

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

AMERICAN AIRLINES, INC. AND SOUTHWEST AIRLINES CO.,

Petitioners,

v.

INTELLECTUAL VENTURES I LLC,

Patent Owner.

---

Case No. IPR2025-00786

U.S. Patent No. 7,949,785

---

**BRIEF IN SUPPORT OF PATENT OWNER'S REQUEST FOR  
DISCRETIONARY DENIAL**

**Table of Contents**

PATENT OWNER’S EXHIBIT LIST ..... v

I. INTRODUCTION ..... 1

II. DISCRETIONARY DENIAL IS APPROPRIATE UNDER THE  
*ADVANCED BIONICS* FRAMEWORK AND THE *BECTON DICKINSON*  
FACTORS ..... 4

    A. Prosecution History of the ‘785 Patent ..... 6

    B. The DNS Request Feature ..... 14

    C. Caronni-I and Caronni-II ..... 17

    D. Hipp and RFC-1383 are Cumulative of Caronni-I and  
    Caronni-II ..... 19

    E. Even With the Additional Hipp and RFC-1383 References,  
    Petitioner Still Relies on “Common Knowledge” to Back Fill  
    Missing Features of the DNS Request Limitation ..... 21

    F. The Advanced Bionics and Becton Dickinson Factors Favor  
    Discretionary Denial Because the Caronni-I and Caronni-II  
    References Were Already Considered By the Examiner During  
    Prosecution of the ‘785 Patent, The Hipp and RFC-1383  
    References are Merely Cumulative of the Caronni-I and  
    Caronni-II References, and The Petition Has Failed to Allege  
    That the Office Erred in Applying Caronni-I and Caronni-I  
    During Prosecution ..... 22

        1. The Cumulative Nature Of The Art Asserted In The Petition  
        And The Prior Art Considered During Examination Favor  
        Discretionary Denial Under Factors (A) And (B) ..... 25

        2. The Extent To Which The Asserted Art Was Evaluated  
        During Examination, Including Whether The Prior Art Was  
        The Basis For Rejection; The Extent Of The Overlap  
        Between The Arguments Made During Examination And  
        The Manner In Which Petitioner Relies On The Prior Art  
        Favor A Discretionary Denial Under Factors (C) And  
        (D) ..... 25

        3. Whether Petitioner Has Pointed Out Sufficiently How The  
        Examiner Erred In Its Evaluation Of The Asserted Prior Art  
        And The Extent To Which Additional Evidence And Facts

Presented In The Petition Warrant Reconsideration Of Prior Art Or Arguments Favor A Discretionary Denial Under Factors (E) And (F)..... 27

III. THE DIRECTOR SHOULD EXERCISE DISCRETION AND DENY INSTITUTION BECAUSE THE PETITION IS FACIALLY DEFICIENT..... 29

A. The Purported Motivation For Combining Caronni-I With Caronni-II Is Limited To Conclusory And Unsupported Allegations .....29

1. The Fact That Caronni-I And Caronni-II Have “Analogous Components” Is Insufficient To Establish A Motivation To Combine..... 31

2. The Lack Of A Non-Conclusory Explanation “Why” The References Would Be Combined Is Fatal..... 32

3. A Reasonable Expectation Of Success Is Insufficient To Establish A Motivation To Combine ..... 33

4. The Testimony Of Petitioners’ Declarant Parrots The Words Of The Petition And Provides No Additional Explanation Or Citations Supporting The Alleged Motivation To Combine Caronni-I and Caronni-II ..... 34

B. The Purported Motivation For Combining Caronni-I/Caronni-II With Hipp Is Also Limited To Circular And Irrelevant Allegations ..... 34

C. The Purported Motivation For Combining Caronni-I/Caronni-II With RFC-1383 Is Also Limited To Irrelevant Allegations.... 37

IV. THE LENGTH OF TIME THE ‘785 PATENT HAS BEEN IN FORCE SUPPORTS DISCRETIONARY DENIAL ..... 39

V. THE FINTIV FACTORS FAVOR DISCRETIONARY DENIAL .....40

A. Factor 1 Weighs Against Institution Because A Stay Has Not Been Granted In Either The Southwest Or American District Court Litigation And There Is No Evidence That A Stay Would Be Granted If This IPR Was Instituted..... 42

B. Factor 2 Weighs Against Institution Because The Parallel Litigation Has A Trial Date Scheduled Before The Projected Statutory Deadline For The Board’s Final Written Decision .. 43

C.	Factor 3 Weighs Against Institution Because The Parties Will Have Invested Significant Effort In The Parallel Litigation By The Time The Board’s Institution Decision Is Due.....	45
D.	Factor 4 Weighs Against Institution Because There Is Substantial Overlap Between The Southwest And American District Court Litigations And This IPR, And Petitioners’ <i>Sotera</i> Stipulation Will Not Mitigate Such Overlap.....	46
	1. There is substantial overlap in the claims challenged in the Southwest and American District Court Litigations and this IPR, and the lack of complete overlap was of Petitioners’ own making.....	46
	2. Petitioners’ <i>Sotera</i> stipulation will not mitigate the overlap between the Southwest and American District Court Litigations and this IPR .....	47
E.	Factor 5 Weighs Against Institution Because The Patent Owner Is The Same And The Petitioner Are The Same Parties As In The Parallel Litigation .....	49
F.	Factor 6 Weighs Against Institution Because The Merits Of Petitioner’s Challenge Is Weak.....	49
VI.	PETITIONERS’ GAMESMANSHIP IN CONNECTION WITH CLAIM CONSTRUCTION WARRANTS DISCRETIONARY DENIAL .....	49
VII.	CONCLUSION.....	51

## PATENT OWNER'S EXHIBIT LIST

Ex. 2001	Docket from <i>Intellectual Ventures I LLC et al. v. Southwest Airlines, Co.</i> , 7:24-cv-277 (WDTX)
Ex. 2002	<a href="http://www.txwd.uscourts.gov/for-attorneys/judge-albright-courtroom-faq/">www.txwd.uscourts.gov/for-attorneys/judge-albright-courtroom-faq/</a>
Ex. 2003	Docket from <i>Intellectual Ventures I LLC et al. v. American Airlines, Inc.</i> , 4:24-cv-980 (EDTX)
Ex. 2004	Defendant American Airlines, Inc.'s P.R. 3-3 Invalidation Contentions in <i>Intellectual Ventures I LLC et al. v. American Airlines, Inc.</i> , 4:24-cv-980 (EDTX)
Ex. 2005	Defendant Southwest Airlines Co.'s Preliminary Invalidation Contentions in <i>Intellectual Ventures I LLC et al. v. Southwest Airlines, Co.</i> , 7:24-cv-277 (WDTX)

## I. INTRODUCTION

Pursuant to the Memorandum by the Acting Director dated March 26, 2025, setting forth “Interim Processes for PTAB Workload Management” (the Memorandum), Patent Owner hereby sets forth the applicable bases for discretionary denial of institution. This filing is being made within two months of the date on which the PTAB entered a Notice of Filing Date Accorded Petition, which occurred on May 9, 2025 (Paper #5).

The Petition challenges U.S. Patent No. 7,949,785 (the ‘785 Patent) based on a combination of prior art that is, at best, cumulative of the art that the Examiner considered during prosecution of the ‘785 Patent. The key claim limitation resulting in allowance during prosecution (referred to hereinafter as the “DNS request feature” for ease of reference) requires the return of three addresses -- i.e., (i) a public network address of the route director, (ii) a private network address for the destination device, and (iii) the second virtual network address that corresponds to the destination device. The Petition relies on Caronni-I, Caronni-II, Hipp and RFC-1381. However, both Caronni-I and Caronni-II were considered during the original prosecution, and correctly found wanting with respect to the DNS request feature. Hipp and RFC-1383 are, at best, cumulative of the already-considered art, and completely lacking in disclosure of the DNS request feature that resulted in allowance. As a result, the *Becton Dickinson* factors favor discretionary denial because the prior art relied on in

the Petition is, at best, cumulative of the art considered by the Examiner, and the Petition has failed to allege -- let alone demonstrate -- that the Office erred in allowing the application over that prior art during prosecution.

The Director should also exercise discretion and deny institution because the Petition is facially deficient. Ground 1 is predicated on combining at least Caronni-I, Caronni-II and Hipp, and Ground 2 is predicated on combining at least Caronni-I, Caronni-II and RFC-1383. The Petition makes only limited and conclusory allegations with respect to any motivation to combine these references. The Petition's motivation to combine argument relies heavily on Petitioners' contentions that the references purportedly relate to the same field or goal. However, the law is clear that simply being in the same field of endeavor or having the same goal do not by themselves establish a reason to combine references. The weakness of the Petition's motivation to combine arguments is compounded by its reliance on an expert declaration that is entitled to little if any weight, as it contains essentially a verbatim restatement of the motivation to combine allegations in the Petition.

A further consideration relevant to discretionary denial is the length of time the claims have been in force. Here, the claims of the '785 Patent have been in force for almost 14 years, and the Patent has since expired. The length of time that the claims were in force, combined with the fact that the Patent is now expired, are further factors that favor discretionary denial.

The *Fintiv* factors also favor the discretionary denial of institution in this case. Petitioner Southwest Airlines is the defendant in parallel litigation overseen by Judge Albright. In that case, Judge Albright has set the Markman Hearing for 7/29/2025 and has scheduled Trial for 7/27/2026. Thus, the anticipated date of the institution decision in this IPR (11/9/2025) will be three and a half months after the Markman Hearing, and the due date for a final written decision in this IPR (if it were instituted) would not be until 11/9/2026 -- which will be three and a half months after the Trial date. Neither party has even asked Judge Albright to move the trial date, and Judge Albright has made clear that he will only move the trial date in “extreme circumstances” which are not even alleged to be present here.

