinary functions." *Two-Way Media*, 874 F.3d at 1339; *Elec. Power Grp.*, 830 F.3d at 1355; *see also buySAFE*, 765 F.3d at 1355 ("That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive. The computers in *Alice* were receiving and sending information over networks

connecting the intermediary to the other institutions involved, and the Court found the claimed role of the computers insufficient.").

Furthermore, nothing in the claims amounts to an improvement in computer capabilities that would constitute an inventive concept. Instead, the asserted claims simply recite performing abstract steps on pre-existing, generic computing devices. *See, e.g.*, Appx157 (15:63-16:5). There is nothing unconventional in the arrangement or operation of the devices.

VoIP-Pal relies heavily on the mention of a "call controller" or "controller" in the claims. Br. 22, 28-29. That element, however, does not perform the claimed method steps. Instead, the call controller is merely mentioned as the intended recipient of the routing message produced as the result of the claimed steps. *See* Appx167 (36:30-32) ("producing a . . . routing message for *receipt by a call controller*" (emphasis added)); Appx234 (43:53-54, 43:61-63) ("producing a [first/second] routing message for receipt by [a/the] controller"). As such, the call controller has no bearing on the performance of the claims and cannot possibly add an inventive concept to the performance of the abstract idea.

At most, the call controller, as the intended recipient, could arguably affect the format of the routing message, but no particular format is claimed. In any event, the format of data is itself an abstract idea and cannot add an inventive concept. *See Capital One Fin.*, 850 F.3d at 1340 (holding that "specific data structures and

objects . . . [do] not change [the] analysis"). Regardless, the specification makes clear that the call controller is, itself, a general-purpose computer that has a microprocessor, memory, and an I/O port. *E.g.*, Appx157 (15:63-16:5). As a result, there is no special format required for the routing message and no inventive concept added by a contemplation in the claims that the routing message may be received by a general-purpose computer. *See Ultramercial*, 772 F.3d at 714-15 (holding that receiving data on a generic computer was part of an abstract idea).

The preamble to claim 1 of the '815 patent also recites a "routing controller," which is the device that operates the claimed process. Other than capability to perform the steps of the method—as a generic computer could—the claim provides no other information about this component.

2. The Claimed Steps, Considered Individually Or As An Ordered Combination, Are Not Transformative

This Court has consistently held functional, results-oriented claims to be directed at an abstract idea. *See, e.g.*, *Elec. Power Grp.*, 830 F.3d at 1356 ("[T]he essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101, especially in the area of using generic computer and network technology to carry out economic transactions."); *Two-Way Media*, 874 F.3d at 1337 (claims do not "sufficiently describe how to achieve these results in a non-abstract way"); *Affinity Labs*, 838 F.3d at 1265 (The only limitations

not directed to the abstract idea itself "describe purely conventional features of cellular telephones and the applications that enable them to perform particular functions. They therefore do not meaningfully limit the scope of the claims.").

Here, the asserted claims similarly recite purely results-focused, functional limitations. Each limitation describes the end result of the step, not how the step is performed. For example, claim 1 requires "locating a caller dialing profile" but is agnostic as to how the profile is located and what the profile contains. The results-focused functional limitations of the asserted claims are just like those in *Two-Way Media* and *Affinity Labs*, which confirms the lack of inventive concept under step two.

Receiving a caller, callee, or participant identifier. According to the patent, these identifiers can be either a telephone number or a username, both of which were well known long before the priority date and certainly cannot add any inventive concept. Appx158 (17:13-15) ("[t]he caller identifier field may include a [publicly switched telephone network] number or a system subscriber user name"); Appx156 (14:49-50) ("a callee telephone/videophone number"). Furthermore, collecting and retrieving information has been commonly held to lack an inventive concept. *See, e.g.*, *FairWarning*, 839 F.3d at 1093 ("We have explained that the realm of abstract ideas includes collecting information, including when limited to particular content." (quotations omitted)).

Locating a caller or participant profile. The caller or participant profile is likewise nothing new. The specification makes clear that the patentee did not invent a caller/participant profile, which is simply a record of known attributes about the caller. *See, e.g.*, Appx158 (18:1-4) ("Effectively the dialing profile is a record identifying calling attributes of the caller identified by the caller identifier. More generally, dialing profiles represent calling attributes of respective subscribers."). Obtaining or locating information has been held by this Court not to add an inventive concept. *See, e.g.*, *CyberSource*, 654 F.3d at 1372 ("[O]btaining information . . . can be performed by a human who simply reads records of . . . transactions from a preexisting database." (quotation omitted)).

Matching information in the caller dialing profile. Matching information that has been collected—*i.e.*, analyzing that information—also does not add any inventive concept. The specification makes clear that there is nothing innovative about the "matching" step—it simply requires comparing information, such as an area code, to other information. *See, e.g.*, Appx150 (2:8-10) ("Using the call classification criteria may involve comparing calling attributes associated with the caller dialing profile with aspects of the callee identifier."); *id*. (2:17-19) ("Comparing may involve determining whether the callee identifier includes a portion that matches an area code associated with the caller dialing profile."); *id*. (2:20-22) ("Comparing may involve determining whether the callee identifier has a

length within a range specified in the caller dialing profile."). The case law supports the notion that matching/analyzing information does not provide an inventive concept. *See Symantec*, 838 F.3d at 1318 (holding that determining whether the received data matched certain characteristics did not add inventive concept).

