

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,
Petitioner

v.

PORTSMOUTH NETWORK CORP.,
Patent Owner

Case No. IPR2024-00503

U.S. Patent No. 7,035,279

PATENT OWNER'S SUR-REPLY

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Patent Owner Portsmouth Network Corp. (“Patent Owner”) respectfully submits this Sur-Reply to Petitioner’s Reply (Paper 15, “Reply”) regarding U.S. Patent No. 7,035,279 (Ex. 1001, “’279 patent”).

I. INTRODUCTION

The Petition failed to demonstrate that any of the challenged claims of the ’279 Patent are unpatentable. Patent Owner’s Patent Owner’s Response (Paper 12, “POR”) clearly identified several reasons why Petitioner had failed to show that the challenged claims were unpatentable including because (1) a person of ordinary skill in the art (“POSITA”) would not have been motivated to combine Kovvali with Kalman and (2) even if a POSITA were motivated to combine the references, Kovvali does not disclose the receipt of the request from the client node and the subsequent response to the request, as recited in claims 1 and 15 of the ’279 patent. Instead of responding to this arguments head on, Petitioner’s Reply is filled with mischaracterizations of the evidence and strawmen arguments that Petitioner attempts to use to distract the Board from the main arguments. When the issues are confronted head on, however, it is clear that Petitioner’s arguments are unavailing and that Petitioner has still failed to establish that the challenged claims are unpatentable.

II. CLAIM CONSTRUCTION

In its Petition, Petitioner asserted that none of the claim terms required express

construction. Petition, 12. In its Reply, Petitioner, for the first time, discusses its proposed district court constructions and asserts that “this Petitioner Reply is Cisco’s first opportunity to address in this proceeding the claim construction issues that have developed over the past year.” Reply, 6. But Petitioner is incorrect. If Petitioner felt a construction was needed for any of the recited ’279 patent claim terms it could have provided them with its Petition regardless of the status of the district court case.

Moreover, even if Petitioner was correct and its Reply was the first time Petitioner was able to address its own proposed claim construction positions from the district court case, Petitioner’s Reply focuses only on the recitation of “predetermined” and “quantum” in independent claims 1 and 15 and fails to address how the combinations of (1) Kovvali and Kalman, (2) Kovvali, Kalman, and Maters, or (3) Kovvali, Kalman, and RFC2892 disclose or render obvious the challenged dependent claims 10, 14, 16, and 18 under its specific claim construction for the term “predetermined.” Not only are Petitioner’s arguments with respect to claims 1 and 15 unavailing, as discussed in more detail below, but to the extent the Board adopts Petitioner’s construction of “predetermined,” the Board should also conclude that Petitioner failed to demonstrate the unpatentability of at least claims 10, 14, 16, and 18.

A. The Challenged Independent Claims are Valid Under Petitioner’s Construction of “Predetermined” and “Quantum”¹

¹ Despite labeling the heading “Kovvali and Kalman render the Challenged Claims

As explained in the POR, Petitioner has failed to establish that the challenged claims are unpatentable under the plain and ordinary meaning of “predetermined” and “quantum.” POR, 3-4, 15-18. Even if, however, the Board adopts Petitioner’s constructions of “predetermined” and “quantum” from the district court case, the challenged independent claims are still valid.

1. Kovvali Fails to Disclose the “Predetermined Quantum” Limitation Under Petitioner’s Construction

As the Reply recognizes, “predetermined” and “quantum” appear in the phrase “a predetermined quantum” in independent claims [1.8] and [15.8]. Reply, 24. Petitioner proposes that the term “predetermined” should be construed as “determined before the data flow request,” and “quantum” as “an amount of requested resource by which to increase or decrease.” Reply, 6, 9. Under Petitioner’s proposed constructions, claim elements [1.8] and [15.8] would require the quantity of quantum to be determined before the data flow request.

