NOTE: This disposition is nonprecedential.

# United States Court of Appeals for the Federal Circuit

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**REALTIME DATA LLC, DBA IXO,**
*Plaintiff-Appellant*

**v.**

**REDUXIO SYSTEMS, INC., ARYAKA NETWORKS, INC., PANZURA, INC., FORTINET, INC.,**
*Defendants-Appellees*

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2019-2198, 2019-2201, 2019-2202, 2019-2204

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Appeals from the United States District Court for the District of Delaware in Nos. 1:17-cv-01635-CFC, 1:17-cv-01676-CFC, 1:18-cv-01200-CFC, 1:18-cv-02062-CFC, Judge Colm F. Connolly.

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Decided: October 23, 2020

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Before NEWMAN, O'MALLEY, and TARANTO, *Circuit Judges*.

Opinion for court filed by *Circuit Judge* O'MALLEY.

Concurring opinion filed by *Circuit Judge* TARANTO.

O'MALLEY, *Circuit Judge*.

In 1955, Judge Learned Hand called the court-created "invention requirement" "the most baffling concept" in all of patent law. *Lyon v. Bausch & Lomb Optical Co.*, 224 F.2d 530, 536 (2d Cir. 1955).[1] Today, he would likely save

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[1] Essentially, the invention requirement instructed courts to invalidate patents that did not involve a true measure of invention, with little explanation of what that concept meant. *See McClain v. Ortmayer*, 141 U.S. 419, 427 (1891) ("In a given case we may be able to say that there is present invention of a very high order. In another we can see that there is lacking that impalpable something which distinguishes invention from simple mechanical skill."). Congress did away with the requirement in the 1952 Patent Act and, instead, directed courts to assess whether the invention was nonobvious, codifying that concept in 35 U.S.C. § 103.

that characterization for the court-created exceptions to what constitutes patentable subject matter under 35 U.S.C. § 101. Because those exceptions are complex and their application is reviewed de novo, district courts might be tempted to opt for an effective coin toss rather than a reasoned analysis when faced with a challenge under § 101. This is especially so where the abstract idea exception is invoked. But the system is not supposed to work that way. The parties are entitled to more and the Court of Appeals needs more.

A district court opinion "must contain sufficient findings and reasoning to permit meaningful appellate scrutiny." *Gechter v. Davidson*, 116 F.3d 1454, 1458 (Fed. Cir. 1997). Although we have said that we review judgments, not opinions, *King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 862 (Fed. Cir. 1985), where a district court has offered no reasoning for us to review we may, and most often do, decline to analyze a legal question in the first instance. *Proveris Sci. Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1373 (Fed. Cir. 2014).

Realtime Data LLC ("Realtime") appeals from a bench ruling of the United States District Court for the District of Delaware holding all 159 claims of U.S. Patent Nos. 7,415,530 ("'530 patent"), 8,717,203 ("'203 patent"), 9,054,728 ("'728 patent"), 9,116,908 ("'908 patent"), and 9,667,751 ("'751 patent") (collectively "patents-in-suit") patent ineligible under 35 U.S.C. § 101. *See* J.A. 52–59. Because this case presents one of those rare circumstances in which a district court's treatment of a complex and close legal issue is too cursory to allow for meaningful appellate review, we vacate and remand for the district court to give additional consideration to the eligibility question and elaborate on its reasoning.

## I. BACKGROUND

### A. The Patents-in-Suit

The patents-in-suit all relate, at a high level, to methods and systems for digital data compression. The '728 patent and '203 patent, which are in the same family and share a common specification, are titled "Data Compression Systems and Methods." The patents' written descriptions explain the problem of "data dependency" in prior art systems. "Data dependency" is "content sensitive behavior" that means "the compression ratio achieved is highly contingent upon the content of the data being compressed." '728 patent, col. 2, ll. 29–35. One prior art solution was to select a compression technique based on "file type descriptors" (*e.g.*, .doc, .txt, or .pdf) that are used to identify "the application programs that normally act upon the data contained within the file." *Id.* at col. 3, ll. 2–5. The written descriptions explain, however, that this solution's efficacy is limited by the sheer number and rate of development of application program types. *Id.* at col. 3, ll. 9–19. The written descriptions further describe a system for data compression that looks beyond the file type descriptor, to the underlying data, to complete the desired compression. *See generally id.* at col. 3, l. 59–col. 5, l. 11.