Classifying the call as private or public and producing a routing message. As discussed above, at most this process is performed by a generic computing device as a natural result of the comparing step discussed above. *See* Appx156 (13:10-14) (disclosing that the system "may be implemented as separate modules on a *common computer system* or by separate computers" (emphasis added)). "Classifying" information—*i.e.*, categorizing that information—is not inventive. *See, e.g.*, *Content Extraction*, 776 F.3d at 1347; *Symantec*, 838 F.3d at 1314. And, again, sending and routing messages is not inventive. *See Symantec*, 838 F.3d at 1318 (holding that there was no inventive concept in claims that classified and routed messages); *buySAFE*, 765 F.3d at 1355 ("That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.").

Ordered combination. None of the individual steps is sufficient to transform the abstract idea into a patentable invention. When they are considered collectively—as an ordered combination—there is still nothing inventive about these abstract steps. This same collection of steps—collecting, analyzing, and then

storing, sending, or routing information—is undisputedly well known and, as discussed, has been consistently held to be abstract. *See, e.g.*, *TLI Commc'ns*, 823 F.3d at 611; *Elec. Power Grp.*, 830 F.3d at 1353-54 (collecting cases).

To route communications based on information about the participants, the information must be collected, analyzed, and then utilized (*e.g.*, stored or sent). The combination of steps therefore says nothing more than the abstract idea itself—*i.e.*, that a call could be routed based on information about the participants. Thus, the combination of steps "add[s] nothing that is not already present when the steps are considered separately." *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1334 (Fed. Cir. 2015). The district court correctly determined that the representative claims fail to clear step two of the *Alice* framework, and thus that they do not recite eligible subject matter.

II. VoIP-Pal Has Not Demonstrated Error In The District Court's Eligibility Analysis

While this Court reviews the district court's determination of ineligibility *de novo*, VoIP-Pal has not identified any legal errors in the district court's analysis.

A. The District Court's Step-One Analysis Tracked The Claim Language

VoIP-Pal's primary attack on the district court's analysis of *Alice* step one is that the court improperly departed from the language of the claims. Br. 32. That attack fails for several reasons. Legally, VoIP-Pal is wrong that a claim cannot be

directed to an abstract idea unless all the limitations somehow play a role in that idea or are themselves abstract. Factually, VoIP-Pal is wrong that the district court ignored or improperly reduced the claims to "nebulous propositions." *Id.* And rhetorically, it is VoIP-Pal that has twisted the claims into something they are not in an attempt to reach for non-abstract subject matter.

1. Reciting Tangible Elements Does Not Avoid A Finding Of Abstractness

This Court's law is clear that the question of whether a claim is directed to an abstract idea can turn on fewer than all the limitations. As discussed above, the inquiry at step one involves determination of a claim's "focus." *Elec. Power Grp.*, 830 F.3d at 1353 (citing *Enfish*, 822 F.3d at 1335-36; *Internet Patents*, 790 F.3d at 1346); *see also ChargePoint*, 920 F.3d at 765; *BSG Tech*, 899 F.3d at 1286.

VoIP-Pal's principal argument on appeal is that the district court "ignor[ed] the tangible and concrete technological aspects of the claims." Br. 32. Indeed, VoIP-Pal uses the word "tangible" and its variants at least thirty times in its brief on appeal. VoIP-Pal argues that, if the invention itself is tangible, or, if it produces a tangible result, then it is for that reason alone patent-eligible. *See, e.g.*, Br. 34-35 (arguing that "these claims . . . are tangible" and that "[t]he purpose of the claims . . . is to make something tangible" (emphases omitted)). That approach was rejected by the Supreme Court in *Bilski v. Kappos*, 561 U.S. 593 (2010), and VoIP-

Pal's bid for its exhumation is foreclosed by *Alice*, and this Court's subsequent precedent. *See, e.g.*, *Solutran, Inc. v. Elavon, Inc.*, No. 2019-1395, 2019 WL 3418471, at *5 (Fed. Cir. July 30, 2019).

"[N]ot every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry." *TLI Commc'ns*, 823 F.3d at 611. For example, in *Alice* itself, the Supreme Court found that system claims including "a 'data processing system' with a 'communications controller' and 'data storage unit'" "[are] purely functional and generic," and that those recited components did not save the claims from abstractness. *Alice*, 573 U.S. at 226. The Court explained that "none of the hardware recited . . . 'offers a meaningful limitation beyond generally linking "the use of the method to a particular technological environment," that is, implementation via computers.'" *Id.* (alteration omitted). Furthermore, "claims are not saved from abstraction merely because they recite components more specific than a generic computer." *BSG Tech*, 899 F.3d at 1286.

The same is true here. The process of claim 1 of the '815 patent operates a routing controller to "facilitate communications" between callers by receiving unspecified "identifiers" of the caller and callee, looking up unspecified caller "attributes," determining an unspecified "match" among that information, "classifying" the communication as public or private, and producing a routing message that identifies the destination of the communication, either in terms of a

private network address or a public network gateway. Appx167 (36:14-38); *see also* Appx234 (43:41-65) (same for claim 74 of the '005 patent).

