United States Court of Appeals for the Federal Circuit

ALTERWAN, INC.,
Plaintiff-Appellant

v.

AMAZON.COM, INC., AMAZON WEB SERVICES, INC.,
Defendants-Appellees

2022-1349

Appeal from the United States District Court for the District of Delaware in No. 1:19-cv-01544-MN, Judge Maryellen Noreika.

Decided: March 13, 2023

C. GRAHAM GERST, Global IP Law Group, LLC, Chicago, IL, argued for plaintiff-appellant. Also represented by STEVEN J. FALETTO, ALISON AUBREY RICHARDS, HANNAH L. SADLER.

J. DAVID HADDEN, Fenwick & West LLP, Mountain View, CA, argued for defendants-appellees. Also represented by JOHNSON KUNCHERIA, RAVI RAGAVENDRA RANGANATH, SAINA S. SHAMILOV; TODD RICHARD GREGORIAN, San Francisco, CA.

Before LOURIE, DYK, and STOLL, *Circuit Judges*.

DYK, *Circuit Judge*.

In this patent infringement action, the parties entered into a stipulation of non-infringement based on two of the district court's claim construction rulings. Because the stipulation is ambiguous and therefore defective, we vacate and remand for further proceedings.

BACKGROUND

Appellant AlterWAN sued appellee Amazon for infringement of claims of two patents: U.S. Patent Nos. 8,595,478 ("the '478 patent") and 9,015,471 ("the '471 patent").[1] AlterWAN's patents concern improvements to implementing wide area networks ("WANs") over the Internet. Both patents share a common specification. The specification describes two core problems with using the Internet for WANs. The first is the problem of latency (or delay) due to uncontrolled "hops" from one node to another while the data packet is en route to its destination. '478 patent, col. 3 ll. 32–49. The second is the lack of security for data transmitted over the Internet. '478 patent, col. 3 ll. 50–53. The patents purport to address those problems with a "private tunnel" that provides "preplanned high bandwidth, low hop-count routing paths between pairs of customer sites." '478 patent, col. 4 ll. 17–18, 34.

At the claim construction phase, the parties disputed two terms relevant to this appeal: "non-blocking bandwidth" and "cooperating service provider."

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[1] There were originally six patents involved in the proceedings below, but only two are relevant to this appeal. AlterWAN voluntarily stipulated to dismissal of claims based on the other four patents with prejudice.

I. Non-Blocking Bandwidth

The term "non-blocking bandwidth" appears in claims 1, 13, and 14 of the '471 patent but not in the asserted claims of the '478 patent. Claim 1 of the '471 patent, which appears to be representative of the '471 claims, uses the term "non-blocking bandwidth:"

> 1. An apparatus, comprising:
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> an interface to receive packets;
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> circuitry to identify those packets of the received packets corresponding to a set of one or more predetermined addresses, to identify a set of one or more transmission paths associated with the set of one or more predetermined addresses, and to select a specific transmission path from the set of one or more transmission paths; and
>
> an interface to transmit the packets corresponding to the set of one or more predetermined addresses using the specific transmission path;
>
> wherein
>
> each transmission path of the set of one or more transmission paths is associated with a reserved, non-blocking bandwidth, and
>
> the circuitry is to select the specific transmission path to be a transmission path from the from the [sic] set of one or more transmission paths that corresponds to a minimum link cost relative to each other transmission path in the set of one or more transmission paths.

'471 patent, col. 15 ll. 44–63 (emphasis added). The specification explains that "the quality of service problem that has plagued prior attempts is solved by providing non-blocking bandwidth (bandwidth that will always be available and will always be sufficient)." '471 patent, col. 4 l. 66–col. 5 l. 2.

Amazon sought the construction "bandwidth that will always be available and will always be sufficient," J.A. 430, mirroring the language of the specification. AlterWAN argued that no construction was necessary for "non-blocking bandwidth." Alternately, AlterWAN proposed the construction "bandwidth that will always be available and will always be sufficient while the network is operational." *Id.* AlterWAN urged that the language "while the network is operational" was necessary because "[t]here is no such thing as a network that can never fail." *Id.* at 431. The district court agreed with Amazon, reasoning that the patentee acted as its own lexicographer and that the claim language required that the bandwidth be available even if the Internet is down.