The '908 patent and the '530 patent, which are in the same family and share a common specification, are titled "System and Methods for Accelerated Data Storage and Retrieval." The patents' written descriptions explain that the disclosed invention relates to "improving data storage and retrieval bandwidth utilizing lossless data compression and decompression." '908 patent, col. 1, ll. 17–18. The written descriptions describe certain drawbacks found in prior art systems, including that they did not adequately account for hardware limitations. *Id.* at col. 2, ll. 34–45. The patents' disclosed invention purports to overcome these limitations by, for example, selecting encoding techniques "based upon their ability to effectively encode

different types of input data." *Id.* at col. 12, ll. 5–7. The written descriptions explain that this is meant "to eliminate the complexity and additional processing overhead associated with multiplexing concurrent encoding techniques." *Id.* at col. 12, ll. 31–33.

The '751 patent is titled "Data Feed Acceleration" and relates to "systems and method for providing accelerated transmission of data . . . over a communication channel using data compression and decompression to . . . effectively increase the bandwidth of the communication channel and/or reduce the latency of data transmission." '751 patent, col 1., ll. 27–36. The '751 patent's written description describes drawbacks in the prior art, including that "current methods of encryption and compression take as much or substantially more time than the actual time to transmit the uncompressed, unencrypted data." *Id.* at col. 3, ll. 31–33. The disclosed invention purports to solve these problems via a "data compression ratio [that] is substantial and repeatable on each data packet" that has "no packet-to-packet data dependency." *Id.* at col. 7, ll. 55–66.

The patents-in-suit and members of their patent families have been widely litigated. *See* Appellees' Br. 14 n.1 (collecting cases). Of particular relevance to this appeal, Magistrate Judge John D. Love of the Eastern District of Texas considered the patent eligibility of the '728, '530, and '908 patents, as well as the eligibility of members of the '203 and '751 patents' families, in two separate cases. *See Realtime Data, LLC v. Carbonite, Inc.*, No. 6:17-CV-00121, 2017 WL 4693969 (E.D. Tex. Sept. 20, 2017), *report and recommendation adopted*, No. 1:17-cv-12499-WGY (D. Mass. March 7, 2018), ECF No. 97; *Realtime Data, LLC v. Actian Corp.*, No. 6:15-CV-463-RWS-JDL, 2015 WL 11089485 (E.D. Tex. Nov. 30, 2015), *report and recommendation adopted*, 2016 WL 259581 (E.D. Tex. Jan. 21, 2016). In each case, Judge Love recommended that the challenged claims be deemed patent eligible at both *Alice* step 1 and step 2. His reports and recommendations were fully

adopted by two different district court judges—Judge Robert W. Schroeder III of the Eastern District of Texas and, due to an intervening transfer, Judge William G. Young of the District of Massachusetts—each with significant experience in patent cases.

B. District Court Proceedings

Realtime filed suit alleging infringement of various combinations of the claims of the patents-in-suit against Fortinet, Inc. ("Fortinet") and Reduxio Systems, Inc. ("Reduxio") in November 2017, against Panzura, Inc. ("Panzura") in August 2018, and against Aryaka Networks, Inc. ("Aryaka") in December 2018. Fortinet, Reduxio, Panzura, and Aryaka (collectively "defendants") filed motions to dismiss the suits for failure to state a claim in early 2019. Among other things, the defendants argued that all 159 claims of the patents-in-suit are patent ineligible under 35 U.S.C. § 101.

Pursuant to a June 10, 2019 order, the parties were instructed to submit a letter to the court in advance of oral argument identifying "which Supreme Court or Federal Circuit case that party contends is most similar to the challenged claim(s)." *See, e.g.*, Order, *Realtime Data LLC v. Fortinet, Inc.*, No. 17-cv-01635-CFC (D. Del. June 10, 2019), ECF No. 51. Defendants identified *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322 (Fed. Cir. 2017). *See, e.g.*, Letter, *Realtime Data LLC v. Fortinet, Inc.*, No. 17-cv-01635-CFC (D. Del. July 3, 2019), ECF No. 56. Realtime pointed to *Visual Memory LLC v. Nvidia Corp.*, 867 F.3d 1253 (Fed. Cir. 2017). *See* Letter, *Realtime Data LLC v. Fortinet, Inc.*, No. 17-cv-01635-CFC (D. Del. July 3, 2019), ECF No. 57.