But Petitioner’s arguments with respect to limitation [1.2], which recites “receiving a request at the first node . . . so as to carry the data flow” undercut Petitioner’s argument that claims [1.8] and [15.8] are unpatentable under Petitioner’s proposed construction because Petitioner fails to show that “an amount of a requested resource by which to increase or decrease” is “determined before” the data

obvious under Petitioner’s proposed district court claim constructions,” the Reply does not mention Kalman. Reply 24-27.

flow request.

Specifically, for limitation [1.2], Petitioner argues that “the receipt of data from local dynamic channels by a node (e.g., Node B or Node C)” is the data flow request. Petition, 35. But this is not a request. Instead, Petitioner is simply equating the actual flow of data with a “data flow request.” POR, 18. As there is no data flow request, just the flow of data, there is nothing establishing that anything, let alone the quantum, is “determined before” the data flow request, as required under Petitioner’s proposed construction. Therefore, Petitioner has failed to meet its burden of showing that the claims are unpatentable under Petitioner’s proposed constructions of “predetermined” and “quantum.”

2. The Board Should Reject Petitioner’s Thinly Veiled Argument That Receiving and Processing Data is a Request to Use Resources

In its Reply, Petitioner for the first time proposes a construction for “resources,” in which Petitioner attempts to broaden its plain and ordinary meaning to support its baseless argument that “receiving and processing data” is a “request . . . to use a portion of the resources.” Reply, 11-12; Ex.2007. Petitioner then asserts that under this broad interpretation the prior art discloses this limitation. Reply, 24-27. Both of these arguments should be rejected.

First, the disclosure for “resources” identified by Petitioner refers to bandwidth and processing power in the context of the network disclosed in the ’279 Patent. Ex. 1001, 2:9-37; Reply, 11-12. It does not, however, address or clarify what

is meant by *requesting* to use a resource or refute Patent Owner’s argument that “merely receiving and processing data is not a *request* to use any resource.” POR, 17. Therefore, Petitioner’s proposed construction of “resources” requires no response because it does not rebut Patent Owner’s argument that receiving and processing data is not a request to use any resource. Reply, 11-12, 18; POR, 15-18.

Second, the ’279 Patent discusses “resource” in a specific context—a network arranged in a ring topology where the “nodes are capable of transmitting data around the ring” and “[a node] determines whether it already has sufficient resources allocated it.” Ex. 1001, 2:9-37. This context differs from the prior art—Kovvali—that Petitioner asserts discloses “receiving a request at the first noted to use a portion of the resources.” Unlike the ’279 patent, Kovvali is not concerned with maximizing the efficiency of each available path in the ring network system as, but rather with creating a communication network in which resources can be dynamically managed to handle irregular streams of data. POR, 10; Ex. 2004 ¶ 42. Thus, both Petitioner’s attempt to broaden the scope of “resources” to include “any other allowable factor that may affect the ability of a network link to convey a data flow between the nodes” and assertion that Kovvali discloses “receiving a request . . . to use a portion of the resources” should be rejected. Reply, 17-24; POR, 15-18.

III. IT WOULD NOT HAVE BEEN OBVIOUS TO COMBINE KALMAN AND KOVVALI TO ARRIVE AT THE CHALLENGED CLAIMS

A. Petitioner Mischaracterizes Patent Owner’s Argument

Contrary to Petitioner’s assertion, Patent Owner’s argument that it would not have been obvious to combine Kalman and Kovvali is not based on generally improving efficiency. Reply, 14. Instead, as discussed further below, it is based on Kovvali and Kalman being disparate references, which a POSITA would not combine. POR, 9-14; *see also Tinnus Enterprises, LLC v. Telebrands Corp.*, 846 F.3d 1190, 1207 (Fed. Cir. 2017) (“We cannot say that the district court committed a clear or obvious error when it found insufficient motivation to combine these disparate references.”).