The policies behind *Fintiv*, including reducing the potential for duplicative efforts and inconsistent results, also favor discretionary denial. For example, it will already be necessary for there to be two claim constructions involving the ‘785 Patent, namely one by Judge Albright in the Southwest litigation, and another by Judge Mazzant in the American litigation. If this IPR goes forward, three Administrative Patent Judges at the PTAB will also need to conduct their own claim construction analysis of the ‘785 Patent. Thus, if this IPR were to go forward, the resources of 5 judges (two district court judges and three PTAB judges) will be needed to construe the claims. Clearly, the addition of a further claim construction

analysis by the PTAB (on top of two District Courts) only increases the potential for duplicative efforts and inconsistent results.

Finally, in the district courts, Petitioners have taken the position that key claim terms of the ‘785 Patent are “indefinite” because they “fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention,” while, in this IPR, the Petitioners have abandoned those positions in favor of interpretations intended to support invalidity arguments in this IPR—without acknowledging, let alone justifying, the inconsistency. This type of gamesmanship also favors discretionary denial.

For all of these reasons, and as explained more fully below, the Director should exercise her discretion to deny institution.

## **II. DISCRETIONARY DENIAL IS APPROPRIATE UNDER THE *ADVANCED BIONICS* FRAMEWORK AND THE *BECTON DICKINSON* FACTORS**

The Petition challenges the ‘785 Patent based on a combination of prior art that is, at best, cumulative of the art that the Examiner considered<sup>1</sup> during prosecution of the ‘785 Patent. In an Office Action prior to allowance of the patent,

---

<sup>1</sup> It is indisputable that both Caronni-I (U.S. Patent No. 6,970,941) and Caronni-II (U.S. Patent No. 7,814,228) were considered during the original prosecution, as they are both listed on the face of the ‘785 Patent. The Petition’s allegation that Caronni-II was not “considered during prosecution” is false. Pet., 69.

the following dependent claims, which were just previously amended, were indicated as allowable:

16. The system of claim 1 wherein the virtual network manager is further configured to receive a DNS request from the source device, and return a public network address of the route director, a private network address for the destination device, and the second virtual network address that corresponds to the destination device.

44. The virtual network manager of claim 32 further comprising a DNS server for the virtual network, the DNS server configured to receive a DNS request from a first device in the virtual network, and return a network address associated with a network route director, a private network address associated with a second device in the virtual network, and a virtual network address associated with the second device.

Ex. 1002, 399; *see* Ex. 1002, 320, 326 (showing amended claims 16 and 44).

All of the independent claims in the application were subsequently amended to include the same, or similar, claim limitations and were allowed. This claim feature (referred to hereinafter as the “DNS request feature” for ease of reference) requires the return of three addresses -- i.e., (i) a public network address of the route director, (ii) a private network address for the destination device, and (iii) the second virtual network address that corresponds to the destination device. As explained in the ‘785 Patent, the DNS request feature uses a DNS request to facilitate the retrieval of all address components required to route an encapsulated message from a source to a destination device within a virtual network. The DNS request feature is an important limitation—it enables dynamic, policy-driven routing across public and

private networks while preserving application transparency and secure isolation, which is essential for scalable and seamless virtual networking across heterogeneous environments.

For this critical claim limitation, the Petition cites two combinations of references:

- Ground 1 – Caronni-I (U.S. Patent No. 6,970,941), Caronni-II (U.S. Patent No. 7,814,228), and Hipp (U.S. Patent No. 6,766,371)
- Ground II – Caronni-I, Caronni-II, and RFC-1383 (Huitema, C., Network Working Group Request for Comment (RFC): 1383, entitled An Experiment in DNS Based IP Routing)

Both Caronni-I and Caronni-II were already considered by the Examiner during prosecution of the ‘785 Patent application, and Hipp and RFC-1383 are, at best, cumulative of the already-considered art, and completely lacking in disclosure of the key claim element that was deemed allowable during prosecution. As a result, and as explained more fully below, the *Becton Dickinson* factors favor discretionary denial because the prior art relied on in the Petition is, at best, cumulative of the art considered by the Examiner, and the Office did not err in allowing the application over that prior art during prosecution.

#### **A. Prosecution History of the ‘785 Patent**

The application that matured in the ‘785 Patent was filed on February 6, 2004. Ex. 1002, 113. Following two earlier rejections (Ex. 1002, 143-162, 202-213),

Applicant filed a Request for Continued Examination (RCE), which included, *inter alia*, dependent claims 16 and 44, as set forth below:

**16. (currently amended)** The system of claim 1 wherein the virtual network manager is further configured to receive a DNS request from the source device, and return a public network address of the route director, a private network address for the destination device, and the second virtual network address that corresponds to the destination device. ~~claim 15 wherein said second device includes at least one private physical address.~~

**44. (currently amended)** The system virtual network manager of claim 32 further comprising a DNS server for the virtual network, the DNS server configured to receive a DNS request from a first device in the virtual network, and return a network address associated with a network route director, a private network address associated with a second device in the virtual network, and a virtual network address associated with the second device. ~~wherein each member receives a respective virtual address when registering with the management device to join the virtual community, the management device includes a DNS server for the virtual community, a first member in the virtual community communicates with another member in the virtual community by querying the DNS server to determine a private network and the respective virtual network address for the another member, and to determine a public address of the network traffic router, and the first member communicates with the another member using an encapsulated packet having a source address which is the respective virtual network address of the first member and a destination address which is the respective virtual network address of the another member, by sending the encapsulated packet to the network traffic router in an encapsulating packet having a destination address which is the public address of the network traffic router, the private network address for the another member is included in the encapsulating packet and is used by the network traffic router to route the encapsulated packet to the another member.~~

Ex. 1002, 244-245, 309-351.

The Examiner responded to the RCE with a Non-Final Office Action, indicating that dependent claims 16 and 44 contained allowable subject matter. Ex. 1002, 399. Over several subsequent replies, the independent claims were amended to include the allowable subject matter of claims 16 and 44. More specifically, in a Reply filed on May 29, 2009, Claim 1 was amended to include the allowable features of Claim 16, Claim 32 was amended to include the allowable features of Claim 44, and Claims 16 and 44 were canceled:

**1. (currently amended)** A virtual network system, comprising:

a virtual network manager implemented as a first computing device, the virtual network manager configured to register devices in a virtual network that is defined by a domain name, each device in the virtual network being identified to the other devices by a virtual network address that is unique for each device and not directly routable via a public network, the virtual network manager further configured to distribute a virtual network address to a device when the device is registered in the virtual network; and

a route director implemented as a second computing device, the route director configured to communicate data between the devices that are registered in the virtual network, the data being communicated as encapsulated data packets from a source device to a destination device, an encapsulated packet including a first virtual network address that corresponds to the source device and a second virtual network address that corresponds to the destination device; and

the virtual network manager further configured to receive a DNS request from the source device, and return a public network address of the route director, a private network address for the destination device, and the second virtual network address that corresponds to the destination device.

**32. (currently amended)** A virtual network manager, comprising:

a network interface configured for data communication via a virtual network that is defined by a domain name having an associated public network address;

a register module configured to register devices in a virtual network, the register module further configured to:

receive a registration request from an agent associated with a device; ~~and~~

distribute a virtual network address to the device when the device is registered in the virtual network, the device being identified to other devices in the virtual network by the virtual network address; and

a DNS server for the virtual network, the DNS server configured to receive a DNS request from a first device in the virtual network, and return a network address associated with a network route director, a private network address associated with a second device in the virtual network, an a virtual network address associated with the second device.

Ex. 1002, 437-465.

In a Supplemental Reply to the same Non-Final Office Action, Claim 93 was amended as follows:

**93. (currently amended)** A virtual network system, comprising:

a computing device that includes at least a memory and a processor configured to implement a virtual network manager having a network interface coupled to a virtual network, the virtual network manager including at least one virtual community definition that is defined by a domain name having an associated public network address and a user set of one or more devices that are registered in the virtual network, each device in the virtual network being identified to the other devices

by a virtual network address that is associated with the device, the virtual network manager configured to exchange virtual network information with the one or more devices of the user set, ~~and~~ the virtual network being accessible by devices in the user set and devices outside of the user set, and the virtual network manager further configured to receive a DNS request from a source device, and return a public network address of a route director, a private network address for a destination device, and a virtual network address that corresponds to the destination device.

Ex. 1002, 493-521. The Remarks indicate that “[c]laim 93 recites allowable subject matter as incorporated into claims 1 and 32 as described above.” *Id* (emphasis removed). Independent Claims 53, 64 and 80 were amended to include different features and were rejected again in a Final Office Action. Ex. 1002, 613-618. Claims 1, 32 and 93 were indicated allowable. *Id* at 616. In response to the Office Action, Claims 53, 64 and 80 were amended:

**53. (currently amended)** A virtual network system, comprising:

a computing device that includes at least a memory and a processor configured to implement a network manager of a virtual network that is defined by a public domain name, the network manager configured to distribute virtual network addresses to devices that register as members in the virtual network, each device in the virtual network being identified to the other devices by a virtual network address associated with the device;

a first virtual network agent associated with a first device that is registered as a member in the virtual network;

at least a second virtual network agent associated with at least a second device that is registered as a member in the virtual network; ~~and~~

a route director configured to route communications between the first device and the at least one second device in the virtual network via the respective first and second virtual network agents, the communications configured for routing as encapsulated packets that include a first virtual network address that is not directly routable corresponding to the first device and a second virtual network address that is not directly routable corresponding to the at least second device; and

the network manager includes a DNS server configured to provide authoritative responses for DNS queries in the virtual network, the DNS server further configured to receive a DNS query from the first device and return a network address of the route director, a network address of the second device, and the virtual network address of the second device.

**64. (currently amended)** A computer-implemented method, comprising:

receiving registration requests from devices that request to be registered as members of a virtual network that is defined by a domain name having an associated public network address in a public network, each of the devices having an associated private network address;

distributing a virtual network address to a device to register the device as a member in the virtual network, each device in the virtual network being identified to the other devices by the virtual network address that is associated with the device; ~~and~~

routing communications between the devices that are registered in the virtual network, the communications being routed as encapsulated packets from a source device to a destination device, an encapsulated packet including a first virtual network address that corresponds to the source device and a second virtual network address that corresponds to the destination device; and

transmitting a response to a DNS request received from one of the devices that are the members in the virtual network, the response to the DNS request including a public network address of a route director that registers the devices, a public network address of the destination device,

and the second virtual network address that corresponds to the destination device.