II. Cooperating Service Provider

The term "cooperating service provider" appears in claims 1, 6, 10, 18, 42, 51, and 63 of the '478 patent and in claim 19 of the '471 patent. Claim 1 of the '478 patent appears to be representative:

> 1. A method of operation in a router that is part of a wide area network, the method comprising:
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> > filtering inbound data packets received on an input port of the router to identify data packets that correspond to a selected group of addresses relative to data packets that are not within the selected group of addresses; and

> providing priority routing for the data packets in the selected group of addresses, including
>
> performing a look-up into a routing table applicable to the selected group of addresses to identify one or more transmission paths that meet a minimum transmission requirement relative to other available transmission paths, and
>
> routing the data packets to at least one cooperating service provider using one of the identified one or more transmission paths.

'478 patent, col. 15 ll. 43–58 (emphasis added).

AlterWAN argued that no construction was necessary for "cooperating service provider," or, if construction is necessary, that the term ought to be construed as a "service provider whose transmission equipment is coupled to the path" or "third party service provider whose transmission equipment is coupled to the path." J.A. 436. Amazon urged that the term should be construed to mean "service provider that agrees to provide nonblocking bandwidth." *Id.*

After a *Markman* hearing, the district court initially construed "cooperating service provider" as "service provider that agrees to provide blocked bandwidth."[2] J.A. 40. The district court reasoned that the prosecution history, in which the patentee stated that "cooperating services providers . . . have prearranged for blocked bandwidth[,]" supported this construction. *Id.* The district court refused to

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[2] Claim 2 of the '471 patent includes the related term "cooperating third party service provider." In its claim construction order, the district court assigned the same construction to both "cooperating service provider" and "cooperating third party service provider."

substitute "non-blocking bandwidth" for "blocked bandwidth," as Amazon requested, because "the parties disagree[d] whether 'blocked bandwidth' has the same meaning as 'non-blocking bandwidth,'" but the parties did not ask the court to construe "blocked bandwidth." *Id.* The court noted that "[s]hould a dispute based on the meaning of 'blocked bandwidth' later arise, the parties may raise it to the extent necessary." *Id.*

At the summary judgment stage, AlterWAN argued that "blocked bandwidth" should be construed as "bandwidth reserved for a particular purpose," while Amazon sought to substitute the term "non-blocking bandwidth" for "blocked bandwidth." J.A. 771. At a hearing, the district court agreed with Amazon and changed its construction of "cooperating service provider" to be a "service provider that agrees to provide non-blocking bandwidth." *Id.* at 3.

III. Further Proceedings

The stipulated judgment that is appealed here was entered into after the filing of motions for summary judgment, including Amazon's motion for summary judgment of non-infringement.[3] After changing the construction of

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[3] The stipulation provided, in relevant part:

> [T]he parties stipulate and agree as follows:
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> 1. Under the Court's constructions of "cooperating service provider" and "nonblocking bandwidth," Amazon has not infringed, and does not infringe, the '478 and '471 patents.
>
> 2. The parties stipulate to the entry of judgment of non-infringement of the '478 and '471 patents, subject to AlterWAN's

"cooperating service provider" at the summary judgment hearing, the district court gave AlterWAN the opportunity to submit a supplemental expert report to make additional infringement contentions based on the new construction, or, if the new construction meant there was no reasonable infringement argument that AlterWAN could make, to stipulate to non-infringement.

After the summary judgment hearing, the parties filed a stipulation and order of non-infringement of the patents-in-suit. The parties stipulated to "the entry of judgment of non-infringement of the '478 and '471 patents." J.A. 4. The stipulation explained, "[u]nder the Court's constructions of 'cooperating service provider' and 'non-blocking bandwidth,' Amazon has not infringed, and does not infringe, the '478 and '471 patents." *Id*. Based on the stipulation, the district court entered a final judgment. AlterWAN appealed.

In its appeal, AlterWAN challenges the district court's construction of "cooperating service provider" and "non-blocking bandwidth" as well as a third term, "routing." AlterWAN concedes that "routing," a term that the district court offered guidance on at the summary judgment hearing, is not included in the stipulation, but AlterWAN argues we should address the term to conserve judicial resources. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

> forthcoming appeal of the Court's Claim Construction and Summary Judgment Orders.