1. The Invention Disclosed in Kovvali improved the efficiency of a known SONET infrastructure for handling increased data traffic using an improved method and apparatus for using SONET Technology

Patent Owner explained that Kovvali teaches a centralized system that uses an arbiter node to manage network capacity in a SONET infrastructure. POR, 10; Ex. 2004, ¶ 42-43. Kovvali seeks to resolve data transport problems in a SONET infrastructure stemming from the “dramatic increase in data traffic the past few years,” which has resulted in “the volume of this data traffic now typically exceed[ing] the volume of the voice traffic.” Ex. 1005, 3:14-20, 3:40-49.

2. The Invention Disclosed in Kalman improved the efficiency of prior network protection and restoration techniques using a method not linked to a specific transport protocol such as SONET

Kalman, on the other hand, “is directed to “achiev[ing] fast protection in a ring network while providing for efficient network capacity utilization. POR, 10; Ex.

2004, ¶ 41. The novel network protection and restoration technique disclosed in Kalman “efficiently utilizes the total bandwidth in a network to overcome the drawbacks of prior art networks.” POR, 8; Ex. 2004, ¶ 41. Specifically, in survivable networks, Kalman teaches that “all nodes know the status of the network, and all independently identify the optimal routing path to each destination node when there is a fault in any of the links.” POR, 11; Ex. 2004, ¶ 41. Accordingly, the invention in Kalman is not linked to a specific protocol, such as SONET, to avoid “extremely wasteful capacity” of prior art SONET ring protection technology. Ex. 1006, 2:42-47.

B. Petitioner’s Four Reasons for Combining Kalman and Kovvali are Unavailing

Petitioner’s Reply incorrectly asserts that Patent Owner failed to rebut the Petitioner’s proffered reasons to combine Kovvali and Kalman. Reply, 12-13; Petition, 23-26. As explained in its POR, however, and as Petitioner seemingly ignores, Patent Owner rebutted these arguments, providing great detail on how each of them are based on improper hindsight. POR, 9-15.

First, Petitioner asserts that “the combination would have been obvious because it represents merely the ‘use of Kalman’s known technique for selecting a preferred path on a ring network to improve Kovvali’s multi-path ring network for transmitting dynamic frames in the same way.’”² Reply, 13; POR, 12. But Petitioner

² Petitioner repeats the same argument later in its Reply. Reply, 15 (“The Petition

raised this argument in its Petition and Patent Owner explained that Kovvali and Kalman are directed to different methods for data routing, a POSITA would not be motivated to combine them, and Petitioner’s assertion otherwise is based entirely on relying on the problem articulated in the ’279 Patent as motivation to combine the references. POR, 12. Petitioner’s Reply fails to provide any additional arguments or rationale to overcome the fact that this obviousness argument is based entirely on hindsight.

Second, Petitioner asserts that the application of “Kalman’s technique to improve Kovvali’s method ‘ready for improvement would yield predictable results.’” Reply, 13. But, again, Patent Owner already explained that this purported rationale to combine the references in precisely the same arrangement claimed in the ’279 patent, and is based on conclusory statements grounded in hindsight. POR, 11-14. As in previous cases where the Federal Circuit found that such arguments were insufficient to establish obviousness, Petitioner’s rationale should be given no weight. *See, e.g., TQ Delta, LLC v. Cisco Systems, Inc.*, 942 F.3d 1352, 1360 (Fed.

articulated reasons why a POSITA considering Kovvali would have found it obvious—without any knowledge of the ’279 patent—to make various modifications, such as modifying Kovvali’s arbiter to choose which direction to send a particular flow.”). This argument fails because, as Petitioner explained, there are a “myriad of network configurations.” Petition, 25. Besides using the ’279 Patent as a template, there is no reason why a POSITA would combine Kovvali and Kalman to arrive at the exact same network configuration described in the ’279 patent given the “myriad of network configurations.” POR, 13-14.

Cir. 2019) (reversing the Board’s final written decision holding the claims of the asserted patents invalid as obvious, in part, because “[t]he expert failed to explain how specific references could be combined, which combination(s) of elements in specific references would yield a predictable result, or how any specific combination would operate or read on the asserted claims.”).