**80. (currently amended)** One or more processor readable storage media comprising processor readable code that, if executed by a computer device, implements a virtual network manager to:

receive registration requests from devices that request to be registered as members of a virtual network that is defined by a domain name having an associated public network address in a public network, each of the devices having an associated private network address;

distribute a virtual network address to a device to register the device as a member in the virtual network, each device in the virtual network being identified to the other devices by the virtual network address that is associated with the device; ~~and~~

manage communications routed between the devices that are registered in the virtual network, the communications routed as encapsulated packets from a source device to a destination device, an encapsulated packet including a first virtual network address that corresponds to the source device and the second virtual network address that corresponds to the destination device; and

transmit a response to a DNS request received from one of the devices that are the members in the virtual network, the response to the DNS request including a public network address of the virtual network manager, a public network address of the destination device, and the second virtual network address that corresponds to the destination device.

Ex. 1002, 658-683. The remarks indicated that these claims were amended to recite “allowable subject matter as described above in the context of the allowed independent claims 1, 32, and 93.” *Id.* at 682-683.

The application was subsequently allowed, and the independent Claims were subsequently re-numbered as follows:

- Original Claim 1 – Issued Claim 1
- Original Claim 32 – Issued Claim 30
- Original Claim 53 – Issued Claim 38
- Original Claim 64 – Issued Claim 48
- Original Claim 80 – Issued Claim 62
- Original Claim 93 – Issued Claim 75

Ex. 1002, 760-766, 801-806.

Caronni-I and Caronni-II were both considered by the Examiner during prosecution of the '785 Patent application. Caronni-I appears on the Notice of References Cited in the Non-Final Office Action dated September 22, 2006. Ex. 1002, 167.

<b>Notice of References Cited</b>		Application/Control No.		Applicant(s)/Patent Under Reexamination	
		10/403,818		ALKHATIB ET AL.	
		Examiner		Art Unit	Page 1 of 1
		Douglas B. Blair		2142	
U.S. PATENT DOCUMENTS					
*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,107,464	09-2006	Shapira et al.	709/200
*	B	US-6,226,751	05-2001	Arrow et al.	726/15
*	C	US-6,970,941	11-2005	Caronni et al.	709/238
*	D	US-7,010,702	03-2006	Bots et al.	726/13
*	E	US-6,701,437	03-2004	Hoke et al.	726/15
*	F	US-6,594,704	07-2003	Birenback et al.	709/238
*	G	US-2004/0148439	07-2004	Harvey et al.	709/249
*	H	US-2003/0041138	02-2003	Cheline et al.	709/223
*	I	US-2003/0041091	02-2003	Cheline et al.	709/200
*	J	US-7,092,390	08-2006	Wan, Albert Chungbor	370/392
*	K	US-6,832,322	12-2004	Boden et al.	726/15
*	L	US-7,107,614	09-2006	Boden et al.	726/15
*	M	US-2002/0133534	09-2002	Forslow, Jan	709/200

Caronni-II appears on the Notice of References Cited in the Non-Office Action dated February 4, 2009. Ex. 1002, 692.

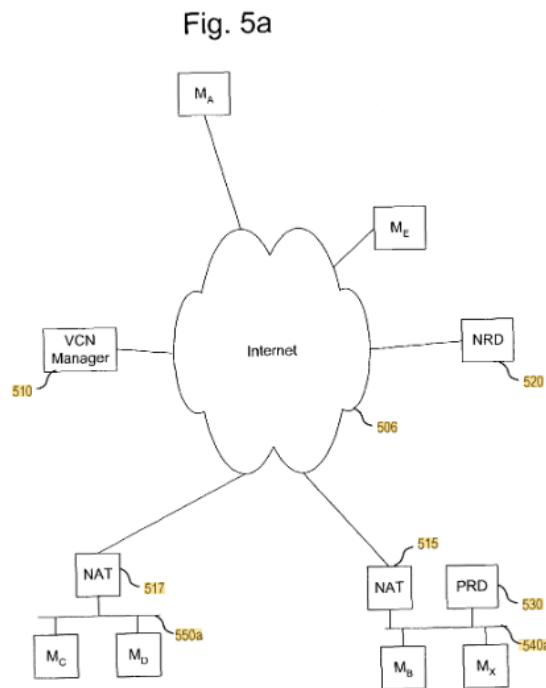
<b>Notice of References Cited</b>		Application/Control No. 10/403,818		Applicant(s)/Patent Under Reexamination ALKHATIB ET AL.	
		Examiner DOUGLAS B. BLAIR		Art Unit 2442	Page 1 of 1
<b>U.S. PATENT DOCUMENTS</b>					
*		Document Number Country Code Number Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,814,228	10-2010	Caronni et al.	709/245
*	B	US-7,787,428	08-2010	Furukawa et al.	370/338
*	C	US-7,653,747	01-2010	Lucoo et al.	709/245
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			
<b>FOREIGN PATENT DOCUMENTS</b>					

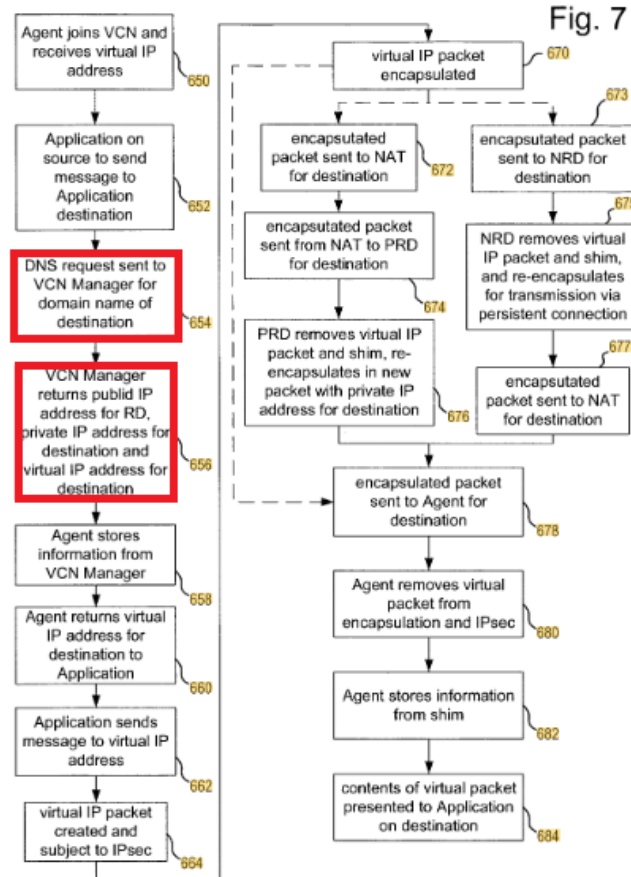
Both references appear on the face page of the ‘785 Patent.

**B. The DNS Request Feature**

The DNS request feature recited in the claims of the ‘785 Patent is directed to a virtual network manager with the ability to dynamically facilitate communication between devices in a virtual network by receiving a DNS request from a source device and returning a set of addressing information necessary to route encapsulated data packets. As recited in Claim 1, and similarly in the other independent Claims, the virtual network manager is configured to return (1) the network address of the route director, (2) the network address for the destination device, and (3) the virtual

network address of the destination device. This capability allows the system to establish a secure, logical communication path over public or private infrastructure without requiring the devices to have routable public addresses or prior knowledge of each other's physical location. This functionality is shown in Figure 7 of the '785 Patent, which is reproduced below and highlighted to show the relevant steps. Figure 5a of the '785 Patent, which shows the relevant system elements, is also reproduced below.





As described in an example in the ‘785 Patent specification, an application on the source device  $M_A$  may intend to communicate with an application on the destination device  $M_B$ . Ex. 1001, 14:29-32. In Step 654, the source device ( $M_A$  of FIG. 5) sends a DNS request to the virtual network manager (VCN Manager 510 of FIG. 5) using a domain name associated with the destination device ( $M_B$  of FIG. 5). Ex. 1001, 14:32-34. In Step 656, the VCN Manager responds with all required addressing data: the virtual IP address of the destination device ( $M_B$ ), the private IP address of the destination device ( $M_B$ ), and the public IP address of the appropriate route director for NAT traversal (NRD 520 or PRD 530, depending on whether the

destination device is part of a private network or not). Ex. 1001, 14:34-47. This dynamic DNS-based resolution is fundamental to the invention's ability to support distributed, secure networking while maintaining transparency for application-layer communications.

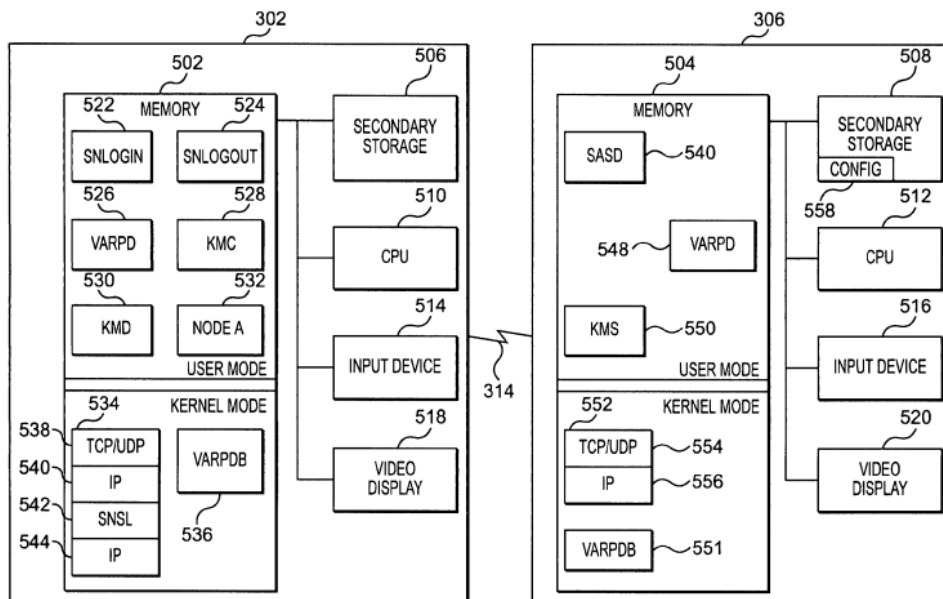
By embedding this DNS query and multi-address response mechanism into the virtual network infrastructure, the '785 Patent enables dynamic and scalable address resolution without the need for static routing or manual configuration. This approach stands in contrast to prior art systems, such as those disclosed in Caronni-I or RFC 1383, which either rely on static mappings or fail to return the full set of address information in response to a runtime query. The patent's integration of DNS into the virtual address resolution process is essential to its architecture and central to its claims.

