

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 PRELIMINARY RESPONSE**

## **TABLE OF CONTENTS**

|      |                                                                                                                                                                                                                                                                                                     |    |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| I.   | INTRODUCTION .....                                                                                                                                                                                                                                                                                  | 1  |
| II.  | CLAIM CONSTRUCTION .....                                                                                                                                                                                                                                                                            | 2  |
| III. | PERSON OF ORDINARY SKILL IN THE ART .....                                                                                                                                                                                                                                                           | 3  |
| IV.  | ARGUMENT.....                                                                                                                                                                                                                                                                                       | 3  |
| A.   | Petitioner fails to articulate a valid motivation to combine Kovvali with Kalman .....                                                                                                                                                                                                              | 5  |
| 1.   | Legal Standard .....                                                                                                                                                                                                                                                                                | 5  |
| 2.   | A POSITA would not find it obvious to combine Kovvali and Kalman .....                                                                                                                                                                                                                              | 7  |
| B.   | Petitioner’s Cited References Fail to Render Obvious Claims 1 and 15 .....                                                                                                                                                                                                                          | 10 |
| 1.   | Ground 1 should be denied because the combination of references fails to teach “determining, for the links comprised by each of the paths, respective levels of use of the requested resources due to communications in progress over the network” (claim limitations [1.6] and [15.6]).....        | 10 |
| 2.   | Ground 1 should be denied because the combination of references fails to teach “selecting which of the paths is to carry the data flow responsive to the determined levels of use of the requested resources on the links comprised in each of the paths” (claim limitations [1.7] and [15.7])..... | 14 |
| C.   | The Board should use its discretion and deny institution under the <i>Fintiv</i> factors.....                                                                                                                                                                                                       | 17 |
| 1.   | <i>Fintiv</i> Factor 1: The district courts have not granted a stay .....                                                                                                                                                                                                                           | 17 |
| 2.   | <i>Fintiv</i> Factor 2: Trial is scheduled to take place before the projected deadline for a final written decision.....                                                                                                                                                                            | 17 |
| 3.   | <i>Fintiv</i> Factor 3: The parties will have invested significant                                                                                                                                                                                                                                  |    |

|                                                                                                                            |    |
|----------------------------------------------------------------------------------------------------------------------------|----|
| resources in cases .....                                                                                                   | 19 |
| 4. <i>Fintiv</i> Factor 4: The issues in the petition and District Court proceeding significantly overlap.....             | 20 |
| 5. <i>Fintiv</i> Factor 5: Petitioner is a defendant in the District Court proceedings .....                               | 21 |
| 6. <i>Fintiv</i> Factor 6: Petitioner’s grounds do not rise to the level of “compelling evidence of unpatentability” ..... | 22 |
| D. The Board Should Exercise its Discretion and Deny Institution under § 325(d) .....                                      | 23 |
| 1. The Petition relies on substantially the same art and argument already rejected by the Office .....                     | 24 |
| 2. Petitioner has failed to demonstrate that the Office erred in a material manner.....                                    | 26 |
| V. CONCLUSION.....                                                                                                         | 26 |

## TABLE OF AUTHORITIES

|                                                                                                                                     | Page(s) |
|-------------------------------------------------------------------------------------------------------------------------------------|---------|
| <b>Cases</b>                                                                                                                        |         |
| <i>Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH,</i><br>No. IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020)..... | 24, 25  |
| <i>Apple Inc. v. Fintiv, Inc.,</i><br>IPR2020-00019, Paper No. 11 (P.T.A.B. March 20, 2020) . 1, 17, 18, 19, 20, 21,<br>22, 23      |         |
| <i>Becton, Dickinson &amp; Co. v. B. Braun Melsungen AG,</i><br>No. IPR2017-01586, Paper 8 (P.T.A.B. Dec. 15, 2017) .....           | 24      |
| <i>CCS Fitness, Inc. v. Brunswick Corp.,</i><br>288 F.3d 1359 (Fed. Cir. 2002) .....                                                | 2       |
| <i>Commscope Techs. LLC v. Dali Wireless, Inc.,</i><br>IPR2022-01242, Paper No. 23 (P.T.A.B. Feb. 27, 2023).....                    | 22, 23  |
| <i>Dealertrack Inc. v. Huber,</i><br>674 F.3d 1315 (Fed. Cir. 2012) .....                                                           | 3       |
| <i>EClinicalWorks, LLC v. Decapolis LLC,</i><br>IPR2022-00229, Paper No. 10 (P.T.A.B. Apr. 13, 2022) .....                          | 18      |
| <i>Google LLC v. Kewazinga Corp.,</i><br>IPR2021-00527, Paper 16 (PTAB Aug. 24, 2021).....                                          | 25      |
| <i>HP Inc. v. Slingshot Printing LLC,</i><br>IPR2020-01084, Paper No. 13 (P.T.A.B. Jan. 14, 2021) .....                             | 21      |
| <i>In re Gorman,</i><br>933 F.2d 982 (Fed. Cir. 1991) .....                                                                         | 6       |
| <i>In re Magnum Oil Tools Int'l, Ltd.,</i><br>829 F.3d 1364 (Fed. Cir. 2016) .....                                                  | 6       |
| <i>Medtronic Corevalve LLC v. Spyeside Medical, LLC,</i><br>IPR2021-00240, Paper 9 (PTAB July 23, 2021).....                        | 25      |