VoIP-Pal's argument that the district court "stripped the tangible and concrete call controller, network and gateway limitations from the claims" (Br. 29) is particularly weak because none of those items are the focus of the claims. The call controller is identified in the claim only as the intended recipient of the routing message, and that message includes information about the communication's destination, either as a private network address or a public network gateway. The items cited by VoIP-Pal merely link the claimed method to a particular technological environment, which is not enough to avoid abstraction. *Alice*, 573 U.S. at 226; *TLI Commc'ns*, 823 F.3d at 613 ("[A]lthough the claims limit the abstract idea to a particular environment—a mobile telephone system—that does not make the claims any less abstract for the step 1 analysis.") (citing *OIP Techs.*, 788 F.3d at 1362-63).

2. The District Court Considered All Claim Limitations

VoIP-Pal repeatedly attacks the district court for supposedly ignoring claim language. Br. 29 ("[t]he district court stripped the tangible and concrete call controller, network and gateway limitations from the claims"); *id.* (accusing the court of "vitiating critical claim limitations"); Br. 38 ("the [district court] necessarily eliminated concrete element from claim 1 of the '815 Patent such that the allegedly

abstract idea is not a true reflection of claim 1"). That criticism is both unfounded and unfair, as the district court's thorough analysis establishes.

The district court's decision reflects extensive consideration and discussion of the specification and claims of the Asserted Patents during its step-one analysis. Appx8-12; Appx24-34. The court began by summarizing the claim limitations "in plain language." Appx25-26; Appx39. That summary (reproduced in the block quotation at the outset of the Argument above) is an accurate description of the claim and its overall focus and character. The court's plain-language articulation was hardly divorced from the claim and included the very controller and network references that VoIP-Pal now incorrectly says were "stripped" from the claim.

The district court would have been on solid ground to base its analysis on that summary moving forward, but it went further. The court dug into those limitations and consulted the specification. Beginning with the caller and callee "identifier," the court concluded that the identifier could be a conventional phone number, "as the specification admits." Appx27. For the "dialing profile," the court concluded, again based on the specification, that the profile includes "various identificatory attributes of subscribers that are left undefined in the claim and specification." *Id.* The district court did similar analyses for other limitations in the claim, ultimately concluding that the claim is like others that have been found to be abstract for not going beyond receiving and analyzing or retrieving and processing data. Appx27-

28 (citing *W. View Research, LLC v. Audi AG*, 685 F. App'x 923, 926 (Fed. Cir. 2017) (nonprecedential)).

The district court followed the same approach with representative claim 74 of the '005 patent. Appx38-43. It accurately characterized its limitations (Appx39), and then analyzed them in detail while consulting the specification (Appx40-42). For the claimed "participant identifier," the court noted that the term is not expressly used in the '005 patent but is "akin to the aforementioned caller identifier and callee identifier in claim 1 of the '815 patent because the participant identifier functions in the same way." Appx40. It concluded that the "participant profile" of claim 74—also not used expressly in the specification of the '005 patent—is like the caller dialing profile of the '815 patent and equally generic. Appx41. As with its approach for the '815 patent, the district court continued with the limitations of claim 74 of the '005 patent, finding each generic and not unique to the patent. Appx41-42.

Comparing the district court's analysis at step one of *Alice* with VoIP-Pal's brief, the conclusion is clear: VoIP-Pal has no legitimate criticisms of the district court. As explained above, the district court's analysis was true to this Court's precedent and the representative claims. The criticism VoIP-Pal does raise, that the district court somehow ignored all the supposedly "technological" (Br. 17), "physical" (Br. 23), "highly specific" (Br. 25), "tangible and concrete" (Br. 29),

"critical" (*id.*), "integrated" (Br. 34), and "special" (Br. 35), claim limitations is not borne out by even a cursory reading of the district court's opinion.

3. VoIP-Pal Mischaracterizes Its Own Claims

Ironically, in criticizing the district court's analysis, VoIP-Pal repeatedly mischaracterizes its own claims. VoIP-Pal attempts to tether its claims to something tangible by incorrectly asserting that the claims describe a process or method of operating a *call controller*. For example, the first sentence of the Argument section of VoIP-Pal's brief states, "The claims at issue are generally directed to *call controllers* – and processes and systems for their operation . . . ." Br. 28 (emphasis added); *see also* Br. 22-23. However, the claims are *not* directed to the operation of the call controller. The claims describe the operation of the *routing controller*, which receives caller and callee identifiers, looks up information about the caller, classifies the call, and produces a routing message to be received by the *call controller*.