Third, Petitioner argues that a POSITA would have been motivated to implement Kalman’s techniques in Kovvali’s centralized bandwidth manager. Reply, 13. Petitioner’s only support is that “a POSITA would have understood that engineers working on bandwidth allocation schemes would consider a myriad of network configurations to use network resources efficiently.” Reply, 13 (citing Petition, 25-26). This does not, however, establish a motivation to combine. Instead, it begs the question: out of the myriad of network configurations, what is the motivation for combining Kalman and Kovvali in the exact same network configuration disclosed in the ’279 patent? The Federal Circuit answered the question, rejecting obviousness, in a similar situation where there were a “myriad [of] design challenges” and the prior art disclosed “different structures, resolve[d] dissimilar problems, and propose[d] dissimilar solutions.” *Nichia Corp. v. Everlight Am., Inc.*, 855 F.3d 1328, 1339 (Fed. Cir. 2017). As such, Petitioner’s third reason fails to establish a motivation to combine.

Last, Petitioner argues that “A POSITA would have a reasonable expectation

of success ‘because of the overall similarities between the network architectures and technologies described in Kovvali and Kalman.’” Reply, 13. The Federal Circuit has repeatedly held that “the apparent similarity between the prior art references . . . is an illusion built upon hindsight bias.” *Knauf Insulation, Inc. v. Rockwool Int’l A/S*, 788 Fed. App’x 728, 732-23 (Fed. Cir. 2019) (citing *W.L. Gore Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1552-52 (Fed. Cir. 1983)). And Petitioner makes an additional unavailing point that “Kalman describes that its path-selection technique may be applied ‘to any network transmitting frames, cells, or using any other protocol.’” But the “mere fact that [] possible arrangements existed in the prior art does not provide a reason that a skilled artisan would have” applied Kalman’s path-selection techniques to Kovvali’s network. *Virtek Vision Int’l ULC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 887 (Fed. Cir. 2024). As explained POR, “Petitioner points to no disclosure in the references or any other basis to show that a POSITA looking at Kovvali and Kalman would arrive at the claimed invention,” thus Petitioner fails to identify why and how a POSITA would combine these teachings without using hindsight. POR, 13.

C. Petitioner Attempts to Circumvent Patent Owner’s Detailed Explanation For Why a POSITA Would Not Combine Kovvali and Kalman

Petitioner fails to address the reasons set forth in POR for why a POSITA would *not* combine Kovvali and Kalman. Reply, 16-17. For example, Petitioner ignores the fundamentally different network structures and the facts provided in

Patent Owner’s expert declaration. *Id.* Like the Petition, the Reply fails to address why and how a POSITA would be motivated to combine references despite the references disclosing significantly different network structures from each other and from the network structure disclosed in the ’279 Patent. POR, 9-13 (reasons Patent Owner provided for why a POSITA would not combine Kovvali and Kalman with support from its expert declaration); Reply, 16-17 (Petitioner’s conclusory response with no supporting facts).

1. A POSITA would not combine Kovvali and Kalman because they are fundamentally different

The Federal Circuit has previously held that “a skilled artisan would have not been motivated to modify [references]” when they both involve data routing but “do so for different reasons.” *Apple Inc. v. INVT SPE LLC*, 851 Fed. App’x 200, *202-203 (Fed. Cir. Apr. 13, 2021). To that end, Patent Owner identified specific facts supporting its conclusion that “Kovvali and Kalman are directed to different methods for data routing.” POR, 9, 12. Like the Federal Circuit, the Board here should find that “given these disparities, a reasonable fact finder could conclude there was no motivation to combine” Kalman and Kovvali. *Apple*, 851 App’x at *203 (“Given these disparities, a reasonable fact finder could conclude there was no motivation to combine [references]”).