|                                                                                                                                     |                                         |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <i>Miltenyi Biomedicine GmbH v. The Trustees of the Univ. of Pennsylvania,</i><br>IPR2022-00853, Paper 18 (PTAB Feb. 17, 2023)..... | 25                                      |
| <i>Mintz v. Dietz &amp; Watson, Inc.,</i><br>679 F.3d 1372 (Fed. Cir. 2012) .....                                                   | 6                                       |
| <i>Nokia of America Corp. and Ericcon, Inc.v. Godo Kaisha IP Bridge 1,</i><br>IPR2022-00755, Paper No. 9 .....                      | 21                                      |
| <i>Nora Lighting, Inc. v. Juno Mfg., LLC,</i><br>IPR2015-00601, Paper 13 (PTAB Aug. 12, 2015).....                                  | 26                                      |
| <i>Phillips v. AWH Corp.,</i><br>415 F.3d 1303 (Fed. Cir. 2005) (en banc) .....                                                     | 2                                       |
| <i>Sand Revolution II LLC v. Continental Intermodal Group – Trucking LLC,</i><br>IPR2019-01393, Paper 24 (June 16, 2020).....       | 17, 19, 20                              |
| <i>TriVascular, Inc. v. Samuels,</i><br>812 F.3d 1056 (Fed. Cir. 2016) .....                                                        | 6                                       |
| <b>Statutes</b>                                                                                                                     |                                         |
| 35 U.S.C. § 314.....                                                                                                                | 1                                       |
| 35 U.S.C. § 314(a) .....                                                                                                            | 4, 10, 17                               |
| 35 U.S.C. § 325(d) .....                                                                                                            | 2, 23, 24                               |
| 37 C.F.R. § 42.107 .....                                                                                                            | 1                                       |
| <b>Other Authorities</b>                                                                                                            |                                         |
| U.S. Patent No. 5,461,611.....                                                                                                      | 26                                      |
| U.S. Patent No. 6,680,912.....                                                                                                      | 5                                       |
| U.S. Patent No. 6,920,113.....                                                                                                      | 5                                       |
| U.S. Patent No. 7,035,279.....                                                                                                      | 1, 2, 9, 10, 13, 14, 15, 16, 24, 25, 26 |

## **INDEX OF EXHIBITS**

| <b><u>Exhibit</u></b> | <b><u>Description</u></b>                                                                                            |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| 2001                  | Docket Navigator – E.D. Tex. Time to Trial Statistics                                                                |
| 2002                  | E.D. Tex. Civil Case No. 2:23-cv-441; Cisco Initial Invalidity Contentions (w/o exhibits) (Served February 20, 2024) |
| 2003                  | US Patent 5,461,611                                                                                                  |

Pursuant to 37 C.F.R. § 42.107, Patent Owner Portsmouth Network Corporation (“Portsmouth”) submits this Preliminary Response to the Petition for *Inter Partes* Review (“IPR”) of U.S. Patent No. 7,035,279 (the “’279 Patent”) (Paper 1).

## **I. INTRODUCTION**

The Petition is deficient and fails to meet its burden in several ways.

First, Petitioner fails to articulate any valid basis for combining the prior art it relies on for each of the grounds asserted in the Petition. The primary references the Petitioner relies on teach disparate methodologies for managing network traffic. Not only does Petitioner fail to reconcile these differences in arguing that a POSITA would be motivated to combine these references, the primary motivation it discloses is laden with hindsight and does not provide a basis for why a POSITA would modify and combine the references in the way Petitioner suggests.

The Petition further fails to show that the independent claims are obvious in light of its cited references. The Petitioner misconstrues relevant claim limitations and does not point to any evidence in either of its cited references that reads on those limitations.

In addition to the Petition’s failure to establish the unpatentability of the independent claims of the ’279 Patent, institution should also be denied under 35 U.S.C. § 314 based on the *Fintiv* factors. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-

00019, Paper No. 11 (P.T.A.B. March 20, 2020) (“*Fintiv I*”). As explained in detail below, four factors (2, 3, 5, and 6) weigh strongly in favor of discretionary denial, whereas one factor (1) is neutral and one factor (4) only marginally favors not exercising discretion to deny institution.

The Petition should be further denied under 35 U.S.C. § 325(d) because the Office has already considered the same or substantially similar art during the prosecution of the ’279 Patent.

Accordingly, Patent Owner respectfully requests that the Board deny institution.

## **II. CLAIM CONSTRUCTION**

A court “‘look[s] to the words of the claims themselves...to define the scope of the patented invention.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). A claim term is generally given its “ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at 1312-13. While courts may deviate from the plain and ordinary meaning in some circumstances, there is a “heavy presumption that a claim term carries its ordinary and customary meaning.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (internal quotations omitted). Under this “exacting” standard, any departure from a claim’s

ordinary meaning must be based on language that is “so unmistakable as to be unambiguous[.]” *Dealertrack Inc. v. Huber*, 674 F.3d 1315, 1322 (Fed. Cir. 2012) (citations omitted). Here, at this stage in the proceeding, Patent Owner will apply the ordinary and customary meaning to the ’279 Patent’s claim terms.

### **III. PERSON OF ORDINARY SKILL IN THE ART**

Petitioner contends that a person having ordinary skill in the art (“POSITA”) in January 2001 “would have had a master’s degree in computer science, computer engineering, or an equivalent, and two years of professional experience relating to network communications and resource allocations.” Pet. at 12. The Petition further notes that “[a]dditional work experience can substitute for specific educational background, and vice versa.” *Id.*

For the purposes of this Preliminary Response, Patent Owner does not dispute Petitioner’s definition of a POSITA.

### **IV. ARGUMENT**

Petitioner challenges all the ’279 Patent’s claims across grounds 1-3. Independent claims 1 and 15 are only challenged under Ground 1.