On July 19, 2019, the district court heard argument on the motions to dismiss. The proceeding lasted two hours and eight minutes, including a recess. The argument focused primarily on claim 25 of the '751 patent. *See* J.A. 29–51. The district court asked numerous questions of

Realtime—focusing on individual claim elements and asking Realtime to explain what made the claim "novel." *See* J.A. 33–34. At one point, the district court interjected that the solution claimed in the '751 patent was "obvious—it's just stating the obvious." J.A. 48. The court then clarified, "I don't mean obviousness in the patent sense. I mean it is obvious like it's common sense." *Id.* While Realtime's counsel attempted to focus the court to the question of whether the claims were directed to an improvement on existing technology, as opposed to mere use of such technology, the court did not appear to consider that question. *See* J.A. 42–46. Having dissected claim 25 of the '751 patent, the district court ended the argument. *See* J.A. 52.

Following a short recess, the district court announced it was "prepared to rule on the pending motions" and explained it would "not be issuing written opinions." J.A. 52. The transcript would serve as its ruling on all pending motions. The court stated that it had "followed a thorough process before making the decision," including considering the briefing and engaging in oral argument, J.A. 52, but its complete oral analysis of the patent eligibility of the 159 claims in the asserted patents fills only five pages of transcript. J.A. 53–57. At the end of those five pages, the court declared all claims of U.S. Patent Nos. 7,415,530, 8,717,203, 9,054,728, 9,116,908, and 9,667,751 patent ineligible. J.A. 57.

After the district court announced its ruling, Realtime asked for the court's decision on its request for leave to amend its complaints. J.A. 59. The district court responded, "my practice has been to ignore [requests for leave to amend] and just to grant a motion to dismiss." J.A. 60. Although the district court conceded that "reasonable people can disagree" on the eligibility of the asserted claims, J.A. 58, it denied Realtime's request for leave to amend its complaint. J.A. 63. ("I think you can take your issues up with the Federal Circuit, and if I'm wrong, I'm wrong.").

Judgment was entered in each case on July 29, 2019. J.A. 1–8. Realtime timely appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

## II. DISCUSSION

Courts must assess the patent eligibility of claims via the two-part test established by the Supreme Court in *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014). At *Alice* step 1, a court must "determine whether the claims at issue are directed to a patent-ineligible concept." *Id.* at 218. Patent ineligible concepts include laws of nature, natural phenomena, and abstract ideas. A court's determination of whether a claim is directed to one of those patent ineligible concepts must consider individual claim elements and the elements as an ordered combination. *Id.* at 217. At *Alice* step 2, a court must decide whether the claims contain an "inventive concept" such that "the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* at 217–18 (alteration in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 73 (2012)).

The ultimate determination of patent eligibility under 35 U.S.C. § 101 is a question of law that we review de novo. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018). That we have de novo review does not, however, mean that we are a court of *first* view. Despite the standard of review that we apply, we remain a court of appeal not a court of original jurisdiction. *Compare* Original Jurisdiction, Black's Law Dictionary (10th ed. 2014) ("A court's power to hear and decide a matter before any other court can review the matter."), *with* Appellate Jurisdiction, *id.* ("The power of a court to review and revise a lower court's decision."). District courts have an obligation to provide us with a reviewable decision, commensurate with the issues before it. *See Nazomi Commc'ns, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1371 (Fed. Cir. 2005) ("[T]his court must be furnished 'sufficient findings and

reasoning to permit meaningful appellate scrutiny.' This requirement for sufficient reasoning applies with equal force to issues of law . . . and issues of fact . . . ." (quoting *Gechter*, 116 F.3d at 1458)). De novo appellate review certainly does not justify resolving a complex legal issue without an opinion or reasoned analysis. Unfortunately, that is exactly the type of improper justification the district court proffered in this case. *See* J.A. 55 (district court discussing the de novo standard of review and concluding "[t]hat's why I'm not going to write anymore"); *see also id.* ("[M]aybe Realtime is right and the Federal Circuit panel will say differently and will have that opportunity to do that.").