Claim 1 of the '815 patent refers to a call controller only as the intended recipient of the message produced: "producing a [private or public] network routing message for receipt by a call controller." Appx167 (36:30-37). Similarly, claim 74 of the '005 patent refers to "producing a [first or second] network routing message for receipt by a controller" (here, the "controller" is the call controller, which, as discussed above, is the item that receives the routing message). Appx234 (43:41-

65). The claims do not elsewhere mention a call controller, and do not recite a process for a call controller's operation.[1]

VoIP-Pal tells this Court that "the claimed process and method generate *a tangible product*, such as a phone call or other message that is routed over a computer node to a gateway to a public network, an address on a private network or a destination on a packet-switched network." Br. 33-34. In addition to misusing the term *tangible*, VoIP-Pal again mischaracterizes its own claims. Taking claim 1 of the '815 patent as an example, the only thing produced by the claim is a "routing message." Appx167 (36:30-36). That routing message is not the payload (*e.g.*, the voice information) of any call. Rather, it provides the call controller with information about the intended destination of the call. *See* Appx130 (Fig. 16, showing exemplary routing message). The routing controller produces the routing message for receipt by the call controller, and, even when sent, the routing message is sent only to the call controller, not to the intended callee. Appx118 (Fig. 1; note

[1] In a footnote, Voip-Pal apparently argues that some claims of the '815 patent might require more than producing a routing message in connection with routing a call. Br. 50 n.7. Whether or not correct, this assertion is irrelevant because actually routing a call or communication is equally abstract. *E.g.*, *Symantec*, 838 F.3d at 1314 (holding that classifying and routing emails was abstract). Furthermore, the district court's statement of the abstract idea included the concept of call routing: "routing a call based on characteristics of the caller and callee." Appx25.

the arrow from Routing Controller 16 to Call Controller 14 where the routing message is sent).

As discussed above, the call controller and routing controller are described in generic computer terms as items that "may be implemented as separate modules on a common computer system or by separate computers, for example." Appx156 (13:10-14); *see supra* Statement of the Case, Section II. Thus, claim 1 when properly read produces a message within a computer module bound for a different module within that computer.

VoIP-Pal cites tangibility again in arguing that "[t]he purpose of the claims, moreover, is to ***make something tangible***. The method produces a phone call—audio you can hear . . . when that phone call is routed to the recipient's phone. That tangible output is an element of the claim." Br. 35 (emphasis in original). By "[t]hat tangible output," VoIP-Pal apparently means the phone call or the audio, but neither is produced by the claim—no call is completed in the claim and no audio is referred to—and, of course, neither is *tangible*. Again, the claim produces one thing: a message in a computer. And information within a computer is simply not *tangible*. *See, e.g.*, *Digitech Image Techs., LLC v. Elec. for Imaging, Inc.*, 758 F.3d 1344, 1349 (Fed. Cir. 2014) (explaining that information itself is non-tangible); *Versata Dev. Grp.*, 793 F.3d at 1333-34 (explaining that claims involving collecting, recognizing, and storing data are similar to claims that recite the basic conceptual framework for

organizing information that have no tangible form); *Reese v. Sprint Nextel Corp.*, No. 2018-1971, 2019 WL 2418971, at *3 (Fed. Cir. June 10, 2019) (nonprecedential) (holding claims that produce audible tone are still abstract); *see supra* note 1.

Finally, as discussed above, Appellees note that even if VoIP-Pal were correct to refer to its message or the method of producing the message as "tangible," that would not affect the analysis here because tangibility does not prevent a claim from being directed to an abstract idea. *See TLI Commc'ns*, 823 F.3d at 611; *Solutran*, 2019 WL 3418471, at *5 ("the physicality of the paper checks being processed and transported is not by itself enough to exempt the claims from being directed to an abstract idea").

4. VoIP-Pal's Claims Are Not Directed To A Technological Process

VoIP-Pal also argues that its claims are not abstract because they are directed to a technological process. Br. 32-34. Although call routing generally involves technological components, VoIP-Pal did not invent those components. VoIP-Pal did not invent call routers, network nodes, gateways, the PSTN, or VoIP calling, nor did it invent routing between two different networks, or using information associated with a caller and a callee in routing. There is no debate that the Asserted Patents refer to those elements in passing, but the claims are directed to the creation of generic messages after performing generic data-gathering and analysis steps.

This point dispels VoIP-Pal's reliance on *Diamond v. Diehr*, 450 U.S. 175 (1981). *See, e.g.*, Br. 36-37. As explained in *Alice*, "the claims in *Diehr* were patent eligible because they improved an existing technological process, not because they were implemented on a computer." 573 U.S. at 223. VoIP-Pal's claims do not recite any *improvement* in call routing; they simply recite the use of generic computer components to route calls.

VoIP-Pal also argues, "[a]s in *DDR Holdings*, the claims here are 'necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer[s].'" Br. 42-43 (alteration in original) (citation omitted). VoIP-Pal's analysis of *DDR Holdings* clings to the "rooted in computer technology" phrase without coming to grips with it. This Court did not simply say that all inventions using computer technology are patent eligible. Instead, it elaborated on that technology and the particular problem solved by the patent. As this Court explained, that patent addressed "the problem of retaining website visitors that, if adhering to the routine conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host's website after 'clicking' on an advertisement and activating a hyperlink." *DDR Holdings*, 773 F.3d at 1257. The patented solution in *DDR Holdings* was to create in real time a hybrid web page "that merges content associated with the products of the third-party merchant with the stored 'visually perceptible elements' from the identified host website." *Id.*

Nothing in VoIP-Pal's claims is remotely similar to the claims at issue in *DDR Holdings*. VoIP-Pal's claims do not change how gateways or nodes operate. Instead, VoIP-Pal's claims are about routing information that is derived from a database instead of a caller. *See* Br. 12 (describing the need for a caller to dial "9" in existing systems to place a call between a private network and the PSTN). That is not a solution to a technological problem; it is simply an alternative way to derive routing information. More importantly, VoIP-Pal's invention is wholly unlike *DDR Holdings*, where an existing technological process was made to work differently than it had in the past. None of the components VoIP-Pal points to work any differently within their environment, and as a result, VoIP-Pal's reliance on *DDR Holdings* fails.