As it pertains to this Patent Owner’s Preliminary Response, claim 1 (a method claim) is representative of claim 15 (an apparatus claim). Claim 1 recites:

[1.0] In a communication network that includes a plurality of nodes interconnected by links, the nodes including at least first and second nodes, a method for routing a data flow, comprising:

[1.1] allocating a respective number of quanta of one or more resources in the network to each of the nodes;

[1.2] receiving a request at the first node to use a portion of the resources so as to carry the data flow between the first and second nodes over one of a plurality of paths therebetween, each such path comprising a respective sequence of the links;

[1.3] and in response to the request: if the resources already allocated to the first node on one of the paths are sufficient, directing the data flow from the first node to the second node over the one of the paths without requesting additional resources;

[1.4] and if the resources already allocated to the first node are insufficient, performing the following steps:

[1.5] requesting an increase in an allocation to the first node of the requested resources;

[1.6] determining, for the links comprised by each of the paths, respective levels of use of the requested resources due to communications in progress over the network;

[1.7] selecting which of the paths is to carry the data flow responsive to the determined levels of use of the requested resources on the links comprised in each of the paths;

[1.8] and increasing the allocation of the resources to the first node on the selected path by a predetermined quantum.

As demonstrated below, Ground 1 of the Petition fails to teach limitations [1.1]-[1.8] and [15.1]-[15.8]. The Petition fails to establish a reasonable likelihood that Petitioners would prevail in showing the unpatentability of the '279 Patent's independent claims, and therefore also the claims which depend therefrom. 35 U.S.C. § 314(a). Accordingly, the Board should deny institution.

**A. Petitioner fails to articulate a valid motivation to combine Kovvali with Kalman**

Petitioner argues that the only independent claims, claims 1 and 15, are rendered obvious by a combination of U.S. Patent No. 6,920,113 (“Kovvali”) and U.S. Patent No. 6,680,912 (“Kalman”). Pet. at 13. Petitioner argues that a POSITA would be motivated to combine the two references because (1) they “provide complementary ideas for the efficient transmission of data in a ring network,” (2) the combination would be obvious as it represents “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,” (3) it would result in the “efficient transmission of dynamic frames in a ring network using a lowest-cost path,” and (4) it would improve Kovvali’s “multi-path ring network” by “centralizing path selection decisions at the arbiter, [resulting in a] more efficient utilization of available network capacity.” Pet. at 23-24. None of these reasons articulates a viable motivation to combine the references, particularly in light of the fact that Kovvali and Kalman are directed to completely different problems and disparate methodologies for managing network communications that cannot be reconciled without hindsight.

**1. Legal Standard**

To satisfy its burden of proving obviousness, “a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific

reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). The Federal Circuit has repeatedly cautioned against hindsight reconstruction of the references in an obviousness analysis. *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016) (“Although the KSR test is flexible, the Board must still be careful not to allow hindsight reconstruction of references ... without any explanation as to how or why the references would be combined to produce the claimed invention.”) (internal quotation marks omitted).

Hindsight is particularly in play where the Petitioner uses “the invention to define the problem that the invention solves.” *Mintz v. Dietz & Watson, Inc.*, 679 F.3d 1372, 1377 (Fed. Cir. 2012) (explaining that “the inventive contribution lies in defining the problem in a new revelatory way. In other words, when someone is presented with the identical problem and told to make the patented invention, it often becomes virtually certain that the artisan will succeed in making the invention.”). Rather than relying on the invention itself to provide a roadmap for its obviousness analysis, the Petitioner must “prove by clear and convincing evidence that a person of ordinary skill in the [network communications] arts at the time of the invention would have recognized the [...] problem recognized by the inventors and found it obvious to [address that problem using the] structure disclosed [by] the [’279] patent[.]” *Id.*; see also *In re Gorman*, 933 F.2d 982, 987 (Fed. Cir. 1991) (“It is

impermissible [...] simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps.”).

**2. A POSITA would not find it obvious to combine Kovvali and Kalman**

Petitioner points to no disclosure in either Kovvali or Kalman that would lead a POSITA to combine the two references. Kovvali does not suggest the use of the arbiter component to select specific file paths, and Kalman does not suggest the use of a dispatcher component to direct network traffic. In fact, both references teach away from the functionalities disclosed in the other reference.

For instance, Kovvali is directed to accommodating bursty data, which prior art digital signal hierarchy systems could not efficiently handle. Ex. 1005, 3:32-35; 4:25-34. To this end, Kovvali teaches a system of communication in a SONET framework in which “[s]tatistical multiplexing and over-subscription is achieved by using a centralized bandwidth arbiter,” resulting in a system that can accommodate bursty data by reorganizing bandwidth as necessary. *Id.*, 7:32-33. However, Kovvali does not suggest or teach bi-directional transmission in the SONET framework. In fact, Kovvali praises the SONET framing structure for its “mechanisms for fault management and protection switching,” which allows communication to switch from one ring to another in the event of a failure. *Id.*, 4:27-30. In other words, Kovvali does not teach using both the inner and outer ring for

network transmissions absent a link failure. Unlike Kalman, Kovvali is not concerned with maximizing the efficiency of each available path in the ring network system, but rather with creating a communication network in which resources can be dynamically managed to handle irregular streams of data.

Kalman, on the other hand, is directed to “acheiv[ing] fast protection in a ring network while providing for efficient network capacity utilization.” Ex. 1006, 4:20-22. It does not suggest the use of a “dispatcher” or ring-leader node, but rather teaches that each node monitors the status of each link that it’s connected to, and in the event of a link failure, broadcasts the failure to all nodes triggering a reconfiguration of path routing within each node. *Id.*, 3:10-18. Thus, the system 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.” *Id.*, 3:17-20 (emphasis added). The use of an arbiter node is not suggested, and in fact, would interfere with Kalman’s goal of fast failure protection by adding in multiple layers of communication into the system.