### **C. Caronni-I and Caronni-II**

Caronni-I and Caronni-II were both cited and considered by the Examiner during prosecution of the '785 Patent, as reflected on the face of the '785 Patent. Yet despite being substantively before the Examiner, neither reference was applied in any rejection, nor were they relied upon to challenge the patentability of the independent claims.

Substantively, both Caronni references describe a virtual addressing scheme based on internal identifiers—namely, a numerical Supernet ID and a virtual IP

address tuple. *See, e.g.*, Ex. 1003, 7:10-13. Caronni-I teaches the use of an internal resolution mechanism, the Virtual Address Resolution and Protocol Daemon (VARPD) 548, to translate these internal node IDs to real IP addresses via a pre-established mapping table. Ex. 1003, 7:17–50. Caronni-II adds registration metadata and describes internal address resolution policies but continues to rely on numeric address queries and static lookups. Ex. 1004, 7:30-50. Neither reference teaches, suggests, or enables domain-name-based resolution using the DNS protocol, nor do they disclose any DNS-based request initiated at runtime from a source device, as required by the independent claims of the ‘785 Patent. For ease of reference, FIG. 5 of Caronni-I, showing the relevant system, is reproduced below for convenience.



**FIG. 5**

Further, neither Caronni nor Caronni-II disclose returning multiple types of network addresses—specifically, a route director address, a destination device address, and a virtual address of the destination—in response to any resolution request. The Caronni references each describe resolution of a single virtual node ID to a single real IP address (*See, e.g.*, Ex. 1003, 8:30–50), which is insufficient to meet the requirement in Claim 1 and its analogs that the virtual network manager returns a set of address information for routing encapsulated packets.

**D. Hipp and RFC-1383 are Cumulative of Caronni-I and Caronni-II**

Petitioner attempts to bolster its obviousness theory by adding Hipp to Caronni-I and Caronni II (Ground 1). But Hipp does not disclose anything material that Caronni-I and Caronni-II do not already teach. Hipp uses a virtual network environment (VNE) in which virtual IP addresses are assigned to members of isolated network domains—just like the systems in Caronni-I and Caronni-II. Ex. 1005, 6:15-20. Its only reference to DNS appears at column 6, lines 16-26, where it mentions that a virtual hostname may be resolved to a virtual IP address using preconfigured DNS or a local host file. Like the Caronni references, this is a static configuration mechanism, which is external to the virtual network framework. Like Caronni-I and Caronni-II, Hipp does not disclose (i) DNS queries initiated at runtime, (ii) DNS requests directed to a virtual network manager, or (iii) responses containing multiple address types of any kind.

Accordingly, Hipp merely restates—if anything—what Caronni already implies with respect to virtual address mapping and static resolution. It adds no substantive disclosure with respect to the DNS-based resolution limitation in the claims. It is therefore cumulative of Caronni-I and Caronni-II.

While RFC-1383 introduces use of DNS in packet routing, it too is cumulative of the concepts already disclosed in Caronni-I and Caronni-II, particularly in the context of the DNS request feature. Ex. 1006, Section 2, pages 2-3. Caronni-I already discloses the idea of a virtual address realm, where devices are assigned internal (non-public) IP addresses, and Caronni-II expands that model with metadata registration, encapsulation, and session-aware routing. RFC-1383 overlays a similar model using “RX records” in DNS to return the IP address of a gateway for a multihomed domain — but this is functionally equivalent to Caronni-I’s route resolution mechanism via VARPD and does not return any additional address types. Ex. 1006, Section 2, pages 2-3, Section 5.1, page 11.

Critically, RFC-1383 does not teach or suggest returning all three required address types: it lacks disclosure of a virtual IP address for the destination (as used in the virtual address realm of the ‘785 Patent) and does not address internal private IPs either. It discloses a gateway address (comparable to Caronni-I’s real IP of a node or intermediate forwarder), but this alone does not render the claimed combination obvious. Additionally, the DNS use in RFC-1383 is tightly coupled to

in-addr.arpa lookups and focused on gateway selection for source-routing purposes, not as a general-purpose resolution mechanism integrated with a virtual network manager. Ex. 1006, Section 2, pages 2-3.

Caronni-I and Caronni-II were explicitly cited and considered by the examiner during prosecution of the '785 Patent and RFC-1383 offers no non-cumulative teaching relevant to the DNS limitations of the independent claims. Since RFC-1383 fails to add any missing disclosure with respect to returning multiple address types or integrating DNS with virtual network identity management, RFC-1383 cannot meaningfully contribute to an obviousness combination.

**E. Even With the Additional Hipp and RFC-1383 References, Petitioner Still Relies on “Common Knowledge” to Back Fill Missing Features of the DNS Request Limitation**

Throughout the Petition, and importantly with respect to the DNS Request limitation that was deemed allowable during prosecution of the '785 Patent application, Petitioner acknowledges that it still has not found all of the claim limitations within the cited references. For example, with respect to the DNS Request limitation, Petitioner states:

- “A POSITA would understand the “querying network services in a well-known manner” is a DNS operation.” Petition, paper 64.
- “A POSITA would understand that higher layer processes in Caronni-I would use DNS services, such as those disclosed by Hipp or those generally known to a POSITA, to initially determine a virtual destination node address.” *Id.*

- “A POSITA would understand both Caronni-I (address translation) and Caronni-II (VARP lookup table) are similar to DNS operations. Thus, a POSITA would understand that the combination of Caronni-I/II and Hipp discloses a DNS request.” Petition, paper 65 (citations removed).
- “A POSITA would recognize this addition to the VARP table would provide multiple addresses from a single VARP query.” *Id.*
- “A POSITA would recognize the Caronni-I/II and Hipp combination would disclose a way to store and return multiple IP address[es] in a response to a single query.” Petition, papers 65-66.

It is, thus, clear that Petitioner has not found additional prior art that, when combined with the references (Caronni-I and Caronni-II) already considered by the Examiner during prosecution, supplies the claim features the Examiner deemed allowable during prosecution.

**F. The Advanced Bionics and Becton Dickinson Factors Favor Discretionary Denial Because the Caronni-I and Caronni-II References Were Already Considered By the Examiner During Prosecution of the ‘785 Patent, The Hipp and RFC-1383 References are Merely Cumulative of the Caronni-I and Caronni-II References, and The Petition Has Failed to Allege That the Office Erred in Applying Caronni-I and Caronni-I During Prosecution**

As explained in *Advanced Bionics, LLC v. Med-El Elektromedizinische Gerate GMBH*, IPR2019-01469, Paper #6, 7-8 (P.T.A.B. 2020) (Precedential):

... 35 U.S.C. § 325(d) identifies two separate issues for the Director to consider in exercising discretion to deny institution of review: whether the petition presents to the Office the same or substantially the same art previously presented to the Office, or whether the petition presents to the Office the same or substantially the same arguments previously presented to the Office. ...

Under § 325(d), the art and arguments must have been previously presented to the Office during proceedings pertaining to the challenged patent. Previously presented art includes art made of record by the Examiner, and art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS), in the prosecution history of the challenged patent. ... If the “same or substantially the same prior art or arguments previously were presented to the Office,” then the Board’s decisions generally have required a showing that the Office erred in evaluating the art or arguments. See, e.g., *Becton, Dickinson*, Paper 8 at 24 (considering whether the petitioner has pointed out sufficiently how the examiner erred in its evaluation of the asserted prior art). If the petitioner fails to show that the Office erred, the Director may exercise his discretion not to institute inter partes review. *Id.* (exercising discretion where “Petitioner has not pointed to error by the Examiner”).

In the present case, Caronni-I and Caronni-II were both cited in the list of references considered by the Examiner during prosecution of the ‘785 Patent and, with respect to the DNS request feature of the independent Claims of the ‘785 Patent, Hipp and RFC-1383 are cumulative of Caronni-I and Caronni-II, as explained in detail in Section II(E) above. It was, therefore, Petitioner’s burden to demonstrate that the Office erred in considering Caronni-I and Caronni-II, and Petitioner has failed to do so.

Simply put, institution of *inter partes* review is not warranted in this case because the Petition relies entirely on prior art that was cumulative of prior art applied by the Patent Office during prosecution. As set forth in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (precedential), the Board considers six non-exclusive factors in

determining whether to exercise discretion under 35 U.S.C. § 325(d) based on the prior consideration of art and arguments. When applied to the record here, each of these factors, enumerated below, weighs in favor of discretionary denial.

- (a) the similarities and material differences between the asserted art and the prior art involved during examination;
- (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
- (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
- (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;
- (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and
- (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of prior art or arguments.

Specifically, the Caronni-I and Caronni-II references were applied by the Office during prosecution of the '785 Patent by citation in the Examiner's lists of considered references. With respect to the DNS request limitation claimed in the '785 Patent, the Petition relies on a combination of Caronni-I, Caronni-II and either Hipp or RFC-1383, which are merely cumulative of Caronni-I and Caronni-II, as explained above. The Petition fails to identify any error in the Office's analysis and offers no material new evidence warranting reconsideration. As detailed below, under the totality of the circumstances, institution should be denied pursuant to 35 U.S.C. §325(d).