Instead of rebutting these facts, Petitioner mischaracterizes Patent Owner’s argument as an attempt to “distinguish the prior art references from each other, not

from the claims.” Reply, 15. Not so. As explained in the POR, and previously here, Kovvali and Kalman “disclose different [network] structures, resolve dissimilar problems, and propose dissimilar solutions.” *Nichia*, 855 F.3d at 1339 (affirming the district court’s conclusion that the petitioner failed to prove that the patent was invalid as obvious). Thus, Patent Owner is not “attacking” Kovvali or Kalman individually, it is attacking the motivation to combine the references based on their differences. POR, 8-13. Petitioner’s assertions should thus be given no weight.

2. Patent Owner Relies on Its Expert To Explain the Fundamental Differences Between Kovvali and Kalman

As explained in POR, “Kalman’s structure is not compatible with the network structure disclosed in Kovvali, which requires each node to communicate with an arbiter node rather than all other nodes and it is the arbiter which identifies the optimal path.” POR, 13-14; Ex. 2004, ¶ 43. In its Reply, Petitioner argues that “this is a conclusory attorney argument, not even supported by testimony from Portsmouth’s declarant.” Reply, 17. Petitioner is wrong. Patent Owner’s expert devoted 3 full pages in his declaration explaining the fundamental differences between Kovvali and Kalman. Ex. 2004, ¶¶ 40-44. In fact, it is Petitioner that relies on attorney argument. Reply, 17 (arguing, without any citations to an expert declaration, that “both Kovvali and Kalman describe making dynamic path selections, allowing them to respond to changing conditions regardless of cause.”). Even assuming that Petitioner’s attorney argument is correct, Petitioner ignored the

discrete and different problems identified by Patent Owner's expert and failed to explain why attorney-identified similarities would motivate a POSITA to combine Kovvali and Kalman.

D. Petitioner Failed To Demonstrate That Kovvali Renders Obvious “Receiving A Request At The First Node To Use A Portion Of The Resources As To Carry The Data Flow Between The First And Second Nodes...”

The independent claims of the '279 patent require a “request.” See claim [1.2] (“receiving a request at the first node.”); POR, 2, 3. Petitioner, however, spends 7 pages, of its Reply, including a veiled claim construction argument, arguing that the first node receives data without identifying a request. Reply, 17-24. Petitioner does this because it fails to identify any disclosure of a request and thus failed to meet its burden that the challenged claims are obvious.

1. Petitioner Fails To Demonstrate That Kovvali Renders Obvious “Receiving A Request At The First Node”

As explained in the POR, the “requests for transmission from the client nodes are communicated only to the arbiter node.” POR, 16. Kovvali teaches that “requests to assign dynamic channels for communication between particular nodes are sent from a client node to the arbiter. The arbiter responds to the requests by assigning dynamic channels to particular nodes, and by adjusting the allocated rates for the dynamic channels.” POR, 8. Petitioner does not appear to dispute this general understanding of Kovvali. Reply, 17-24. Rather, Petitioner admits that the non-arbiter nodes receive data packets, and not requests. See Reply, 18 (“The data

packets received by Node B or Node C.”); (“Kovvali teaches that Node B or Node C perform various functions to process and multiplex the data received.”). Nowhere in the Reply does Petitioner take the position that the “first node” (e.g., Node B or Node C) it maps to the independent claims, receive a request.

Instead of rebutting Patent Owner’s argument, Petitioner attempts to argue that the latter portion of the claim limitation is satisfied. *See, e.g.*, [1.2] (“receiving a request at the first node *to use a portion of the resources as to carry the data flow between the first and second nodes . . .*.”) (emphasis added). But this fails to rebut Patent Owner’s arguments for why receiving data does not satisfy the “receiving a request at the first node.” POR, 16-18; Reply, 17-19.