J.A. 4.

DISCUSSION

I

In past cases, we have held that stipulated judgments are defective if they are ambiguous in material respects. *See Jang v. Bos. Sci. Corp.*, 532 F.3d 1330, 1335–36 (Fed. Cir. 2008). The stipulated judgment here provides that Amazon does not infringe under the district court's constructions of "cooperating service provider" and "non-blocking bandwidth." Under the circumstances of this case, the stipulation does not provide sufficient detail to allow us to resolve the claim construction issues presented on appeal.

First, the stipulation does not identify which claims of the '471 patent remain at issue in this appeal. We have vacated judgments that fail to identify which claims are implicated by the judgment. *See Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1342 (Fed. Cir. 2002) (vacating a judgment in part "[b]ecause the district court did not . . . identify the specific claims it held to be infringed under the doctrine of equivalents.").

More importantly, it is unclear whether the judgment requires the affirmance of both "cooperating service provider" and "non-blocking bandwidth," where the interpretation of cooperating service provider includes the term "non-blocking bandwidth."[4] It is also unclear whether affirmance requires the approval of all aspects of the construction of "cooperating service provider."

Stated differently, the parties dispute two aspects of the construction of the term "cooperating service provider" – (1) the construction of the incorporated term "non-blocking bandwidth," and (2) the meaning of the term

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[4] It would appear that approval of both terms would be needed since some claims use one term and some use the other.

"cooperating service provider" apart from the incorporated term. It is unclear whether, under the stipulation, Amazon prevails on infringement if either construction is correct or only if both are correct.

At oral argument, it became apparent that the parties have significant disagreements as to the effect of the stipulation—disagreements that render it impossible for this court to review the judgment.

AlterWAN asserts that the judgment of non-infringement rests solely on the district court's construction of "non-blocking bandwidth," a term which appears both independently and in the district court's construction of "cooperating service provider." AlterWAN argues that the district court's construction requires bandwidth to be available to the customer at all times, even when the Internet is inoperable. Because no system can provide such a service, Amazon cannot infringe. At oral argument, AlterWAN took the position that the "sole reason" Amazon does not infringe under the claim constructions at issue is because of the exclusion of the caveat they had sought at claim construction ("while the network is operational"). This is so because "if the internet goes down, it doesn't provide service." Oral Arg. at 0:30–1:14; *see also* Oral Arg. at 31:02–19 ("Q: Let's adopt your construction of non-blocking bandwidth, which doesn't have that limitation, it only requires that . . . available when the internet is operable, okay? Is your view that they infringe under that claim construction? A: Yes, Your Honor."). In AlterWAN's view, the core issue on appeal is whether the district court erred by failing to add the qualifier "while the network is operational" to its construction of "non-blocking bandwidth."

Amazon, on the other hand, contends that the judgment of non-infringement (as to the claims incorporating the term "cooperating service provider") should be affirmed if the construction of "cooperating service provider" is affirmed, quite apart from the issue of internet availability.

As explained at oral argument, Amazon contends that it allows customers to pay for different port speeds, meaning that the customer gets the purchased speed, not "all the bandwidth [they] could want." Oral Arg. at 20:45–21:01. Since Amazon does not ensure that bandwidth is always sufficient to meet the customer's needs, Amazon does not infringe. Although Amazon defends the district court's construction of "non-blocking bandwidth" and its rejection of the qualifier "while the network is operational," Amazon contends that any error in this respect would not affect the judgment of non-infringement. *See* Oral Arg. at 15:02–22 ("Q: What is the basis [of infringement]? . . . A: Amazon's product does not provide sufficient bandwidth to meet everybody's need, whether the internet is up or down.").

To add to the confusion, AlterWAN contends that it can establish infringement under the district court's construction of the term "cooperating service provider" once the Internet availability language is included because the plain and ordinary meaning of the term simply means a service provider that cooperates.