**1. The Cumulative Nature Of The Art Asserted In The Petition And The Prior Art Considered During Examination Favor Discretionary Denial Under Factors (A) And (B)**

The Petition relies on a combination of Caronni-I, Caronni-II and Hipp or RFC-1383 for the DNS request limitation of the independent Claims. Since the disclosures in Hipp and RFC-1383 relative to this limitation are cumulative of those in Caronni-I and Caronni-II, factors (a) and (b) from *Becton, Dickinson* support discretionary denial.

**2. The Extent To Which The Asserted Art Was Evaluated During Examination, Including Whether The Prior Art Was The Basis For Rejection; The Extent Of The Overlap Between The Arguments Made During Examination And The Manner In Which Petitioner Relies On The Prior Art Favor A Discretionary Denial Under Factors (C) And (D)**

Caronni-I and Caronni-II were expressly listed on the face of the ‘785 Patent and therefore were squarely before the examiner during prosecution. Although the examiner did not deploy either reference as a basis for a rejection, that omission is telling: it reflects the examiner’s informed assessment that the disclosures lacked the critical subject matter required to meet the claim limitations—namely, a virtual-network manager that responds to a runtime DNS request by returning multiple, layered address types (virtual, device, and route-director addresses). Under *Becton, Dickinson* factor (C), the Office has already had the opportunity to weigh

the relevance of these references, and under factor (D), Petitioners advance no new teaching or rationale that the examiner could not have considered.

Importantly, neither Caronni reference even gestures toward DNS-driven resolution. Caronni-I relies on VARPd tables keyed by numeric Supernet IDs (Ex. 1003, 7:10–50). While Caronni-II expands metadata associated with those tables (Ex. 1004, 7:30–50), it still resolves only one address type per lookup. The Examiner, thus, correctly recognized that these systems do not disclose the claimed workflow of receiving a DNS query and returning a set of three distinct addresses for policy-based encapsulated routing. Ex. 1001, Fig. 7, steps 654–656; 14:18–29. Petitioners point to nothing in Caronni-I or Caronni-II that fills this gap, confirming that their current theory is simply a re-packaging of art previously deemed immaterial.

Further, while no arguments were made during examination, Caronni-II was first cited by the Examiner during a critical time in the prosecution of the ‘785 Patent application—it was cited in the first Office Action issued after the DNS request feature was incorporated into independent Claims 1 and 32 in the application. The Examiner indicated that those claims were allowable in the very next Office Action issued. Accordingly, it is clear that the Examiner actually applied Caronni-II to the DNS request feature and decided that Caronni-II did not apply.

Because the Examiner already considered—and implicitly rejected—the relevance of Caronni-I and Caronni-II to the exact limitations now challenged, § 325(d) requires the Board to deny institution. Allowing Petitioners to relitigate references the Office has seen and justifiably set aside would contravene the policy goals underlying *Becton, Dickinson* factors (C) and (D): promoting examination finality and conserving Board resources for truly new, non-cumulative art. In short, Caronni-I and Caronni-II do not advance Petitioners’ case; they merely underscore the strength of the claims the Examiner allowed.

**3. Whether Petitioner Has Pointed Out Sufficiently How The Examiner Erred In Its Evaluation Of The Asserted Prior Art And The Extent To Which Additional Evidence And Facts Presented In The Petition Warrant Reconsideration Of Prior Art Or Arguments Favor A Discretionary Denial Under Factors (E) And (F)**

The Petitioner bears the burden of showing that the Office erred in citing but not applying Caronni-I and Caronni-II in an Office Action during prosecution of the ‘785 Patent. In the present case, the Petition’s entire § 325(d) discussion is limited to a single paragraph in the final pages of the brief. That paragraph merely asserts—without analysis—that “the specific combinations of Caronni-I, Caronni-II, Hipp and RFC-1383 were not considered during prosecution” and that the Examiner “did not reply upon [them] in rejecting the claims.” Petition, papers 79-80. Beyond this, the Petition acknowledges that Caronni-II appears on the face page of the ‘785

Patent, but incorrectly and misleadingly states that the “the Petition relies on Caronni-I which was not cited or relied upon during prosecution or in the *ex parte* reexamination” when in fact it was cited by the Examiner during prosecution and appears on the face of the patent itself. Petition, 68-69. Caronni-I is Petitioner’s primary reference and was used as the basis for its § 103 arguments for the vast majority of the claim elements in both grounds.

The Petition provides no argument whatsoever that the Examiner erred in citing Caronni-I and Caronni-II during prosecution but not applying them in a rejection, and states that Caronni-I was not considered by the Examiner during prosecution, which is outright false. Thus, factors (e) and (f) from *Becton, Dickinson* support discretionary denial.

In sum, all six *Becton, Dickinson* factors—(a) through (f)—support discretionary denial of institution under 35 U.S.C. § 325(d). This is precisely the type of case that the *Becton, Dickinson* factors were intended to address: a Petition that merely repackages art that is cumulative of that already vetted by the Office, without identifying error or providing sufficient justification for a second look. Accordingly, the Director should decline to institute inter partes review in the exercise of her discretion under § 325(d).

### III. THE DIRECTOR SHOULD EXERCISE DISCRETION AND DENY INSTITUTION BECAUSE THE PETITION IS FACIALLY DEFICIENT

The Petition sets forth two Grounds, both of which are seriously flawed.

#### A. The Purported Motivation For Combining Caronni-I With Caronni-II Is Limited To Conclusory And Unsupported Allegations

Both Grounds 1 and 2 rely on combining Caronni-I with Caronni-II. However, the Petition makes only limited and conclusory allegations with respect to any motivation to combine these references. For example, the totality of the Petition's purported motivation for combining Caronni-I with Caronni-II is limited to the following conclusory statements:

Having the same named inventor, Caronni-II naturally extends this architecture by introducing a reflecting agent to manage NAT traversal between private networks. Ex-1004, 8:19–23. While Caronni-II operates at a higher abstraction level than Caronni-I, its disclosure of analogous components—DNS type request, virtual addressing, encapsulation, and node registration—provides overlapping technical objectives. *Id.*, 3:20-23, 3:49–51, 4:11–14. A POSITA would recognize that integrating Caronni-II's reflecting agent with Caronni-I's Supernet structure directly addresses NAT-to-NAT communication challenges. The reflecting agent's ability to map public-facing IP addresses to private virtual addresses aligns with Caronni-I's VARP system, enabling bidirectional connectivity across NAT boundaries. *Id.*, Figure 5. The Caronni-I/II combination results in the inclusion of the reflecting agent's IP address in Caronni-I's VARP system. *Id.*, 8:35–38. This combination enhances Caronni-I's virtual addressing scheme by adding NAT transparency through Caronni-II's reflecting agent, fulfilling a well-documented industry need for scalable hybrid networks. Ex-1011, ¶ 403. Petition, 28-29.

Thus, the Petition makes two conclusory (and illusory) allegations to support an alleged motivation to combine Caronni-I with Caronni-II. First, the Petition offers the conclusory allegation that the purported combination addresses so-called “NAT-to-NAT communication challenges” -- but fails to articulate the specifics of such “challenges” let alone cite any evidence that such “challenges” existed or would have been known to a POSITA. Second, the Petition offers the conclusory allegation that the purported combination “fulfill[ed] a well-documented industry need for scalable hybrid networks” -- but provided no evidence of this so-called “well-documented” industry need. The only citation provided for this conclusory allegation is to ¶ 403 of the declaration of Petitioners’ declarant (Ex. 1011) - however, that paragraph makes no mention of any “well-documented” industry need.

Petitioners’ allegations that Caronni-I and Caronni-II have “analogous components” is akin to an argument that the references belong to the same field, which by itself is insufficient to establish a motivation to combine. In sum, the Petition offers nothing more than unsupported conclusions regarding motivation to combine, which fail to add up to a reasonable likelihood of prevailing. *See Johns Manville Corp. v. Knauf Insulation, Inc.*, Case IPR2018-00827, Paper 9, at 10-13 (PTAB Oct. 16, 2018) (designated informative) (rejecting a similar same-field, beneficial-combination rationale and denying institution); *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) (a petitioner cannot satisfy its

burden of proving obviousness by employing “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness”).

**1. The Fact That Caronni-I And Caronni-II Have “Analogous Components” Is Insufficient To Establish A Motivation To Combine**

Petitioners’ contention that Caronni-I and Caronni-II have analogous components and relate to the same field or goal (Pet. 28) does not by itself establish a reason to combine the references. *Securus Techs., Inc. v Glob. Tel\*Link Corp.*, 701 F. App’x 971, 976-77 (Fed. Cir. 2017) (non-precedential) (holding that “[s]uch short-cut logic would lead to the conclusion that any and all combinations of elements known in [a] broad field would automatically be obvious, without the need for further analysis.”); *Microsoft Corp. v. Enfish, LLC*, 662 F. App’x 981, 990 (Fed. Cir. 2016) (non-precedential) (holding that “the Board correctly concluded” that the petitioner “did not articulate a sufficient motivation to combine” where the only reason given was “that the references were directed to the same art or same techniques”); *Johns Manville*, IPR2018-00827, Paper 9 at 10-11 (rejecting an argument that two references were similar and belonged to the same field as an insufficient reason to combine those references). Petitioners’ analogous components/same objective argument is “simply too conclusory” to show that a POSITA would have combined Caronni-I and Caronni-II in the manner claimed.

*Securus Techs., Inc.*, 701 F. App'x at 976.