A POSITA would not combine Kovvali with Kalman. Kalman teaches away from the SONET bi-directional protection measures that Kovvali lauds, noting that they “are extremely wasteful of capacity.” *Id.*, 2:42-44. Furthermore, in Kalman “[t]he processing is designed to be extremely efficient to maximize switching speed” by ensuring 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.” *Id.*, 3:18-22. This 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. In fact, Kovvali specifically teaches that “not all nodes on [the] SONET ring...need to recognize the internal structure of dynamic frame 510; only nodes that terminate particular channels in the dynamic frame, and the arbiter node, need to recognize the structure.” Ex. 1005, 9:39-43. This is contrary to the teaching in Kalman, which mandates that “each node must know the network topology.” Ex. 1006, 3:9. Thus, the communication and network structure in Kovvali is completely different than that in Kalman, and is designed to achieve different outcomes.

Petitioner fails to reconcile these differences in articulating its motivation to combine the two references. Simply stating that combining these two references would result in increased efficiency is relying on the problem already articulated in the '279 Patent to provide the motivation to combine disparate references. This is hindsight, and is impermissible. Kovvali’s and Kalman’s methods of managing communications over ring networks are actually quite different, and Petitioner fails to identify why and how a POSA would combine these teachings.

**B. Petitioner's Cited References Fail to Render Obvious Claims 1 and 15**

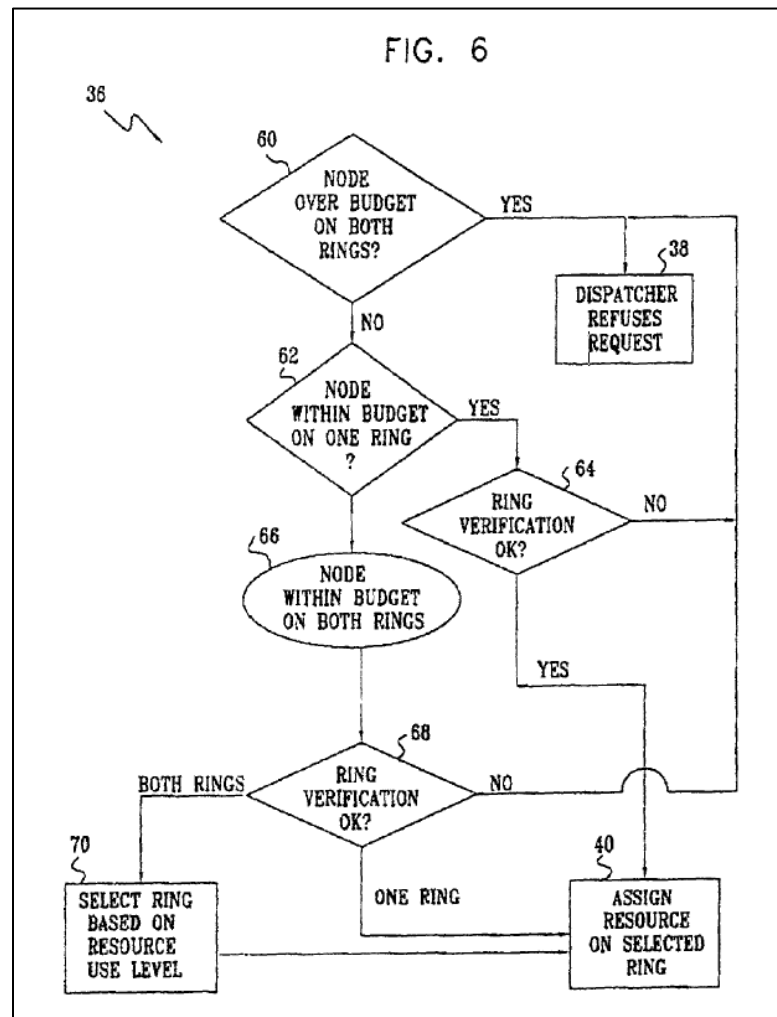
Petitioner fails to show a “reasonable likelihood” that independent claims 1 and 15 are obvious under Ground 1, the only basis for Petitioner’s challenge to these claims. 35 U.S.C. § 314(a).

**1. Ground 1 should be denied because the combination of references fails to teach “determining, for the links comprised by each of the paths, respective levels of use of the requested resources due to communications in progress over the network” (claim limitations [1.6] and [15.6])**

Petitioner argues that the combination of Kovvali and Kalman renders obvious claim limitations [1.6] and [15.6], which require the system or the dispatcher component to “determine[...], for the links comprised by each of the paths, respective levels of use of the requested resources due to communications in progress over the network.” Pet. at 42-47. Petitioner’s argument misconstrues this limitation, and fails to provide any evidence of either Kovvali or Kalman rendering this limitation obvious.

As an initial matter, the ’279 Patent provides that when a “node submits a resource request to the dispatcher,” the dispatcher “checks whether there are resources available to the node on either the inner or the outer ring.” Ex. 1001, 6:11-20. The limitation does not require assessing which direction the transmission needs to travel for efficiency, but rather a determination of resource availability for “the links comprised by each of the paths” between the first node and the destination node. Ex. 1001, claims [1.6], [15.6]. In other words, when a node submits a resource

request to the dispatcher, the dispatcher determines whether there are “sufficient unallocated resources left in the specific node budget and unused resources left on the appropriate segments of at least one of the rings in order for the dispatcher to grant the node’s resource request.” *Id.*, 6:19-23. This process is further illustrated below in Figure 6 of the patent, which schematically shows the steps involved with the dispatcher node in determining whether or not to accommodate a resource request. *Id.*, 7:25-27.