We hold, on the record presented to us on appeal, that the district court's short analysis is insufficient to facilitate meaningful appellate review. We are particularly concerned with four shortcomings in the court's process: (1) the colloquy between the court and Realtime indicates an apparently improper focus on factual questions that are unsuitable for resolution at the pleading stage and a failure to evaluate the claims as a whole; (2) to the extent the district court purported to resolve the "directed to" question of *Alice* step 1, its process is unclear and its conclusion questionable; (3) the court did not address or even acknowledge Judge Love's lengthy written opinions, which were adopted by two district courts, addressing the precise question faced by the court; and (4) although, as the district court requested, Realtime identified *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253 (Fed. Cir. 2017), as the case most analogous to this one and directed the court to our decision in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), and *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), the district court failed to address or distinguish those cases.

First, the colloquy between the district court and Realtime leaves us unclear as to the true basis for the district court's decision. Rather than focus first on whether

the claims are "directed to" an abstract idea as we explained in *Enfish* is the initial inquiry in cases like this, the district court repeatedly inquired whether claim limitations were "novel." *See, e.g.*, J.A. 33 ("The Court: You are not going to tell me it's novel to have a data server implemented on one or more processors, are you?"); *id.* at 34 ("The Court: Well, at the end, you can tell me what's novel about the configuration, so we'll come back to that."). The district court later expressed a view that the claimed invention of the '751 patent was "obvious"—but not in the patent sense, "like it's common sense." *Id.* at 48. Novelty and nonobviousness are well-established patent law doctrines and, though they are not wholly divorced from some aspects of the § 101 inquiry, they are rarely issues appropriate for resolution on the pleadings. That is especially true where, as here, Realtime repeatedly contested as factually incorrect propositions posited by the district court. *See, e.g.*, J.A. 45–46. Those concepts, moreover, are not part of the *Alice* step 1 inquiry, they relate, if at all, to step 2. And, to the extent the court was influenced by its subjective understanding of "common sense," that is plainly irrelevant.

Nothing in the discussion between the court and Realtime leads us to understand that the district court considered the claims as a whole or, for that matter, seriously considered any claims beyond claim 25 of the '751 patent. With the little we have before us, it is hard, if not impossible, to put the district court's commentary out of mind. And, it is difficult to discern what part of the court's concerns with the claims were directed to which step of the *Alice* analysis.

Second, to the extent the court purported to answer the *Alice* step 1 "directed to" question, it is unclear that it did so correctly. One critical shortcoming in the district court's analysis is a failure to identify which, if any, claims are representative. Although the court articulated a "fair description" of each patent-in-suit, J.A. 56, it failed to tie those descriptions to any specific claim or to clarify

whether those descriptions are the abstract ideas that the claims are "directed to" within the meaning of § 101 jurisprudence. It is, of course, incorrect to consider whether a patent as a whole is abstract. The analysis is claim specific. If, as we suspect, the district court's analysis simply generalized the claims, absent a finding of the representativeness of certain claims and without considering the "directed to" inquiry, that was error.

We further question the district court's statements that the claims are, to use the '728 patent as an example, merely "choosing a compression method based on the data type." J.A. 56. This statement seems to miss that the claims expressly achieve this result in certain ways, involving examining data blocks and not relying just on a descriptor. *See* '728 patent, claim 24. Without more analysis, we cannot identify the district court's reasons for omitting key aspects of the claims and we cannot say whether that rationale was sound. It appears, however, that the district court improperly equated the presence of an abstract idea with a conclusion that the claims are directed to such an idea. *Mayo*, 566 U.S. at 71 ("[A]ll inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas."). On remand, we caution the district court away from sweeping generalizations and encourage the court to carefully consider the "directed to" question once more.

Third, as we discuss above, the patents-in-suit and their relatives have been subject to § 101 scrutiny in the past. Two district court judges and one magistrate judge, across two judicial districts, have separately considered whether the claims are patent eligible and concluded that they are. This is not to say that those judges were necessarily correct in their assessment of this issue nor that the court was bound by those conclusions. We mean only to say that, when deciding the motions to dismiss in this case, the court should have, at a minimum, provided a considered explanation as to why those judges were wrong. This could

have been done expressly; the court could have cited the earlier cases and distinguished them. Or the analysis could have been implied; the court could have analyzed the arguments for eligibility in such a way that the reasons for the differing conclusions are apparent. Here, however, rather than take either approach, the court recited a series of legal conclusions and § 101 cases, without analysis. That simply was not enough.