**2. The Lack Of A Non-Conclusory Explanation “Why” The References Would Be Combined Is Fatal**

Putting aside the Petition’s conclusory allegations of so-called “NAT-to-NAT communication challenges” and a “well-documented industry need for scalable hybrid networks”-- which are unsupported by any evidence -- the remainder of Petitioners’ argument for combining Caronni-I and Caronni-II boils down to a tautology: a POSITA would have found it obvious to combine features from Caronni-I and Caronni-II in order to provide the combination of features. Petition, 28-29 (alleging that the combination “enabl[es] bidirectional communication across NAT boundaries” and “ results in the inclusion of the reflecting agent’s IP address in Caronni-I’s VARPD system.”) In other words, Petitioners assert that a POSITA would have been motivated to combine the features in order to combine them. While that circular argument might explain what the combination of Caronni-I and Caronni-II is, it fails to explain why a POSITA would have sought to combine the references. *See ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012) (holding that an expert’s testimony that “by combining these two things you could do something new” that hadn’t been done before failed to establish a reason why a POSITA would have combined two references). And that lack of a “why” is dispositive: a determination of obviousness cannot be reached

where the record lacks an “explanation as to how or why the references would be combined to produce the claimed invention.” *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016); *Virtek Vision Int’l ULC, Inc.*, 97 F.4th at 886 (“These disclosures, however, do not provide any reason why a skilled artisan would use 3D coordinates instead of angular directions in a system”).

In the present case, the lack of a “why” is dispositive: a determination of obviousness cannot be reached where the record lacks an “explanation as to how or why the references would be combined to produce the claimed invention.” *TriVascular*, 812 F.3d 1056, 1066; *Virtek Vision*, 97 F.4th at 886.

### **3. A Reasonable Expectation Of Success Is Insufficient To Establish A Motivation To Combine**

The Petition’s assertion that a “reasonable expectation of success” of combining the references “stems from the complementary nature of the patents” (Pet., 29) addresses the wrong issue and is also totally conclusory. “The obviousness inquiry does not merely ask whether a skilled artisan could combine the references, but instead asks whether ‘they would have been motivated to do so.’” *Adidas AG v. Nike, Inc.*, 963 F.3d 1355, 1359 (Fed. Cir. 2020) (quoting *InTouch Techs., Inc. v. VGO Commc’ns, Inc.*, 751 F.3d 1327, 1352 (Fed. Cir. 2014)). In other words, a reasonable expectation of success (“could combine references”) does not establish a motivation to combine (“would have been motivated to do so”). An expectation of

success cannot cure the deficiencies of Petitioners' conclusory allegations that a POSITA would have been motivated to combine Caronni-I and Caronni-II.

**4. The Testimony Of Petitioners' Declarant Parrots The Words Of The Petition And Provides No Additional Explanation Or Citations Supporting The Alleged Motivation To Combine Caronni-I and Caronni-II**

The cited testimony from Petitioner's declarant, Dr. Zadok, does not cure the Petition's deficiencies. Ex.1011, ¶¶ 351-352, 356 and 403. The cited testimony largely repeats (word-for-word) the petition's conclusory assertions for combining Caronni-I and Caronni-II. *Compare* Pet. at 28-29 with Ex. 1011, ¶¶ 351-352 and 356. For that reason, the testimony of Dr. Zadok on this issue is entitled to little if any weight. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15-17 (PTAB Aug. 24, 2022) (designated precedential) (according "little weight" to declaration testimony that contains a verbatim restatement of a petition's conclusory assertions without additional supporting evidence or reasoning).

In summary, the deficiencies in the Petition's argument alleging a motivation to combine Caronni-I and Caronni-II favor discretionary denial.

**B. The Purported Motivation For Combining Caronni-I/Caronni-II With Hipp Is Also Limited To Circular And Irrelevant Allegations**

Ground 1 further relies on further combining the combination of Caronni-I and Caronni-II with Hipp. As was the case with putting Caronni-I and Caronni-II together, the Petition's argument boils down to a tautology: a POSITA would have

found it obvious to combine features from the combination of Caronni-I and Caronni-II with Hipp in order to provide the combination of features. More specifically, the totality of the Petition’s purported motivation for combining the combination of Caronni-I with Caronni-II with Hipp is limited to the following:

Hipp’s DNS-based hostname resolution complements these frameworks by providing DNS resolution of virtual hostnames to virtual IP addresses. Ex-1005, 6:15–26. By incorporating Hipp’s DNS methodology into Caronni-I’s VARP operations and Caronni-II’s VARP reflecting agent entries, a POSITA would appreciate a DNS capability to resolve a virtual hostname into a virtual IP address, a real IP address and an IP address of a reflecting agent. This integration would leverage Hipp’s DNS capability for virtual hostnames to return multiple address records from a single query, aligning with the dual addressing requirements of hybrid virtual/physical networks. The combination creates a cohesive system where DNS resolution triggers context-aware routing decisions—using virtual addresses for internal Supernet traffic and NAT-translated addresses for cross-boundary communication. Ex-1011, ¶¶ 359, 367. Petition, 29 (emphasis added).

In other words, Petitioners assert that a POSITA would have been motivated to combine the features in order to achieve a combination of features comprising “a DNS capability to resolve a virtual hostname into a virtual IP address, a real IP address and an IP address of a reflecting agent ... for cross-boundary communication.” This glaring deficiency in the purported motivation to combine is compounded by the fact that the Petition’s circular argument forms the Petition’s basis in Ground 1 for the “DNS request feature” recited in the claims which, as discussed in Section II above, was the basis for patentability. See *ActiveVideo*

*Networks*, 694 F.3d 1312, 1328 (expert’s testimony that “by combining these two things you could do something new” that hadn’t been done before failed to establish a reason why a POSITA would have combined two references). Again, the lack of a “why” is dispositive: a determination of obviousness cannot be reached where the record lacks an “explanation as to how or why the references would be combined to produce the claimed invention.” *TriVascular, Inc.*, 812 F.3d 1056, 1066); *Virtek Vision*, 97 F.4th at 886.

Again, the Petition’s assertion that a “reasonable expectation of success” of combining the references “stems from the complementary nature of the patents” (Pet., 29) addresses the wrong issue and is again also totally conclusory. “The obviousness inquiry does not merely ask whether a skilled artisan could combine the references, but instead asks whether ‘they would have been motivated to do so.’” *Adidas AG*, 963 F.3d 1355, 1359. An expectation of success cannot cure the deficiencies of Petitioners’ conclusory allegations that a POSITA would have been motivated to combine the combination of Caronni-I and Caronni-II with Hipp.

Finally, the cited testimony from Petitioner’s declarant, Dr. Zadok, does not cure the Petition’s deficiencies with respect to a motivation for combining the combination of Caronni-I and Caronni-II with Hipp. With one exception (discussed below), the cited testimony largely repeats (word-for-word) the petition’s conclusory assertions for combining Caronni-I and Caronni-II. *Compare* Pet. at 29 *with* Ex.

1011, ¶ 367. For that reason, the testimony of Dr. Zadok on this issue is entitled to little if any weight. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15-17 (PTAB Aug. 24, 2022) (designated precedential) (according “little weight” to declaration testimony that contains a verbatim restatement of a petition’s conclusory assertions without additional supporting evidence or reasoning).

In addition to the circular allegation that a POSITA would have been motivated to combine the features in Caronni-I and Caronni-II with Hipp in order to achieve the combination of features, Dr. Zadok makes the irrelevant statement that “[a] POSITA would have understood that higher layer processes in a Caronni I sending node could use DNS services, such as those disclosed by Hipp or those generally known to a POSITA, to determine a virtual destination node address.” Ex. 1011, ¶ 367 (emphasis added). This statement misses the mark, because the obviousness inquiry is not predicated on what a POSITA “could” do but instead focuses on what a POSITA would have been motivated to do -- a topic Dr. Zadok (and the Petition) say precious little about.

In summary, the deficiencies in the Petition’s argument alleging a motivation to combine Caronni-I and Caronni-II with Hipp favor discretionary denial.

**C. The Purported Motivation For Combining Caronni-I/Caronni-II With RFC-1383 Is Also Limited To Irrelevant Allegations**

Ground 2 further relies on further combining the combination of Caronni-I

and Caronni-II with RFC-1383. As was the case with putting Caronni-I and Caronni-II together with Hipp, the Petition’s argument putting Caronni-I and Caronni-II together with RFC-1383 consists of allegations about what a POSITA “could” have done as opposed to what a POSITA would have been motivated to do. The totality of the Petition’s purported motivation for combining the combination of Caronni-I with Caronni-II with RFC-1383 is limited to the following:

Petitioners incorporate by reference Section VI.E. above (regarding combining Caronni-I/II). The Caronni-I/II combination relies on established virtual-to-real address translation principles using VARP resolution. A POSITA would understand the use of well-known DNS practices and would further recognize RFC-1383 as extending these frameworks through a modified DNS functionality to virtual hostnames and multiple real IP addresses returned by a DNS service. *Id.*, ¶¶ 408, 417.

RFC-1383 discloses a way to store and return multiple IP addresses in response to a single query using a text record and identifies an address of the destination in the domain part of the DNS request and response. Ex-1006, 11 (“This [TXT] record is designed for easy general purpose extensions in the DNS, and its content is a text string.”). A POSITA would’ve appreciated that DNS TXT records inherently structure data through a domain field specifying the destination address and a string value field supporting comma-delimited entries, including an IP address. Further, a POSITA would’ve understood that when RFC-1383 returns one or more extra addresses in response to a DNS query, those could be easily used as the tunneling/encapsulation addresses to enable, for example, VPN and IPsec services, like the tunneling and encapsulation of the Caronni-I/II combination. A POSITA would have a reasonable expectation of success in using such TXT records to return any number of comma-delimited IP addresses, values, and any information disclosed in the Caronni-I/II combination. Ex-1011, ¶¶ 418–425. Petition, 30-31.

Again, the Petition’s allegations address the wrong question. The obviousness question is not whether a POSITA “*could*” have implemented one or more extra addresses from RFC-1383 with the combination of Caronni-I and Caronni-II, but rather whether a POSITA would have been motivated to do so -- a topic that the Petition says precious little about.

The deficiencies in the Petition’s argument alleging a motivation to combine Caronni-I and Caronni-II with RFC-1383 favor discretionary denial.

#### **IV. THE LENGTH OF TIME THE ‘785 PATENT HAS BEEN IN FORCE SUPPORTS DISCRETIONARY DENIAL**

A further relevant consideration identified in the Memorandum was “[s]ettled expectations of the parties, such as the length of time the claims have been in force.” Memorandum, at 1. In this case, the claims of the ‘785 Patent were in force for almost 14 years, and the patent has since expired. The length of time that the claims were in force combined with the fact that the ‘785 Patent is now expired are further factors that favor discretionary denial.