The flow chart shows a “ring verification” step, in which “the dispatcher proceeds to verify that there are sufficient resources available to fill the request on all of the relevant segments of the ring.” *Id.*, 7:46-49. If there are sufficient resources available for each of segments on the chosen ring between the requesting node and the destination node, the dispatcher assigns the requested resources at step 40. *Id.*, 7:45-56. Thus, this limitation requires that the system determine whether the specific paths have sufficient available resources to accommodate the bandwidth increase request. *Id.*, 7:43-56. Petitioner conflates Kalman’s disclosure that teaches selecting a “preferred direction of traffic” with the ’279 Patent’s disclosure of assessing resource availability in response to a request for bandwidth. Petitioner’s conclusory language tacking on that a POSITA would find it obvious that the arbiter from Kovvali would consider “two path options” for “accommodating the bandwidth increase request” does little to address the deficiencies in its argument, as discussed further below.

First, Petitioner relies on Kovvali’s disclosure of a “bidirectional ring network” as teaching that the arbiter would have multiple path options to accommodate a bandwidth increase request. Pet. at 42. However, Kovvali’s disclosure provides no teaching that the arbiter component analyzes the resources available “for the links comprised by each of the path.” Instead, Kovvali teaches that the arbiter component receives a request from the client node and then

holistically considers the entire dynamic frame, and either (1) assigns bandwidth from the elastic section (540) of the dynamic frame or (2) reduces the allocation of another channel. Ex. 1005,12:33-49. There is no teaching in Kovvali that pertains to path selection based on the availability of resources.

Recognizing Kovvali's deficiencies with regards to this limitation, Petitioner introduces Kalman to fill in the gaps. However, Kalman does not teach an arbiter component nor does it teach resource allocation for managing network data flow. Rather, Kalman relates to a technique for selecting a "preferred direction for traffic" between two nodes, "based on the direction with the lowest cost." Ex. 1006, 7:50-53; Pet. at 43. Kalman's disclosure teaches that the "preferred traffic direction" is determined based on "a variety of factors, including the number of hops from source to destination in that direction, the cumulative normalized bit error rate from source to destination in that direction, and the level of traffic congestion." Ex. 1006, 8:1-5. Kalman does not teach "determining...respective levels of use of the requested resources" because the nodes in Kalman cannot make requests for additional resource, and thus, the system cannot check for the availability of the requested resources across various file paths. Kalman's teachings relate to a "network protection and restoration technique" that "efficiently utilizes total bandwidth in the network," and where "no extra capacity is consumed during 'normal' operations." Ex. 1006, 2:48-54;56-61. Nothing in this disclosure teaches a dynamic allocation of

bandwidth as required by the independent claims of the '279 Patent. In fact, the '279 Patent discusses systems like those in Kalman and notes that while these systems “comprise protocol[s] enabl[ing] a system administrator to assign a cost to each link in the network, so that low-cost links are the ones most likely to be selected for routing,” these protocols do “not provide any means or basis for updating the costs automatically, while the network is running, in response to network resource constraints.” Ex. 1001, 1:59-67. So too with Kalman, which makes no consideration of network resource constraints, but rather only determines preferred paths based on a cost analysis. This differs from the claimed system and method in the '279 Patent, which is not just determining levels of congestion, but is rather assessing each segment of each potential file path to determine whether a resource request can be met.

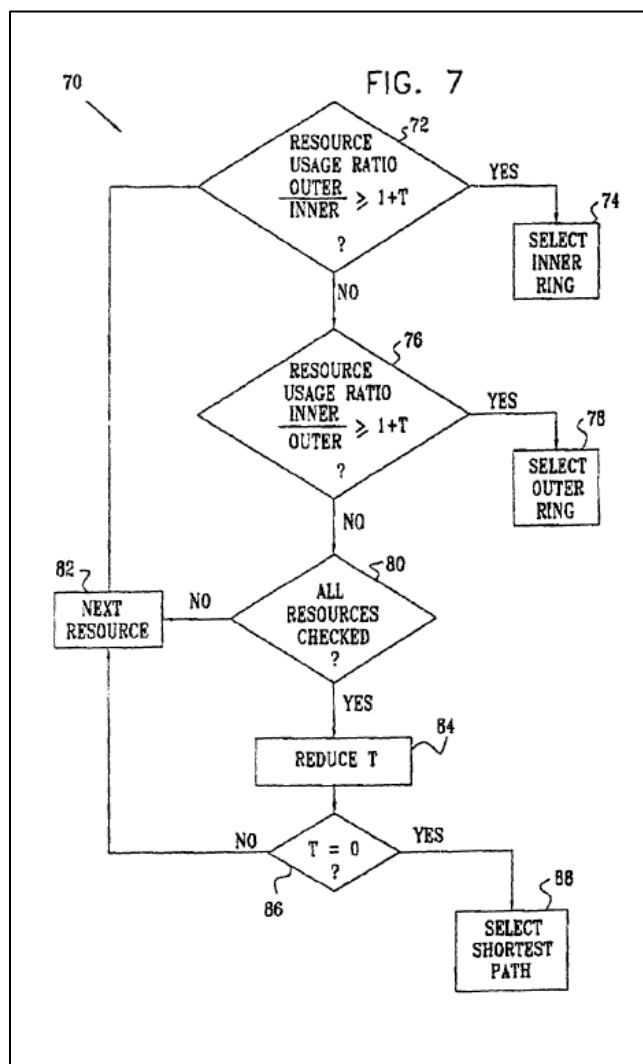
Thus, Petitioner fails to show that this limitation is met.

**2. Ground 1 should be denied because the combination of references fails to teach “selecting which of the paths is to carry the data flow responsive to the determined levels of use of the requested resources on the links comprised in each of the paths” (claim limitations [1.7] and [15.7])**

Petitioner relies on its reasoning for claim limitation [1.6] in explaining how this limitation is met. However, again, Petitioner misinterprets the language of the claim, and presents evidence from Kovvali and Kalman that does not align with the functionality disclosed in the '279 Patent. As discussed above, Kovvali does not teach a dispatcher node that is involved in path selection, but rather teaches a static

arbiter that simply receives requests for resources and either allocates them based on availability or denies the request. *See supra* § IV.B.1.