Fourth, the district court asked each party to identify a single case that most closely supports its position on the eligibility of the claims. Defendants selected *RecogniCorp*. The district court mentioned *RecogniCorp* in its oral opinion. It articulated the holding of that case as, "noting that processes that start with data and add in an algorithm and end with a new form of data are directed to an abstract idea." J.A. 54. It then concluded, without explanation, "[t]hat's what we have here." *Id.* Prior to argument, Realtime identified *Visual Memory*. It argued that the case was analogous during the colloquy. J.A. 50–51. As noted, Realtime also advocated that *Enfish* and *DDR Holdings* are analogous. J.A. 28, 44. The district court, however, never mentioned *Visual Memory*, *Enfish*, or *DDR*, much less distinguished them. We do not today opine on the merits of Realtime's contention that its patents are akin to the patent eligible claims of *Visual Memory* or to any of the other cases where our court has found claims to be patent eligible. We merely note that, by not addressing even the one case held out as most comparable by Realtime, the district court did not do enough.[2]

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[2] This is an important failure. Assessments of patent eligibility are best done by reference to our numerous cases engaging in those assessments and gleaning insight from the resolutions. As that exercise reveals, there are often very fine lines between those cases and between what is patent eligible and what is not. A detailed analysis of

To be clear, we do not hold that a written order is always necessary. There are indeed times, even on a case dispositive motion, where an oral order is enough. We have seen and affirmed several such orders in the past. This case is unique, however, in its paucity of analysis and the closeness of the underlying legal issue. Our conclusion that the district court must do more in this case is reinforced, moreover, by the fact that through its abbreviated process the district court eviscerated five of Realtime's patents and completely resolved four separate district court actions. While much can be said on the benefits of judicial efficiency, the process used here strays beyond efficient to the realm of insufficient.[3]

## III. CONCLUSION

For the reasons discussed above, we vacate the district court's judgments and remand for further proceedings consistent with this opinion. Nothing in this opinion should be read as opining on the relative merits of the parties' arguments or the proper resolution of the case.

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those cases and the record before the district court is often needed if we are to appropriately assess the court's resolution of a § 101 challenge.

[3] Because we vacate the district court's judgment, we need not decide whether the district court abused its discretion by denying Realtime's request for leave to amend its complaints. We are concerned, however, with the district court's statement that its blanket practice is to deny such requests. Factual allegations in a complaint can suffice to overcome *Alice* step 2 and district courts should, as in any civil case, freely grant leave to amend to allege the necessary facts. *See Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1317 (Fed. Cir. 2019); *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1127–30 (Fed. Cir. 2018).

**VACATED AND REMANDED**

COSTS

No costs.

NOTE: This disposition is nonprecedential.

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TARANTO, *Circuit Judge*, concurring in the judgment.

I concur in the judgment, which vacates the district court's judgments dismissing the cases and denying an opportunity to amend the complaints and remands for further proceedings.

The foundation of a proper determination of the eligibility of claimed subject matter under 35 U.S.C. § 101 and the framework of *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208 (2014), is an accurate identification of the focus of the claimed advance at *Alice*'s Step 1, to be

followed (if necessary) by an accurate identification of all specifics of the claims at *Alice*'s Step 2. At both stages, it is important to avoid "overgeneralizing [the] claims," *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016), *i.e.*, "'oversimplifying the claims' by looking at them generally and failing to account for the[ir] specific requirements," *McRO, Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016). At *Alice*'s Step 1, a claim must be "considered in light of the specification" to identify "the focus of the claimed advance." *Enfish*, 822 F.3d at 1335; *Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161, 1168 (Fed. Cir. 2019) (internal quotation marks omitted). In particular, that identification is crucial to applying what is in the present cases the key doctrinal distinction—derived from *Alice*, 573 U.S. at 225—between using unimproved computers and networks as tools and improving computers or networks as tools, *i.e.*, improving basic computer or network functions themselves (*e.g.*, processing, memory, input/output, transmission) in specific ways, *see Enfish*, 822 F.3d at 1335–36; *see also Uniloc USA, Inc. v. LG Electronics USA, Inc.*, 957 F.3d 1303, 1306–07 (Fed. Cir. 2020) (citing cases). Identifying claim specifics is also crucial at *Alice*'s Step 2—to determining whether the claim contains limitations that, alone or in combination, are not aspects of the ineligible matter itself and (if they are not) go beyond "'well-understood, routine, conventional activit[ies]' previously known in the industry." *Alice*, 573 U.S. at 225 (alteration in original) (citation omitted).