2. Petitioner’s Argument Relies on an Impermissible Claim Construction That Broadens The Plain and Ordinary Meaning of “Resources”

Petitioner argues that data received by nodes—other than the arbiter node—disclosed in Kovvali, is a request to use any resources. Reply, 19 (“Kovvali’s bursty traffic unambiguously requires the use of “resources” . . . [e]ach data packet of bursty traffic seeks to use those resources.”) As described above (*supra*, section A.2), Petitioner erroneously attempts to broaden the scope of the inventor’s use of the term “resources” in the network topology described in the ’279 patent and apply it to the disparate network topology described in Kovvali. POR, 7-9. Petitioner’s claim construction exercise fails to identify any “request” received by the first node. *Id.* at 15-18. For this reason, Petitioner fails to meet its burden of showing that Kovvali

discloses a “request” and therefore the challenged claims of ’279 Patent are patentable.

3. Petitioner Mischaracterizes Dr. Olivier’s Testimony and Makes a Baseless Conclusory Statement Based on the Mischaracterizations

Petitioner’s Reply also asserts that Dr. Olivier’s testimony supports its argument that receiving data satisfies the “receiving a request at a first node” claim limitation. Reply, 19. But Dr. Olivier never testified that the term “resources” in the ’279 patent includes processing power. In fact, he disagreed:

Q: Would it also include things like processing power?

A: Typically in networking we don’t think of that as a resource.

Ex. 1026, 12:18-22. Notwithstanding Petitioner’s reliance on numerous misrepresentations of Dr. Olivier’s testimony, there is no identification of any “request” received by the first node and thus Petitioner fails to meet its burden of establishing obviousness. POR, 15-18.

4. The Specification, Dependent Claims, and File History All Confirm That the Independent Claims Require A First Node Receiving a Request

In its Reply, Petitioner also attempts to argue that scope of “receiving a request” was broadened during prosecution of the ’279 Patent to include receiving and processing data. Reply, 19-22. Not so. In the Reply, Petitioner points to arguments that Applicants made to distinguish the “Drake” prior art. Reply, 19-20. Nothing that Petitioner points to, however, suggests that in overcoming “Drake” the

Applicant broadened the scope of the “receiving a request” limitation to include receiving and processing data. In fact, in its Reply Petitioner completely ignores the “request” limitations and focuses instead on the limitation relating to using previously allocated resources to carry new data flow. Reply, 20 (“Applicants emphasized that claim 1 is directed to a node that can use its own previously allocated resources to carry a new data flow (i.e., “without requesting additional resources”). Nothing in the prosecution history supports a construction of the term “receiving a request” to mean receiving and processing data as Petitioner now attempts to argue.

Petitioner goes on to assert that the specification and dependent claims support Petitioner’s argument. Reply, 21. But again, Petitioner focuses on the “in response to the request” limitation instead of the “request” aspect of the limitation. *Id.* Accordingly, Petitioner’s reliance on the specification and dependent claims fail for the same reasons Petitioner’s reliance on the File History fails. Reply, 21-22.

5. Logical Fallacy Undermines Petitioner’s Conclusion

Petitioner also argues that the claim language “does not require an explicit or formal request, but rather is open to **any form of a request.**” Reply, 22 (emphasis added). Even if this is true, which it is not, the only disclosure from Kovvali relied on by Petitioner is “**the receipt of data** from local dynamic channels by Node B or Node C.” *Id.* There is no mention of any form of a request. Yet, the Reply concludes

that “A POSITA would have understood that the receipt of data . . . is indeed a ‘receiving a request’ . . . on a ring network. *Id.* In support, Petitioner cites to a paragraph from Dr. Mir’s declaration. *See id.* This portion of Dr. Mir’s declaration, however, fails to explain why receiving a request would be the same as receiving data to a POSITA. Petitioner’s baseless and unsupported assertions lack merit and Petition has failed to establish that Kovvali discloses this limitation.