As Acting Director Stewart explained, “[a]lthough there is no bright-line rule on when expectations become settled, in general, the longer the patent has been in force, the more settled expectations should be.” *Dabico Airport Solutions Inc. v. Axa Power Aps*, IPR2025-00408, Paper 21, 3. Consistent with this guidance, the Board has found settled expectations where a patent has been in force for as little as seven

years. For example, in *Dabico*, the Board found that settled expectations favored discretionary denial where the challenged patent had been in force for over seven years. Likewise, in *Intel Corp. v. Proxense LLC*, the Board concluded that the “challenged patents have been in force over nine years,” and that this weighed in favor of denial. IPR2025-00327, Paper 12, 2. Similarly, in *Cambridge Industries v. Applied Optoelectronics*, the Board exercised its discretion to deny institution in view of settled expectations, emphasizing that the challenged patents had been in force for nine and seven years, respectively. IPR2025-00434, Paper 11, 3.

These precedents demonstrate that where a patent has been enforceable for a substantial period (i.e., seven years or more) the parties’ settled expectations weigh heavily against institution. Here, the claims of the ‘785 Patent were in force for nearly fourteen years, and the patent has since expired. The exceptional length of time during which the patent was in force—far exceeding the threshold found sufficient in *Dabico*, *Intel*, and *Cambridge*—strongly favor discretionary denial.

## **V. THE FINTIV FACTORS FAVOR DISCRETIONARY DENIAL**

The precedential order in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB March 20, 2020) (“*Fintiv*”) identifies six factors for the Board to consider in deciding whether to exercise discretion to deny institution based on parallel proceedings involving the same patent. Application of the present facts to these

factors demonstrates that there are strong reasons for exercising discretion to deny institution here.

Each of the Petitioners in this IPR is a defendant in a different parallel district court litigation involving the ‘785 Patent. Petitioner Southwest Airlines (Southwest) is the defendant in *Intellectual Ventures I LLC et al. v. Southwest Airlines, Co.*, 7:24-cv-277 (WDTX) (the Southwest District Court Litigation), which is overseen by Judge Albright. In that case, Judge Albright has set the Markman Hearing for 7/29/2025 and has scheduled Trial for 7/27/2026. Ex. 2001, 7 (Dkt. #24). Thus, the anticipated date of the institution decision in this IPR (11/9/2025) will be three and a half months after the Markman Hearing in the Southwest District Court Litigation. In addition, the due date for a final written decision in this IPR (if it were instituted) would not be until 11/9/2026 -- which will be three and a half months after the Trial in the Southwest District Court Litigation.

Judge Albright, who is overseeing the Southwest District Court Litigation, has made crystal clear that he will not move the trial date “except in extreme circumstances.” Judge Albright posts the following admonition on the Court’s website:

## Judge Albright Patent FAQ

Q. When will the Court set the trial date?

A. At or before the CMC, the Court will provide an estimated trial date based on the number of patents-in-suit, the complexity of the case, etc. To the extent the parties would like to reset the trial date, the parties should raise that at the end of the Markman hearing. After the trial date is set, the Court will not move the trial date except in extreme situations. To help the parties prepare for trial, the Court is available on very short notice to help the parties resolve issues or provide guidance that can help the case move forward. The Court is also willing, if circumstances permit, to reduce the time it has to review summary judgment and Daubert motions. To the extent a party believes that the circumstances warrant continuing the trial date, the parties are directed to contact the Court to request a telephonic hearing.

Ex. 2002, 1 ([www.txwd.uscourts.gov/for-attorneys/judge-albright-courtroom-faq/](http://www.txwd.uscourts.gov/for-attorneys/judge-albright-courtroom-faq/)).

There is no evidence of any such “extreme circumstances” in the present case, nor have Petitioners even alleged that such “extreme circumstances” exist here.

Petitioner American Airlines (American) is the defendant in *Intellectual Ventures I LLC et al. v. American Airlines, Inc.*, 4:24-cv-980 (EDTX) (the American District Court Litigation), which is overseen by Judge Mazzant. In that case, Judge Mazzant has set the Markman Hearing for 10/14/2025 and has scheduled the Final Pretrial Conference for 10/19/2026. Ex. 2003, 7-8 (Dkt. #44). Thus, the anticipated date of the institution decision in this IPR (11/9/2025) will be almost a month after the Markman Hearing in the American District Court Litigation.

- A. Factor 1 Weighs Against Institution Because A Stay Has Not Been Granted In Either The Southwest Or American District Court Litigation And There Is No Evidence That A Stay Would Be Granted If This IPR Was Instituted**

No stay has even been requested in either the Southwest District Court Litigation or the American District Court Litigation. Pet., 66.<sup>2</sup> In addition, even if this IPR was instituted (which would not occur until on or around October 9, 2025) it is unlikely that the Court (Judge Albright) would grant a stay. *See, generally, Continental Intermodal Grp. v. Sand Revolution LLC*, No. 7:18-cv-00147 (W.D. Tex. July 22, 2020) (Judge Albright) *Multimedia Content Mgmt. LLC v. Dish Network*, No. 6:18-CV-00207-ADA, 2019 U.S. Dist. LEXIS (W.D. Tex. May 30, 2018) (Judge Albright) (denying stay).

Thus, the first factor weighs against institution.

**B. Factor 2 Weighs Against Institution Because The Parallel Litigation Has A Trial Date Scheduled Before The Projected Statutory Deadline For The Board’s Final Written Decision**

As explained above, the Trial in the Southwest District Court Litigation is scheduled for July 27, 2026, over 3 months before the statutory deadline for issuing a Final Written Decision in this matter on November 9, 2026. Without any evidence to back it up, the Petition asserts that the trial date “often changes.” Petition, 46. In support of this assertion, the Petition cites to the medium time to trial statistics which aggregate data for all judges and all types of civil cases across the district. This data is consistent with some judges in the district taking longer to bring some types of

---

<sup>2</sup> The Petitioners’ assertion that they “are considering requesting a stay” is meaningless. Pet., 67. If a Petitioner could circumvent *Fintiv* Factor 1 by making such an allegation, the factor would be meaningless.

cases to trial longer than others. Nothing about this data shows that any trial date in the district was postponed after its originally scheduled date -- let alone that Judge Albright “often” postpones trial dates. Rather, the evidence demonstrates that Judge Albright will not move the trial date “except in extreme circumstances” - which are not even alleged to be present here. Ex. 2002, 1. Given that the actual trial date in the Southwest District Court Litigation is months before the due date for the date that the Final Written Decision is due, the second factor favors discretionary denial.

The Petition focuses on the fact that the American District Court Litigation may go to trial after the Final Written Decision is due, arguing that this cuts against discretionary denial. However, the Petition has failed to explain why, in a case such as this, where there are multiple petitioners, the second *Fintiv* factor must be satisfied for both Petitioners in order to support a discretionary denial. On the contrary, the policies behind *Fintiv*, including reducing the potential for duplicative efforts and inconsistent results, favor discretionary denial even if the second *Fintiv* factor is met for one Petitioner. For example, there will already be two claim construction hearings in the District Courts (one in the Southwest District Court Litigation (on 7/29/25) and one in the American District Court Litigation (on 10/14/25)) involving the ‘785 Patent. If this IPR goes forward, the PTAB will also need to conduct its own claim construction analysis of the ‘785 Patent. Thus, if this IPR were to go forward, the resources of 5 judges will be needed to construe the claims -- i.e., Judge

Albright, Judge Mazzant, and the three Administrative Patent Judges assigned to this IPR. Certainly, the addition of a further claim construction analysis by the PTAB (on top of two District Courts) only increases the potential for duplicative efforts and inconsistent results in connection with claim construction.

**C. Factor 3 Weighs Against Institution Because The Parties Will Have Invested Significant Effort In The Parallel Litigation By The Time The Board’s Institution Decision Is Due**

Factor 3 relates to investment in the Southwest and American Litigations by the District Court and the parties. *Fintiv*, Paper 11 at 9. This factor is judged from the date of the institution decision, which is expected to be no later than November 9, 2025. *Id.* By the time the Board’s institution decision is due (on 11/9/25), all of the Markman briefing and the Markman Hearings in both the Southwest and American District Court Litigations (scheduled for 7/29/25 and 10/14/25, respectively) will have been completed, and in all likelihood one or both of Judges Albright and Mazzant will have issued their claim construction rulings. Clearly, the parties and the Courts will have made a substantial investment by the expected date of the institution decision on November 9, 2025.

The Petition was filed on April 10, 2025. At that time, Petitioners asserted that the Petition was filed “well before the start of the of the claim construction process.” Pet., at 57. Patent Owner disagrees that the Petition was filed before the start of the claim construction process. However, even if Petitioners’ assertion about the state

of affairs on April 10, 2025 was accurate, it is irrelevant. As explained in *Fintiv*, the investment by the District Courts and the parties is judged from the date of the anticipated institution decision, which is expected to be about November 9, 2025 -- rather than April 10, 2025. *Fintiv*, Paper 11 at 9. There can be no argument that by November 9, 2025 the claim construction process in both the Southwest and American District Court Litigations will be complete (or nearly complete) and thus the District Courts and the parties will have made a substantial investment in the parallel litigations by that time.

Thus, the third factor weighs against institution.

**D. Factor 4 Weighs Against Institution Because There Is Substantial Overlap Between The Southwest And American District Court Litigations And This IPR, And Petitioners' *Sotera* Stipulation Will Not Mitigate Such Overlap**

- 1. There is substantial overlap in the claims challenged in the Southwest and American District Court Litigations and this IPR, and the lack of complete overlap was of Petitioners' own making**

The Petitioners have filed Invalidity Contentions in the Southwest and American District Court Litigations that include all of the grounds asserted in this IPR. Ex. 2004, 15 (identifying as Caronni-I, Caronni-II, Hipp and RFC-1383 as references relied on for invalidity of the '785 Patent) and note 9 on page 15 (incorporating "by reference, in full, the Petition and the Exhibits in IPR2025-

00786); Ex. 2005, 116 (identifying Caronni-I, Caronni-II, Hipp and RFC-1383 as references relied on for invalidity of the '785 Patent).