Like Kovvali, Kalman does not teach “selecting which of the paths is to carry the data flow responsive to the determined levels of use of the requested resources on the links comprised in each of the paths.” Ex.1001, cl. [1.7], [15.7]. The specification of the ’279 Patent discloses comparing “relative resource usage levels for all of the relevant ring segments on both of the rings.” *Id.*, 8:10-11. If resource usage on one ring, either the inner or outer ring, is “substantially heavier” than that on the other ring, the system selects the ring with lower resource usage “for allocation of the requested resources.” *Id.*, 8:33-41. This process is repeated based on the testing of different ratios, and is further outlined in Figure 7 illustrated below:



Kalman, on the other hand, does not involve an assessment of resource usage ratios between the various available file paths to assign requested resources for a transmission. Kalman is concerned with “rapidly reroute[ing] paths that cross broken links.” Ex. 1006, 7:45-49. Kalman functions to simply reroute traffic in the most cost-efficient way possible in event of a link breakage, whereas the system and method claimed in the ’279 Patent selects a route for a given transmission based on a more dynamic assessment of resource use across links that make up different paths

in order to shift resources between nodes. Neither Kovvali nor Kalman disclose this limitation either alone or in combination with each other.

Thus, Kalman and Kovvali do not render this limitation obvious.

**C. The Board should use its discretion and deny institution under the *Fintiv* factors**

Efficiency, fairness, integrity of the system, and the merits support the Board's exercise of its discretionary denial authority under 35 U.S.C. § 314(a). Seeking to minimize duplication of work, the Board has set forth a set of nonexclusive factors for determining whether to deny a petition in view of parallel litigation (i.e., the "*Fintiv* factors"). *See Fintiv I*, IPR2020-00019, Paper No. 11. As explained in detail below, the *Fintiv* factors weigh heavily in favor of discretionary denial in this case.

**1. *Fintiv* Factor 1: The district courts have not granted a stay**

Patent Owner agrees with Petitioners that this factor is neutral because no motion to stay has been filed, so the Board should not infer the outcome of such a motion. *Sand Revolution II LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper No. 24 at 7 (P.T.A.B. June 16, 2020) (informative).

**2. *Fintiv* Factor 2: Trial is scheduled to take place before the projected deadline for a final written decision.**

*Fintiv* Factor 2 weighs against institution because trial in the corresponding district court litigation is set to occur on June 2, 2025. Ex. 1014 at 1. The Final

Written Decision in this IPR is not expected until July 2025; *after* the scheduled trial date.

This factor weighs against institution. *See Fintiv I*, IPR2020-00019, Paper No. 11 at 9 (“If the court’s trial date is earlier than the projected statutory deadline, the Board generally has weighed this fact in favor of exercising authority to deny institution under NHK.”). The timeframe set by the district court is consistent with the statistical median time to trial for the Eastern District of Texas. *See* Ex. 2001. Those statistics indicate that, over the past two years the median time to trial for the district was 18 months after filing. *Id.* Here, trial is conservatively set at 22 months after the case was filed, which is more than the median time to trial in this district. *See* Ex. 1014 at 1; Ex. 1011 (case filed September 26, 2023). Furthermore, the Board has denied institution in similar cases. *See, e.g., EClinicalWorks, LLC v. Decapolis LLC*, IPR2022-00229, Paper No. 10 at 9 (P.T.A.B. Apr. 13, 2022) (finding this factor weighed in favor of discretionary denial and denying institution where “the beginning of the jury trial in the WDTX Cases is roughly ***one or two months*** before any final decision would have been due had inter partes review been instituted”) (emphasis added); *Fintiv I*, IPR2020-00019, Paper No. 15 at 13 (P.T.A.B. May 13, 2020) (informative) (finding this factor weighed in favor of discretionary denial and denying institution where the district court trial was scheduled to occur two months before the deadline for the Board to reach a final written decision) (emphasis added).

Petitioner's reliance on *Sand* in this instance is misplaced. Pet. at 82. The district court proceeding in *Sand* was not in the Eastern District of Texas, and the circumstances of that litigation were entirely different from the circumstances in this case. *Sand Revolution II LLC*, IPR2019-01393, Paper 24 at 3 (June 16, 2020) (informative). In the parallel district court proceeding in *Sand*, the parties and the court updated the scheduling order several times on request by the parties. *Id.* at 8-9. Moreover, the *Sand* case had taken place during the very early days of the COVID-19 pandemic, and the Board recognized that disruptions from the pandemic made the trial date in the district court litigation uncertain. *Id.* No such uncertainty exists here. Thus, this factor weighs in favor of discretionary denial.

**3. *Fintiv* Factor 3: The parties will have invested significant resources in cases**

*Fintiv* factor 3 weighs in favor of the Board exercising its discretionary denial authority. Petitioners wrongly limit their analysis of the parties' investment in the district court proceedings to the stage of those proceedings at the time the petition was filed. Pet. at 83. However, *Fintiv* dictates that the proper timeframe for this factor is the investment in the parallel proceeding at the time of the institution decision. *Fintiv I*, IPR2020-00019, Paper No. 11 at 9–10.

In this case, the parties will have expended significant resources by the time the Board issues an Institution Decision in this case in July 2024. The parties have already exchanged infringement and invalidity contentions for the '297 Patent, in

December 2023 and February 2024, respectively. Fact discovery is already underway under the District Court schedule, and the parties have already produced volumes of documents to each other.