6. Petitioner Fails to Address Any of Patent Owner’s Reasons Establishing That Receiving A Request is not the Same as Receiving Data

In its POR, Patent Owner explained that it is common for nodes in the Kovvali network to receive and process millions of data packet. POR, 17. Thus, Patent Owner explained, a POSITA would not understand that the nodes in the Kovvali network would process millions of requests per second. *Id.* In its Reply, Petitioner fails to rebut Patent Owner’s argument about the data packets that the nodes in the Kovvali network receive, and, instead, makes a strawman argument concerning the ’279 patent claims. *See Reply*, 22. Specifically, Petitioner asserts that “the claims do not limit how often resources may be requested or used.” *Id.* But, even if the claims do not limit how often resources may be requested or used, requiring each non-arbiter node to process millions of requests per second is contrary to Kovvali’s network structure. Ex. 2004, ¶ 16 (“Kovvali . . . requires each node to communicate with an arbiter node rather than all other nodes and it is the arbiter [that] identifies the optimal path.”). Petitioner’s response is simply a distraction that fails to rebut Patent

Owner's argument, supported by Patent Owner's expert, that non-arbiter nodes in Kovvali's network receiving data packets would not process millions of requests per second. POR, 17-18; Ex. 2004, ¶ 50.

The POR further explained that if a node in Kovvali is processing data then it already has been assigned by the arbiter to process that dynamic channel. POR, 18. Thus, the non-arbiter node identified by Petitioner is assigned to carry the data flow and does not receive any "request . . . to use a portion of the resources so as to carry the data flow." *Id.* Petitioner's Reply fails to address this and instead conclusively states "the mere fact that some resources are already allocated to handle packets does not mean that a packet seeking to use those resources cannot be a 'request'." Reply, 23. Petitioner fails, however, to address the fact that in Kovvali, if "resources (e.g., node has been assigned) are already allocated to handle packets," then the data is already passing through the non-arbiter node. POR, 18. Indeed, there is no dispute that data passes through the non-arbiter nodes in Kovalli's network. Petition, 16 ("[n]odes communicate with each other by passing data."); Reply, 17-18 (arguing that Patent Owner does not "appreciate the nature and significant of the data received by Kovalli's Node B or Node C") (emphasis added). As such, under Petitioner's mapping of Kovvali, there is no non-arbiter node that receives request to carry data flow, and only non-arbiter nodes that have data passing through it. Therefore, Petitioner fails to identify any "request" received by the first node and thus fails to

meet its burden of establishing obviousness.

IV. IT WOULD NOT HAVE BEEN OBVIOUS TO COMBINE KALMAN AND KOVVALI WITH RFC2892 TO ARRIVE AT THE CHALLENGED CLAIMS

Petitioner's Reply ignores the glaring deficiency regarding the combination of Kalman, Kovvali, and RFC2892 identified in POR³—namely why would a POSITA combine the three references beyond a vague characterization that they generally relate to “efficient use of bandwidth.” POR, 19. Instead, Petitioner just repeats how the references disclose similar information. Reply, 27 (“Kovvali and Kalman each describe ‘spatial reuse’ for ring traffic); *Id.* (arguing Kovvali and RFC2892 both use SRP Fairness algorithm); Reply, 28 (arguing that “RFC2892 is a prior art publication [specifying] SRP” and baselessly concluding the other two references do too). But simply asserting that the references are in the same general field, without more has been repeatedly rejected by this Board and Federal Courts. See *Securus Tech., Inc. v. Global Tel*Link Corp.*, 701 Fed. App'x 971, 977 (Fed. Cir. 2017) (rejecting Petitioner's argument that “because [references] were drawn from the same general field of art, the skilled artisan would have turned to them to

³ The Reply allocates over 2 pages to this argument and spends the majority of it misquoting and cherry-picking Dr. Olivier's deposition to support its argument that the references all disclose SPR and SPR-fa. Reply, 28-30. Even if Dr. Olivier testified that the references all disclose SPR and SPR-fa (which he does not), there is still no reason proffered for why a POSITA would have been motivated to combine the references.

solve the problems identified the [challenged patent]”) (citing *KSR*, 550 U.S. at 418; *Microsoft Corp. v. Enfish, LLC*, 662 Fed. App’x 981, 990 (Fed. Cir. 2016)). Accordingly, Patent Owner submits that Petitioner’s high-level, handwaving, arguments regarding combinability should be rejected.