We have previously warned of the dangers of stipulating to non-infringement based on a district court's claim constructions without indicating the exact basis for non-infringement. In *Jang*, the parties had entered into a stipulation that suffered two ambiguities. First, the stipulation did not identify which of the district court's claim constructions actually affected the issue of infringement. 532 F.3d at 1336**.** Second, the stipulation did not provide any factual context as to "how the disputed claim construction rulings relate to the accused products." *Id.* at 1337. We vacated and remanded, holding that "[a] judgment is reviewable only if it is possible for the appellate court to ascertain the basis for the judgment challenged on appeal." *Id.* at 1334–35.

Here, as in *Jang*, we cannot "ascertain the basis for the judgment" of non-infringement, *id.*, because the parties did

not adequately explain how the claim construction rulings related to the accused systems. *See also Superior Indus. v. Masaba, Inc.*, 553 F. App'x 986, 989 (Fed. Cir. 2014). We must vacate the judgment and remand to the district court for further proceedings to clarify the parties' non-infringement positions, and to determine whether a stipulation of non-infringement is even possible in the circumstances of this case.

II

Since further proceedings are required, we think it useful and appropriate to clarify the meaning of the claim term non-blocking bandwidth in one respect. The district court's construction, which effectively requires a system to provide bandwidth even when the Internet is inoperable, is not a reasonable construction in light of the specification since it requires the impossible. Amazon cites *Chef America* for the proposition that "[c]ourts may not redraft claims, whether to make them operable or to sustain their validity." Appellee's Br. 20 (quoting *Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004)). In *Chef America*, the patentee claimed a process for making baked goods. 358 F.3d at 1372. The claim limitation at issue was "heating the resulting batter-coated dough to a temperature in the range of about 400° F. to 850° F." *Id.* at 1371. The patentee contended that the temperature range of "400° F. to 850° F." referred to the temperature of the oven, rather than the temperature of the dough. *Id.* at 1371–72. This court disagreed, holding that the claims were unambiguous and declining to replace the term "to" with the term "at," even though the claim, as written, led to an absurd result—the baked good being burned.

Chef America does not require us to depart from common sense in claim construction. Here, the claim language itself does not unambiguously require bandwidth to be available even when the Internet is inoperable. *See Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1345 (Fed. Cir.),

amended on reh'g in part, 366 F. App'x 154 (Fed. Cir. 2009). It is true that the specification defines "non-blocking bandwidth" as "bandwidth that will always be available and will always be sufficient." '478 patent, col. 4 l. 67–col. 5 l. 1. But this statement must be read in context.

The specification states that "[t]he wide area network technology described herein (referred to as AlterWAN™ network) is an alternative wide area network that uses the internet as a backbone." '478 patent, col. 3, ll. 61–63. The specification describes several "quality of service" problems that arise from using the internet as a backbone, including latency problems, that is, "delay on critical packets getting from source to destination." '478 patent, col. 3 ll. 20–53. The patent's solution to the latency problem is to provide "preplanned high bandwidth, low hop-count routing paths between pairs of customer sites that are geographically separated." '478 patent, col. 4 ll. 17–19. The specification describes the preplanned routing paths as a "key characteristic that all species within the genus of the invention will share" and details its operation. '478 patent, col. 4 ll. 15–64. The specification then states: "In other words, the quality of service problem that has plagued prior attempts is solved by providing non-blocking bandwidth (bandwidth that will always be available and will always be sufficient) and predefining routes for the 'private tunnel' paths between points on the internet . . . ." '478 patent, col. 4 l. 65–col. 5 l. 3.

The specification does not remotely suggest operability when the Internet is unavailable. Claims that are directed to transmission over the Internet cannot require such transmission when the Internet is not working. In light of the specification, "non-blocking bandwidth" is properly understood to address the problem of latency, rather than providing for bandwidth even in the scenario where the Internet is inoperable. We do not opine on what the meaning of non-blocking bandwidth is, other than it does not require bandwidth when the Internet is down. The district court

on remand will make an appropriate revision to this claim construction.

AlterWAN also challenges the district court's construction of the "routing" claim term, a term that is not included in the stipulation. Although it can be appropriate to decide, on appeal, claim constructions not implicated by the district court's judgment in limited circumstances, *see Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1369 (Fed. Cir. 2012), we decline to do so here.

CONCLUSION

For the foregoing reasons, we vacate the stipulated judgment of non-infringement and remand the case for further proceedings consistent with this opinion.

VACATED AND REMANDED

COSTS

No costs.