B. The District Court's Step-Two Analysis Accounted For All Claim Limitations

VoIP-Pal fails to demonstrate error in the district court's analysis of *Alice* step two, just as it failed to demonstrate error in the step-one analysis. VoIP-Pal's principal argument against the district court's step-two analysis is that, in VoIP-Pal's view, the district court "grossly" oversimplified the claim, "distill[ing] [it] down to three words." Br. 48-49 (emphasis omitted). As to the individual claim elements, VoIP-Pal argues that the district court's analysis was either unsupported or based on misunderstandings.

1. VoIP-Pal's Claims Are Not An Improvement To A Technological Process That Provides An Inventive Concept

In connection with step one, VoIP-Pal argued that its claims are directed to a technological process, but, as discussed above, that assertion is incorrect. Nonetheless, VoIP-Pal repeats that incorrect argument for step two by urging that its claims recite an improvement to a technological process. VoIP-Pal contends that its claims provide an inventive concept in significant part by touting the purported benefits of "user-specific call handling" and "transparent routing." *E.g.*, Br. 11-15, 25, 45, 59-60. VoIP-Pal also argues that its purported invention "flexibly assign[s] nodes to particular geographic areas" and includes "redundant nodes with overlapping responsibility for load sharing." Br. 14. However, these contentions are irrelevant because the asserted claims do not recite or require those purported benefits.

VoIP-Pal explains that "user-specific call handling" uses information about the caller and callee to obviate need for the caller to use continent or country codes when placing a call to another country. Br. 11-15. VoIP-Pal states that "transparent routing" obviates the need for a caller in a PBX system to use the prefix "9" to place a call to the PSTN. *Id*. And VoIP-Pal contends that flexible assignment of nodes assists with load sharing. Br. 14.

Not only are these purported improvements trivial, they do not have any basis in the actual language of VoIP-Pal's claims. The claims say nothing about the dialing conventions or calling styles specific to a user or that the user can deploy to place a call. *See* Br. 11. For example, claim 1 of the '815 patent only requires "initiation of a call by a calling subscriber" and "receiving a caller identifier and a callee identifier." Nothing in the claim language refers to users deploying unconventional dialing styles—the dialing style is not recited in the claim language. The claims also do not specify what a user must, or must not, dial, such as particular prefixes, nor do they specify that the call will be routed transparently or automatically without the need for the user to manually "trigger" call handling. *See* Br. 12. Again, what the user dials is not found in the claim language, and the representative claims do not even require the call to be routed, let alone routed automatically. Nor does anything in the claim language specify assignment of nodes to geographic locations. *See* Br. 14.

Unclaimed features such as "user-specific call handling," "transparent routing," and "flexibly assigning nodes" cannot save the asserted claims from a finding of abstractness or patent ineligibility. *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016) ("[D]etails from the specification cannot save a claim directed to an abstract idea that recites generic computer parts."); *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1317-18 (Fed. Cir. 2019)

(reinforcing that "what makes the claims inventive [must be] recited by the claims" and patent owner must "ma[k]e specific, plausible factual allegations about why aspects of its claimed inventions were not conventional").

Both VoIP-Pal and its supporting amici incorrectly argue that the district court required the terms "user-specific call handling" or "transparent routing" to appear, *ipsissimis verbis*. Br. 59; Mercado Br. 3-13. These concepts are not embodied by VoIP-Pal's claims in any way, and neither VoIP-Pal nor the amici explain how these concepts are reflected in the claim language.

But even if the Court found that "user-specific call handling" or "transparent routing" were required by the claims, those features would not change the claims' abstract nature or impart an inventive concept. By VoIP-Pal's own descriptions, those features merely customize information to a user or automate functions that were previously carried out manually. Br. 11 ("patented inventions overcame these technical limitations by enabling user-specific calling styles"); Br. 13 ("In this way, the patented invention *automatically* caused a call to be routed over a system network (*e.g.*, 'private network') or through a gateway to another network *without the user manually specifying which network to use for routing*" (emphases added); *see generally* Br. 11-15. Neither customization nor automation constitutes a patent-eligible improvement in technology. *Uniloc USA, Inc. v. ADP, LLC*, No. 2018-1132, 2019 WL 2245938, at *9 (Fed. Cir. May 24, 2019) (nonprecedential) ("[W]e have

held that incorporating user-customization when using the computer as a tool does not render claims patent eligible."); *Credit Acceptance*, 859 F.3d at 1055 ("[M]ere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology.").