V. PETITIONER FAILS TO DEMONSTRATE THAT KOVVALI AND KALMAN WITH RFC2892 RENDER OBVIOUS “RESOURCE BUDGET”

There is no dispute that claim 8 depends from claim 7, and claim 7 depends from independent claim 1. The POR explains that claims 7 and 8 “provide that the dispatcher component selects which path is to carry the data flow based on the resource budget allocated to each node.” POR, 19. As such, the “resource budget,” in dependent claims 7 and 8 allows the dispatcher to “track[] the use of resources in [the] network.” POR, 20; Ex. 1001, 4:46. Like how independent claim 1 “is directed to an improved method for routing data flow in a network,” “resource budget” in claims 7 and 8 also relate to managing resources at a macro level within the network. Ex. 2004, ¶ 32; Ex. 1001, 4:46; POR, 20. Petitioner fails to appreciate that dependent claims 7 and 8 are directed to macro level resource management, like independent claim 1. *See, e.g.*, Reply, 30 (ignoring claim 1 and stating that claim 7 recites “a resource budget assigned to the first node.”). As such, the Reply’s attempt to argue that “resource budget” disclosed in RFC2892, which is directed to micro level resource management, renders claims 7 and 8 obvious is unavailing.

The Reply first argues that because “claim 7 does not recite that the ‘resource

budget’ pertains to high-priority traffic, it is simply irrelevant whether ‘max_usage” and “MAX_ALLOWANCE” pertain to only certain traffic priorities. Not so. As explained above, claim 7 depends from claim 1, which recites “In a communication network . . . a method for routing a data flow”, so claim 7 does not have to explicitly recite that “resource budget” pertains to high-priority traffic.⁴ Ex. 2004, ¶ 55 (“[max_usage and MAX_ALLOWANCE] correspond to congestion management and internode communication, unlike the resource management parameters outline in the ’279 Patent that are in place to allow the dispatcher to ‘track[] the use of resources in [the] network’.”) (citing Ex. 1001, 4:46; Ex. 1018 at 29).

Next, the Reply admits that Patent Owner distinguishes RFC2892’s disclosure of “resource budget” because it pertains to micro level network management. Reply, 31 (“congestion management and internode communication parameters”) (emphasis added). Notwithstanding, Petitioner attempts to mislead the Board by conflating RFC2892’s disclosure of micro level congestion (e.g., internode communications) with Dr. Olivier’s testimony about macro level network congestion. Reply, 31. This comparison is unavailing, however, as RFC2892 relates to micro level congestion and Dr. Olivier was testifying about macro level congestion. Ex. 1026, 34:18-19 (“the patent is focused on reserving resources in a network.”); 35:12-14 (“congestion

⁴ Petitioner’s argument that “Portsmouth fails to tether this supposed distinction between parameters to the claim language, which does not recite ‘parameters’ at all” fails for the same reason. Reply, 31.

is something that the network provider considers something they need to plan for perhaps in the future.”). Thus, Petitioner’s argument fails to hold water because RFC2892’s disclosure of “resource budget” at a micro level is unrelated to the ’279 Patent’s disclosure of “resource budget” at a macro level.

VI. CONCLUSION

For the reasons stated in POR and above, Petitioner has failed to carry its burden to establish that any of the claims of the ’279 Patent are invalid over the prior art. The claims should be upheld as patentable.

Date: March 18, 2025

Respectfully submitted,

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CERTIFICATION UNDER 37 C.F.R. § 42.24(d)

This Response complies with 37 C.F.R. § 42.24(b)(2). As calculated by the “Word Count” feature of Microsoft Word 2010, it contains 5,520 words, excluding the words contained in the following: Table of Contents, Table of Authorities, List of Exhibits, Certification Under 37 C.F.R. § 42.24(d), and Certificate of Service.

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies service of PATENT OWNER'S SUR-REPLY on the counsel of record for the Petitioner by filing this document through the P-TACTS platform on March 18, 2025 and served a true and correct copy of the foregoing by electronic mail on the following counsel:

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