Moreover, there was nothing prohibiting Petitioners from challenging the validity of all of the claims of the '785 Patent in either or both of the Southwest and American District Court Litigations. To the extent that there is a lack of complete overlap between the claims challenged in this IPR and in the District Courts, it is a situation of Petitioners' own making, as Petitioners chose which claims to challenge in each of the forums. It would only invite gamesmanship to reward Petitioners' strategy of engineering a lack of complete overlap in challenged claims by finding that such a situation weighs against discretionary denial.

**2. Petitioners' *Sotera* stipulation will not mitigate the overlap between the Southwest and American District Court Litigations and this IPR**

In addition to citing to Caronni-I, Caronni-II, Hipp and RFC-1383, Petitioners' Invalidity Contentions in the Southwest and American District Court Litigations allege that the '785 Patent claims are invalid over Caronni-I, Caronni-II, Hipp and RFC-1383 in combination with "Cisco VPN Routers and Software" or "VM Ware" -- neither of which appear to be a patent or printed publication. Ex. 2004, 16, 76-153 and 154-231 and Ex. 2005, 119, 546-619 and 620-692. Significantly, these claim charts demonstrate that, in the District Courts, Petitioners are relying on "Cisco VPN Routers and Software" or "VM Ware" solely for

*information cumulative* of what is already shown in Caronni-I, Caronni-II, Hipp and RFC-1383. Ex. 2004, 76-153 and 154-231 (mapping multiple elements to either “Cisco VPN Routers and Software” or “VM Ware” and one or more of Caronni-I, Caronni-II, Hipp and RFC-1383) and Ex. 2005, 546-619 and 620-692 (same).

Petitioners’ strategy is crystal clear. If this IPR is instituted, Petitioners will argue invalidity in the District Courts based on Caronni-I, Caronni-II, Hipp and RFC-1383 in combination with “Cisco VPN Routers and Software” and/or “VM Ware.” Petitioners will argue that these combinations are not covered by the *Sotera* stipulation because one of the references in each of the combinations -- “Cisco VPN Routers and Software” or “VM Ware”-- is not a patent or printed publication. Nonetheless, because “Cisco VPN Routers and Software” or “VM Ware” are cumulative of Caronni-I, Caronni-II, Hipp and RFC-1383, Petitioner will be advancing in the District Court arguments identical to the ones raised here, just with different “window dressing.” Thus, under the present fact, Petitioners’ *Sotera* stipulation will do nothing to mitigate the overlap in invalidity arguments raised by Petitioners in this IPR and in the Southwest and American District Court Litigations.

Because there will be significant overlap between this IPR and the Southwest and American District Court Litigations, there are particularly strong “concerns of inefficiency and the possibility of conflicting decision” if this IPR is instituted. *Fintiv*, Paper 11 at 12.

Thus, the fourth factor weighs against institution.

**E. Factor 5 Weighs Against Institution Because The Patent Owner Is The Same And The Petitioner Are The Same Parties As In The Parallel Litigation**

Patent Owner and Petitioners are the same parties as in the Southwest and American District Court Litigation.

Thus, the fifth factor weighs against institution.

**F. Factor 6 Weighs Against Institution Because The Merits Of Petitioner's Challenge Is Weak**

As explained above, the merits of the Petition are weak because, inter alia, the Petition fails to articulate motivations for combining the references, which weighs against institution under the sixth Fintiv factor.

Accordingly, all of the Fintiv factors weigh against institution of the IPR and institution should therefore be denied.

**VI. PETITIONERS' GAMESMANSHIP IN CONNECTION WITH CLAIM CONSTRUCTION WARRANTS DISCRETIONARY DENIAL**

Finally, the Petition should be denied under the Director's discretionary authority because the Petition is predicated on claim construction positions that cannot be reconciled with those advanced by Petitioners in the Southwest and American District Court Litigations. In the district courts, Petitioners have taken the position that key claim terms of the '785 Patent are "indefinite under 35 U.S.C. § 112, ¶ 2" because they "fail to inform, with reasonable certainty, those skilled in the

art about the scope of the invention.” Ex. 2004, 36-37 and Ex. 2005, 191-192. Yet, the Petitioners have abandoned those positions in this IPR in favor of interpretations intended to support invalidity arguments—without acknowledging, let alone justifying, the inconsistency. This type of gamesmanship is precisely the type of conduct that favors denial of institution.

By way of example, in the district court, Petitioner Southwest Airlines alleges that “virtual network manager” in claim 30 is indefinite and raises questions such as whether the “virtual network manager” is “a physical device, a software system, or a combination of both,” whether it is “a single entity or a collection of distributed components” and how the “virtual network manager” “differ[s] from existing network management systems.” Ex. 2005, 191-192. Petitioner American Airlines asserts that the same phrase is indefinite in the district court. Ex. 2004, 37. Yet, in this IPR, Petitioners contend that the same claim term should be given its “ordinary and customary meaning” as “understood by one of ordinary skill in the art” under *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). Petition, 11-12. These positions are diametrically opposed. A claim term that is “indefinite” does not have any “ordinary and customary meaning” as understood by a POSITA. Congress did not create the IPR process to provide an accused infringer with a mechanism for simultaneously advancing irreconcilable positions in different forums. The fact that

the Petitioners are engaging in this type of gamesmanship provides a further basis for discretionary denial.

Petitioner's indefiniteness positions in the district court are not limited to the term described above but extend to other terms in claim 1 of the '785 Patent. More specifically, in the district courts, Petitioners contend that a POSITA would not have been able to understand the meaning of (i) "virtual network manager," (ii) "receive a registration request from an agent associated with a device," and (iii) "DNS server for the virtual network ... return a network address associated with a network route director." Ex. 2004, 36-37 and Ex. 2005, 191-192. Again, these district claim construction positions are diametrically opposed to ones taken by Petitioners in this IPR, and provide a further basis for discretionary denial.

Under 37 C.F.R. § 42.104(b)(3), a petitioner must provide a clear articulation of "[h]ow the challenged claim is to be construed." Here, the Petitioners failed to meet this burden by basing the Petition on claim constructions that Petitioners believe are incorrect. These aspects of the Petition favor discretionary denial.

## **VII. CONCLUSION**

The Director should exercise discretion and deny institution under the *Becton Dickinson* factors because the prior art relied on in the Petition is, at best, cumulative of the art considered by the Examiner, and the Petition has failed to allege -- let alone

demonstrate -- that the Office erred in allowing the application over that prior art during prosecution.

The Director should also deny institution because the Petition is facially deficient. The Petition makes only limited and conclusory allegations with respect to a motivation to combine these references. In this regard, the declaration of Petitioners' expert is entitled to little if any weight, as it contains essentially a verbatim restatement of the motivation to combine allegations in the Petition.

The length of time the claims have been in force also favor discretionary denial. Here, the claims of the '785 Patent have been in force for almost 14 years and have since expired.

The *Fintiv* factors also favor discretionary denial. Petitioner Southwest is the defendant in parallel litigation with a trial date three and half months before the due date for a final written decision. Permitting this IPR to proceed will exacerbate the risk of inconsistent results, as two district court judges and the PTAB will all be required to separately construe the claims.

Finally, in the district courts, Petitioners have taken the position that key claim terms of the '785 Patent are "indefinite" because they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention," while, in this IPR, the Petitioners have abandoned those positions in favor of interpretations intended to support invalidity arguments in this IPR—without acknowledging, let

alone justifying, the inconsistency. This type of gamesmanship also favors discretionary denial.

For all of these reasons, the Director should exercise her discretion to deny institution.

Respectfully submitted,

Dated: July 9, 2025

By: /Daniel H. Golub/  
Daniel H. Golub  
Registration No. 33,701

*Counsel for Patent Owner  
Intellectual Ventures II LLC*

## CERTIFICATE OF COMPLIANCE WITH WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this **BRIEF IN SUPPORT OF PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL** complies with the type-volume limits set forth in the Memorandum and 37 C.F.R. § 42.24 because it contains 12,093 words, excluding the parts of the Brief that are exempted by 37 C.F.R. § 42.24(a), according to the word processing system used to prepare this Brief.

Respectfully submitted,

Dated: July 9, 2025

By: /Daniel H. Golub/  
Daniel H. Golub  
Registration No. 33,701

*Counsel for Patent Owner  
Intellectual Ventures II LLC*

## CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a copy of the foregoing **BRIEF IN SUPPORT OF PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL** was served via email (as consented to by counsel) on July 9, 2025 to lead and backup counsel of record for Petitioner as follows:

John B. Campbell  
jcampbell@McKoolSmith.com  
MCKOOL SMITH, P.C.  
303 Colorado Street, Suite 2100  
Austin, TX 78701

Casey Shomaker  
cshomaker@mckoolsmith.com  
McKool Smith, P.C.  
300 Crescent Court, Suite 1200  
Dallas, TX 75201

Emily R. Tannenbaum  
etannenbaum@mckoolsmith.com  
McKool Smith, P.C.  
1301 Avenue of the Americas, 32<sup>nd</sup> Floor  
New York, New York 10019

Keith D. Harden  
kharden@munckwilson.com  
Munck Wilson Mandala, LLP  
2000 McKinney Ave., Ste. 1900  
Dallas, Texas 75201

S. Wallace Dunwoody  
wdunwoody@munckwilson.com  
Munck Wilson Mandala, LLP  
2000 McKinney Ave., Ste. 1900  
Dallas, Texas 75201

Michael C. Wilson  
mwilson@munckwilson.com  
Munck Wilson Mandala, LLP  
2000 McKinney Ave., Ste. 1900  
Dallas, Texas 75201

AA\_Intellectual\_Ventures@mckoolsmith.com

Dated: July 9, 2025

By: /Daniel H. Golub/  
Daniel H. Golub  
Registration No. 33,701

*Counsel for Patent Owner  
Intellectual Ventures II LLC*