Thus, because the parties are well underway with the fact discovery process, and will have expended significant resources on its by the time the Institution Decision is due, this factor weighs in favor of discretionary denial.

**4. *Fintiv* Factor 4: The issues in the petition and District Court proceeding significantly overlap**

This factor only marginally favors not exercising discretion to deny institution because the issues in the Petition and the parallel district court proceeding overlap and Petitioners have not provided a *Sotera*-style stipulation. *Fintiv* Factor 4 considers the overlap between issues raised in the petition and in the parallel proceeding. *Fintiv I*, IPR2020-00019, Paper No. 11 at 6. The prior art asserted by the Petitioners in this Petition is identical to prior art being litigated to trial in the district court litigation. Ex. 2002 at 20-22. The Petitioner's stipulation to not assert the same references in the co-pending litigation is only a limited compromise, which the PTAB has previously found to be just "marginally in favor of not exercising discretion to deny institution." *Sand Revolution II*, IPR2019-01393, Paper No. 24 at 9–10. Accordingly, based on Petitioners' *Sand Revolution*-style stipulation, this factor only marginally favors not exercising discretion to deny institution.

**5. *Fintiv* Factor 5: Petitioner is a defendant in the District Court proceedings**

*Fintiv* Factor 5 favors denial of institution because Petitioners are defendants in the parallel district court proceedings. *Fintiv* Factor 5 considers whether the petitioners and the defendants in the parallel proceeding are the same party. *Fintiv I*, IPR2020-00019, Paper No. 11 at 6. Petitioner is a defendant in the district court litigation. Pet. at 83-4; Ex. 1011.

Petitioner argues that despite the fact that it is the Defendant in the parallel litigation, this factor is neutral. Pet. at 83. However, Petitioner's argument is without merit. The Board has previously held that where "Petitioner is the defendant in the parallel proceeding...this factor weighs in favor of exercising our discretion to deny the Petition." *Nokia of America Corp. and Ericcon, Inc.v. Godo Kaisha IP Bridge 1*, IPR2022-00755, Paper No. 9 at 13. Moreover, Petitioner misrepresents the holding in the only case it cites as support for its argument. Pet. at 84 (*citing HP Inc. v. Slingshot Printing LLC*, IPR2020-01084, Paper No. 13 (P.T.A.B. Jan. 14, 2021)). Petitioner asserts that the Board in *HP Inc.* held that "having the 'same parties as parallel proceeding' makes factor 5 'neutral'." *Id.* Not so. The Board actually held that "Factors 1 (likelihood of stay), 2 (district court's trial date as compared to final written decision date), and 5 (same parties as parallel proceeding) collectively are neutral." *HP Inc.*, IPR2020-01084, Paper No. 13 at 9. The Board in *HP Inc.* made no blanket holding that having the same parties as the parallel

proceeding renders Factor 5 neutral. Thus, this factor weighs in favor of denying institution.

**6. *Fintiv* Factor 6: Petitioner’s grounds do not rise to the level of “compelling evidence of unpatentability”**

Factor 6 weighs against institution because, as shown above, the merits of the petition are weak and include numerous deficiencies, which cannot meet the high compelling merits standard needed to overcome *Fintiv* Factors 1–5 strongly favoring denial of institution.

To meet the standard for a compelling unpatentability challenge, the Petition must present challenges “in which the evidence, if unrebutted in trial, would plainly lead to a conclusion that one or more claims are unpatentable by a preponderance of the evidence.” *Commscope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper No. 23 at 3 (P.T.A.B. Feb. 27, 2023) (citing Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation at 4. (June 21, 2022) (“Guidance Memo”).) “[T]he compelling merits standard is a higher standard than the standard for institution set by statute.” *Commscope Techs.*, IPR2022-01242, Paper No. 23 at 3 (citing Guidance Memo at 4–5). Under the compelling merits standard, “[a] challenge can only ‘plainly lead to a conclusion that one or more claims are unpatentable’ if it is **highly likely** that the petitioner would prevail with respect to at least one challenged claim.” *Id.* at 3-4

(quoting *OpenSky Indus., LLC v. VLSI Tech. LLC*, IPR2021-01064, Paper No. 102 at 49–50 (P.T.A.B. Oct. 4, 2022) (precedential)) (emphasis added).

The compelling merits determination does not replace a *Fintiv* analysis; rather, “PTAB panels ... only consider compelling merits if they first determine[] that Fintiv factors 1-5 favor[] a discretionary denial.” *Commscope Techs, LLC*, IPR2022-01242, Paper No. 23 at 4 (P.T.A.B. Feb. 27, 2023). Where the Board finds compelling merits, it “must provide reasoning to explain and support its determination as to compelling merits sufficient to allow the parties to challenge that finding and sufficient to allow for review of that decision.” *Id.* at 5–6. Here, *Fintiv* Factors 1-5 plainly favor discretionary denial thus requiring Petitioner to show compelling merits, which it cannot do. As discussed above, Petitioner’s prior art grounds contain critical deficiencies and do not demonstrate a reasonable likelihood of—let alone plainly lead to—a conclusion that at least one claim is unpatentable. *See supra* §§ IV.A & IV.B.

In sum, four factors (2, 3, 5, and 6) weigh strongly in favor of discretionary denial, whereas one factor (1) is neutral and one factor (4) only marginally favors not exercising discretion to deny institution. Accordingly, Patent Owner respectfully requests that the Board exercise its discretion and deny institution.