2. VoIP-Pal Identifies No Error In The Court's Analysis Of Individual Claim Limitations

VoIP-Pal asserts that many of the district court's conclusions about individual claim elements were "unsupported." Br. 55. Yet VoIP-Pal does not challenge the district court's analysis of most of the claim elements. Rather, VoIP-Pal trains its fire on just two elements: "caller dialing profile" and "matching." Br. 56-57. As to each, the district court's analysis was consistent with the claims and the specification.

With respect to the "caller dialing profile," the district court correctly noted that claim 1 of the '815 patent states that it "compris[es] a username associated with the caller and a plurality of calling attributes associated with the caller." Appx27 (quotation omitted); *see* Appx167 (36:20-23). The district court observed, "the caller dialing profile is comprised of various identificatory attributes of subscribers that are left undefined in the claim and specification." Appx27. In asserting that the district court erred, VoIP-Pal points to figures in the patent, which it says clarifies examples of the caller dialing profile. Br. 56.

However, the language of claim 1 of the '815 patent is so broad that the caller dialing profile is not tied to any specific attributes. Furthermore, those examples, which VoIP-Pal did not raise in connection with step two before the district court, appear to show that the profile might include conventional pieces of information like the caller's name and phone number, including an area code and country code. Appx127 (Fig. 9). There are other fields, but the figure does not describe them. VoIP-Pal also accuses the district court of confusing a caller identifier with a caller profile. Br. 56. But the district noted that a caller identifier was essentially a phone number. Appx9. Given that a caller profile can also include a phone number, VoIP-Pal's accusation is off the mark. Appx127 (Fig. 9).

VoIP-Pal also criticizes the district court's approach to the claimed "match" because, it says, the court failed to consider the inventive nature of the "matching process" described in Figure 8B. Br. 57. Here again, VoIP-Pal's criticism is irrelevant because the language of claim 1 of the '815 patent broadly refers to "determining a match when at least one of said calling attributes matches at least a portion of said callee identifier." The claim requires nothing specific or unconventional regarding the match or how it is carried out. As the specification explains, a match may occur if the caller's area code is the same as the callee's area code. Appx150 (2:17-19); Appx151 (4:21-25); Appx160 (21:27-31). VoIP-Pal does not explain what is inventive about determining that two sets of numbers are

identical. Furthermore, VoIP-Pal does not explain what about the process in Figure 8B demonstrates error by the district court.

3. VoIP-Pal Has Not Demonstrated Error In The District Court's Ordered-Combination Analysis

VoIP-Pal accuses the district court of "distill[ing] down" the ordered combination of the claims to "three words." Br. 49. While VoIP-Pal disparages this approach as "reductionist[]" (*id.*), the district court conducted precisely the analysis required by *Alice* and this Court's post-*Alice* precedent. As the representative claims establish, patentees often use a large number of words to describe basic operations. At step two, the search for an inventive concept required the district court to cut through the verbiage to determine whether the claims disclose significantly more than the abstract idea itself. VoIP-Pal also did not raise this challenge in opposition to the motion to dismiss, which discussed the ordered combination in connection with *Two-Way Media*. Appx942-943. As a result, this Court need not consider VoIP-Pal's argument for the first time on appeal. *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1426 (Fed. Cir. 1997).

On the merits, VoIP-Pal's argument fails. The intent of the second step of the *Alice* test is to look for something transformative—*i.e.*, whether there anything in the individual limitations or their "ordered combination" that serves to "'transform the nature of the claim' into a patent eligible application." *BSG Tech*, 899 F.3d at

1289 (quoting *Alice*, 573 U.S. at 217). In answering that question in the negative, there is nothing wrong with an approach that characterizes the ordered combination of the claim by looking at its operative terms. Indeed, such characterization is almost always required given the realities of claim drafting.

In the case of claim 1 of the '815 patent, the operative terms are: "receiving," "locating," "determining," "classifying," and "producing" a message. Appx167 (36:20-36). In its analysis, the district court focused on those words and more. Appx34-35. When it specifically analyzed them as an ordered combination, the court did not simply convert them to "processing," "routing," and "controlling," as VoIP-Pal asserts. Br. 48. Instead, it looked to this Court's analysis in *Two-Way Media* and compared the steps at issue here with those in *Two-Way Media*, concluding that the two ordered combinations were indistinguishable. Appx37. VoIP-Pal's disagreement with that approach is that the district court failed to look to the specific details of each of those steps. But the district court elsewhere concluded that no individual step was transformative. Appx34-35. For the ordered combination, it analyzed the combination of steps exactly as this Court did in *Two-Way Media*, and VoIP-Pal demonstrates no error in that analysis.

4. Preemption Is A Red Herring Here

In its brief, VoIP-Pal mentions preemption, but never develops any argument regarding preemption. *See, e.g.*, Br. 26 ("[T]he claims do not implicate the

fundamental pre-emption concern that undergirds the abstract-ideas exception."); Br. 52 ("[I]t is clear that an inventive concept exists here and otherwise dispels . . . pre-emption concerns."). Nevertheless, the district court correctly stated that the absence of preemption does not demonstrate eligibility. Appx24 (citing *FairWarning*, 839 F.3d at 1098); *see also, e.g.*, *Symantec*, 838 F.3d at 1321 (explaining that even a narrow claim directed to an abstract idea is not necessarily patent eligible); *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) ("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.")