In the present cases, the district court erred at the foundational stage. In the decision-announcing part of the July 19, 2019 hearing, the court characterized the claims without mention of what, for at least some (perhaps all) of the claims at issue, the claim language and specifications make clear are important parts of what the patents assert are the advances in the art. For example, the court described claim 1 of U.S. Patent No. 9,054,728 as a system for

"choosing a compression method based on the data type." J.A. 56. That description disregards claim language requiring that the identification of data type rely on examination of data blocks and not on a file extension or comparable descriptor of the data type. '728 patent, col. 26, lines 29–48 ("to analyze data within a data block to identify one or more parameters or attributes of the data wherein the analyzing of the data within the data block to identify the one or more parameters or attributes of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block"). The specification describes that data-examination basis for choosing a compressor method as one of the claimed advances over the prior art. *Id.*, cols. 3, 4. The district court's truncated characterization of claim 1 of the '728 patent, and of some or all of the other claims at issue, created an incorrect starting point for the required analysis.

A seemingly related error appears in the portion of the July 2019 hearing devoted to colloquies between the district court and counsel. Although such colloquies are intrinsically only exploratory, and thus could easily have been superseded by the court's articulation of its rationale in the decisional portion of the hearing, in these cases the court's statements in the two portions align. In the colloquy portion, the district court made statements suggesting adoption of a premise that the *Alice* test might be flunked solely because the claimed systems and methods use hardware components such as processors, servers, and memory. *See* J.A. 33–41. To the extent that the district court adopted that premise, it was mistaken. Eligibility analysis in cases like these requires consideration of whether the hardware components have been configured by programming to improve their basic functionalities (*e.g.*, processing functions, memory functions, input/output functions, transmission functions) in specific ways. Such

improvements can be eligible subject matter under *Enfish* and many later cases.

The error at the foundational stage in these cases is not a matter of choosing among an often-available range of formulations that are relatively minor variations in how to describe the claims for both Step 1 and Step 2 purposes. The error here is far more basic, and more consequential for the conduct of a sound analysis. The district court essentially disregarded limitations, in at least some of the patent claims at issue, that are part of the focus of the asserted advances. Because the court overgeneralized, or oversimplified, the claims in that fundamental way, the court in effect failed to conduct the inquiries required under the branch of § 101 doctrine relevant here.

The § 101 inquiries demand close attention to the specific content of the patent claims at issue; the specifics matter under the growing body of precedents that provide both significant analytical distinctions and fact-specific judgments important to the assessment of later-litigated facts. At least since *Alice* was decided, it has become clear that sometimes those inquiries lead quickly, and without the need for extensive discussion, to a conclusion that a claim, despite its length, is merely elaborating on what are all abstract ideas or reciting the details of what are conventional tools of implementation. *See*, *e.g.*, *Electric Power Group, LLC v. Alstrom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016). But the present cases are in a more challenging category, because the claims, on their face and understood in light of the specifications, purport to solve engineering problems in the transfer of data. Whatever conclusion is ultimately reached for the claims before us, these cases require a sounder starting point, and a more extensive analysis, than the district court provided.

In these cases, I agree that it is appropriate to take what is, and should remain, the unusual step of remanding for reconsideration of the § 101 issue without ruling on the

issue ourselves. A remand will allow the district court to characterize the claims more accurately and, on that new basis, to consider relevant precedents of this court that the district court did not address, including a number of post-July 2019 precedents that provide clarifying guidance concerning the inquiries pertinent to the analysis in cases like the ones before us. *See*, *e.g.*, *TecSec, Inc. v. Adobe Inc.*, Nos. 2019-2192, -2258 (Fed. Cir. Oct. 23, 2020), slip op. at 20–31 (citing and discussing cases); *Packet Intelligence LLC v. NetScout Sys., Inc.*, 965 F.3d 1299, 1309–10 (Fed. Cir. 2020); *Uniloc*, 957 F.3d at 1306–07; *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1327–28 (Fed. Cir. 2020); *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1364–65 (Fed. Cir. 2020); *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1149–50 (Fed. Cir. 2019); *see also SRI Int'l, Inc. v. Cisco Systems, Inc.*, 930 F.3d 1295, 1303–04 (Fed. Cir. 2019) (mid-July 2019). A remand will also allow the district court, should Step 2 be reached, to reconsider, after a re-focused analysis proceeding through the Step 1 and Step 2 inquiries, whether the filing of amended complaints should be permitted. I therefore concur in the judgment of the court.