**D. The Board Should Exercise its Discretion and Deny Institution under § 325(d)**

The Board should use its discretion to deny institution under the two-part framework of Section 325(d) because (1) “the same or substantially the same prior art or arguments previously were presented to the Office[.]”; and (2) Petitioner has failed to “demonstrate[] that the Office erred in a manner material to the patentability of challenged claims.” *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, No. IPR2019-01469, Paper 6, at 8 (P.T.A.B. Feb. 13, 2020) (precedential). Denial of institution here is supported by each of the *Becton, Dickinson* factors, as this Petition presents “the same or substantially the same prior art or arguments previously ... presented to the Office” during a proceeding pertaining to the challenged patent.” *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, No. IPR2017-01586, Paper 8, at 17–28 (P.T.A.B. Dec. 15, 2017) (precedential). Petitioner offers no new pertinent art, no non-cumulative arguments for unpatentability, and no plausible showing that the Examiner made a material error of patentability. Thus, the Board should deny institution under § 325(d).

**1. The Petition relies on substantially the same art and argument already rejected by the Office**

Petitioner relies on Kovvali and Kalman in arguing that the independent claims for the '279 Patent are obvious. However, Petitioner fails to consider that the Kalman was cited to the Examiner in an IDS, the Examiner acknowledged the IDS, and Kalman is cited on the fact of the '279 Patent. Ex. 1001 at 1; Ex. 1002 at 127, 195. *Advanced Bionics* specifically provides that “[p]reviously presented art

includes . . . art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS), in the prosecution history of the challenged patent.” IPR2019-01469, Paper 6 at 7; *see also Medtronic Corevalve LLC v. Spyese Medical, LLC*, IPR2021-00240, Paper 9 at 23 (PTAB July 23, 2021) (“Petitioner[] . . . seems to limit this factor to references that are expressly included in a rejection by the examiner. This factor is not so limited.”); *Miltenyi Biomedicine GmbH v. The Trustees of the Univ. of Pennsylvania*, IPR2022-00853, Paper 18 at 12 (PTAB Feb. 17, 2023) (“[I]t defies credulity to argue that the Examiner never considered [the prior art reference] just because he did not address it in an office action of the particular application that issued as the [challenged] patent.”) (internal quotations omitted); *Google LLC v. Kewazinga Corp.*, IPR2021-00527, Paper 16 at 11 (PTAB Aug. 24, 2021) (“precedent establishes” that previously presented art includes art submitted in an IDS).

Furthermore, while the Examiner did not explicitly rely on Kovvali and Kalman during prosecution, the manner in which these references are relied on by the Petitioner is entirely cumulative to or substantially similar to the manner in which the Examiner applied the prior art during prosecution of the ’279 Patent. Thus, Kovvali and Kalman do not present any issues that the Office has not already substantially considered. *Nora Lighting, Inc. v. Juno Mfg., LLC*, IPR2015-00601, Paper 13 at 10-11 (PTAB Aug. 12, 2015) (denying institution where “although the

references are not the same as those submitted for ex parte reexamination, the nature of the evidence as to the prior art at the time of the invention and the arguments presented are substantially the same as that which already has been presented to the Office...”).

Although Kovvali was not presented to the Office, U.S. Patent No. 5,461,611 to Drake (“Drake”) was presented and thoroughly considered across multiple office actions. Ex. 2003. A comparison of Kovvali to Drake makes clear that Drake teaches a “management system for local area networks” that features an “allocator,” which determined “if requested facilities are available, and if so, reserves these facilities for the requesting station.” Ex. 2003 at abstract. This is similar to how Petitioner characterizes Kovvali, and the Examiner ultimately concluded that Drake did not disclose all of the claimed features of the ’279 Patent, alone or in combination with other references.

**2. Petitioner has failed to demonstrate that the Office erred in a material manner**

Petitioner has not even attempted to demonstrate that the Office erred in a material manner. Thus, this factor weighs in favor of the Board exercising its discretionary powers and denying institution.

**V. CONCLUSION**

For the foregoing reasons, the Board should deny institution.

Respectfully submitted,

Date: May 8, 2024

/ James R. Nuttall, Reg. No. 44,978/

James R. Nuttall, Reg. No. 44,978

Sadaf Misbah, Reg. No. 79,583

**STEPTOE LLP**

227 West Monroe, Suite 4700

Chicago, Illinois 60606

Tel: (312) 577-1260

Fax: (312) 577-1370

Katherine D. Cappaert, Reg. No. 71,639

**STEPTOE LLP**

1330 Connecticut Avenue, NW

Washington, DC 20036-1795

Tel: (202) 429-3000

Fax: (202) 429-3902

***Counsel for Portsmouth Network Corp.***

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

This Preliminary Response complies with 37 C.F.R. § 42.24(b)(2). As calculated by the “Word Count” feature of Microsoft Word 2010, it contains 5852 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.

Date: May 8, 2024

By: / James R. Nuttall, Reg. No. 44,978/

James R. Nuttall, Reg. No. 44,978

**STEPTOE LLP**

227 West Monroe, Suite 4700

Chicago, Illinois 60606

Tel: (312) 577-1260

Fax: (312) 577-1370

*Counsel for Portsmouth Network Corp.*

## **CERTIFICATE OF SERVICE**

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies service of PATENT OWNER'S PRELIMINARY RESPONSE on the counsel of record for the Petitioner by filing this document through PTAB E2E system on May 8, 2024 and served a true and correct copy of the foregoing by electronic mail on the following counsel:

Via Email:

Theodore Foster  
ipr.theo.foster@haynesboone.com  
Brian Kwok  
brian.kwok.ipr@haynesboone.com  
David McCombs  
David.mccombs.ipr@haynesboone.com

Date: May 8, 2024

By: / James R. Nuttall, Reg. No. 44,978/

James R. Nuttall, Reg. No. 44,978  
**STEPTOE LLP**  
227 West Monroe, Suite 4700  
Chicago, Illinois 60606  
Tel: (312) 577-1260  
Fax: (312) 577-1370

***Counsel for Portsmouth Network Corp.***