Furthermore, VoIP-Pal's public statements contradict its assertion in this appeal and show that, according to VoIP-Pal, its asserted claims could preempt all telephone calls. For example, in an attachment to one of its complaints, VoIP-Pal contends that its patents "are utilized nearly every time a call is placed." Appx2248. VoIP-Pal has repeated this assertion in public commentary about the lawsuits. *E.g.*, Appx484-485.

C. VoIP-Pal Fails To Demonstrate Error With Any Of Its Remaining Arguments

Unable to seriously challenge the district court's determinations that the representative claims fail both steps of the *Alice* framework, VoIP-Pal advances additional arguments in an apparent bid for a remand. None are persuasive.

1. No Factual Disputes Precluded Dismissal For Ineligibility Under § 101

As an afterthought, in the last sentence of its Argument, VoIP-Pal cites *Berkheimer* in support of its assertion that "there are issues of fact in dispute with respect to why the asserted claims provide an 'inventive concept.'" Br. 60. An amicus brief supporting VoIP-Pal makes the same argument. Mercado Br. 3-13.

Most importantly, VoIP-Pal does not say what the disputed factual issues are but simply cites its Third Amended Complaint against AT&T in support of the assertion. Br. 60. Before the district court, VoIP-Pal mentioned the need for discovery to "elicit evidence to show that a VoIP system is inherently a computer network, and that a VoIP system may use non-PSTN protocols." Appx1325-1326 (footnote omitted). VoIP-Pal also said that Appellees' "arguments about what is conventional should be regarded with skepticism." Appx1326. None of that amounts to a clearly identified disputed issue that should have precluded disposition of the § 101 issue. *See Interval Licensing*, 896 F.3d at 1342 n.4; *Innovation Scis., LLC v. Amazon.com, Inc.*, No. 2018-1495, 2019 WL 2762976, at *3 (Fed. Cir.

July 2, 2019) (nonprecedential). There is no dispute that the representative claims describe methods that can operate in the environment of a computer network, and Appellees' statements regarding what is conventional are based on VoIP-Pal's statements and admissions in the Asserted Patents, its complaints, and in opposing Appellees' motion to dismiss in the district court.

Furthermore, VoIP-Pal incorrectly characterized *Berkheimer* when it told the district court, "[t]he Federal Circuit has made clear that many of the inquiries under a § 101 analysis are deeply factual and not ripe for adjudication on an undeveloped record." Appx1326 (citing *Berkheimer*, 881 F.3d at 1369). Record development is not the issue. The issue is whether there are plausible factual allegations that preclude dismissal, and it is VoIP-Pal's burden to identify them. *See Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018); *Cellspin*, 927 F.3d at 1317-18 (reiterating need for patent owner to "ma[k]e specific, plausible factual allegations about why aspects of its claimed inventions were not conventional" to survive dismissal under Rule 12(b)(6)). As this Court noted in *Berkheimer*, "[p]atent eligibility has in many cases been resolved on motions to dismiss or summary judgment. Nothing in this decision should be viewed as casting doubt on the propriety of those cases." 881 F.3d at 1368. As a result, in order to demonstrate error, VoIP-Pal must do more than cite *Berkheimer* and ask for

discovery. VoIP-Pal must identify some specific and plausible factual allegation that precludes dismissal, and it has not. *See, e.g.*, *Aatrix*, 882 F.3d at 1125.

VoIP-Pal's amici loses credibility by arguing that step two *always* involves factual questions that can *never* be decided on a motion to dismiss. Mercado Br. 8. Of course, *Berkheimer* itself rejected that proposition. *See* 881 F.3d at 1368. In this case, no plausible factual allegations precluded dismissal for ineligibility—as VoIP-Pal implicitly confirms in its brief by failing to identify any such allegations or why they preclude dismissal.

2. Claim 28 Of The '815 Patent Requires No Different Outcome

In the district court, Appellees briefed why the two representative claims were representative of all asserted claims and showed how all asserted claims are invalid under § 101. Appx929-931; Appx943-944. VoIP-Pal never challenged the identification of representative claims at the district court. In a footnote, it acknowledged Appellees' focus on claim 1 of the '815 patent and claim 74 of the '005 patent but told the court it would focus "primarily on Claim 1 of the '815 Patent" in its brief. Appx1304 n.3. The district court rightly concluded that there was no dispute about the identification of representative claims. Appx8.

VoIP-Pal now faults the district court for failing to appreciate the dispute VoIP-Pal had supposedly raised about the representative claims. Br. 9 n.2. But

VoIP-Pal raised no such dispute and cannot do so now on appeal for the first time. *Sage Prods.*, 126 F.3d at 1426; *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 582 F.3d 1288, 1296 (Fed. Cir. 2009) ("If a party fails to raise an argument before the trial court, or presents only a skeletal or undeveloped argument to the trial court, we may deem that argument waived on appeal.").

What VoIP-Pal did argue below was that claim 28 of the '815 patent was written in means-plus-function form, making it "less plausible" that claim 28 was directed to an abstract idea than claim 1 of the '815 patent. Appx1315. The district court addressed that argument. Appx32-34. The court was not persuaded because, among other reasons, the structure identified in the specification corresponding to the routing controller was a common computer system and because "[t]he routing controller circuit itself also contains only generic computer components." Appx33.

VoIP-Pal made no general argument that claim 28 should be considered separately for any other reason and made no argument about *Alice* step two in connection with claim 28. More critically, VoIP-Pal did not say *why* the means-plus-function nature of claim 28 rendered it non-abstract. Instead, VoIP-Pal referred to unspecified algorithms purportedly disclosed in five patent figures that it said demonstrated the non-abstract nature of the claim. Appx1315-1316. VoIP-Pal did not appear to dispute the general-purpose nature of the corresponding computer but suggested that the computer would be programmed with an algorithm that would

render claim 28 non-abstract. Appx1316. VoIP-Pal did not identify the specific algorithm within the figures it was referring to, let alone make any argument as to why the unspecified algorithm would render claim 28 non-abstract. Without VoIP-Pal identifying and explaining to the district court why one of the various algorithms saves claim 28, the district court was under no obligation to seek one out to answer a specific argument VoIP-Pal had not made.

Regardless, the figures cited by VoIP-Pal do not disclose an algorithm that renders the claims non-abstract. Figures 1 and 8A-8D provide some detail about what information is compared (Appx118; Appx123-126), but the underlying information is still conventional: the dialing profiles include conventional information, such as the user name, domain, international and national dialing digits, country code, and number length. Appx158 (17:62-65). The purported algorithmic structure for the asserted means-plus-function claims—Figures 1 and 8A-8D and related descriptions in the specification—merely describes an abstract process of acquiring, analyzing, and presenting information. The focus of claim 28 remains unchanged by the purported structure in the specification and is not substantively different than the representative claim for purposes of § 101. As a result, VoIP-Pal has demonstrated no error in the district court's analysis of claim 28, to the limited extent VoIP-Pal presented a distinct argument about that claim.

CONCLUSION

For these reasons, Appellees respectfully request that this Court affirm the judgment of dismissal.

Dated: August 5, 2019

Respectfully submitted,

/s/ Mark A. Perry

Mark A. Perry
Andrew Wilhelm
GIBSON, DUNN & CRUTCHER LLP
1050 Connecticut Avenue, NW
Washington, DC 20036
(202) 955-8500
MPerry@gibsondunn.com
AWilhelm@gibsondunn.com

Ryan Iwahashi
GIBSON, DUNN & CRUTCHER LLP
1881 Page Mill Road
Palo Alto, CA 94304
(650) 849-5367
RIwahashi@gibsondunn.com

John M. Desmarais
Ameet Modi
DESMARAIS LLP
230 Park Avenue
New York, NY 10169
(212) 351-3400
JDesmarais@desmaraisllp.com
AModi@desmaraisllp.com

/s/ Nathan K. Kelley

Nathan K. Kelley
PERKINS COIE LLP
700 13th Street, N.W., Suite 600
Washington, DC 20005
Telephone: (202) 654-3343
Facsimile: (202) 624-9574
nkelley@perkinscoie.com

Gene W. Lee
PERKINS COIE LLP
1155 Avenue of the Americas
22nd floor
New York, NY 10036-2711
Telephone: (212) 261-6825
Facsimile: (212) 977-1638
glee@perkinscoie.com

Counsel for Defendant-Appellee Twitter, Inc.

Peter C. Magic
DESMARAIS LLP
101 California Street.
San Francisco, CA 94111
(415) 573-1900
PMagic@desmaraisllp.com

Counsel for Defendant-Appellee Apple Inc.

/s/ Michael Hawes

Michael Hawes
BAKER BOTTS, L.L.P.
910 Louisiana
One Shell Plaza
Houston, TX 77002
(713) 229-1750
michael.hawes@bakerbotts.com

Lauren J. Dreyer
BAKER BOTTS, L.L.P.
1299 Pennsylvania Avenue, NW
Washington, DC 20004
(202) 639-7823
lauren.dreyer@bakerbotts.com

Counsel for Defendant-Appellee AT&T Corp

/s/ Megan S. Woodworth

Frank C. Cimino, Jr.
Megan S. Woodworth
VENABLE LLP
600 Massachusetts Ave., NW
Washington, D.C. 20001
(202) 344-4569
FCCimino@venable.com
MSWoodworth@venable.com

William A. Hector
VENABLE LLP
101 California Street, Suite 3800
San Francisco, CA 94111
(415) 653-3750
WAHector@venable.com

Counsel for Defendant-Appellee Cellco Partnership

CERTIFICATE OF SERVICE

I, Nathan K. Kelley, hereby certify that on August 5, 2019 I caused the foregoing to be filed via the Court's CM/ECF system and served on all counsel of record via CM/ECF.

Dated: August 5, 2019

/s/ Nathan K. Kelley
Nathan K. Kelley

CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 28.1(e). This brief contains 13,729 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b).

2. This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2016 in Times New Roman, 14-point.

Dated: August 5, 2019

/s/ Nathan K. Kelley
Nathan K. Kelley