IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

INTELLECTUAL VENTURES I LLC AND INTELLECTUAL VENUTRES II, LLC, **Plaintiff,** **vs.** **AMERICAN AIRLINES, INC.,** **Defendant.**	**Civil Action No. 4:24-cv-00980** **JURY TRIAL**

DEFENDANT AMERICAN AIRLINES, INC.'S PARTIAL MOTION TO DISMISS

TABLE OF CONTENTS

Page

I. FACTUAL BACKGROUND 1

II. LEGAL STANDARD 2

A. Three-Factor test from *Bot M8 v. Sony* to state a patent infringement claim 2

B. Legal Standard for Patent Eligibility 3

III. ARGUMENT 4

A. IV Failed to Plausibly Plead Unauthorized Use for the Cloud Computing Patents 4

B. IV Failed to Plausibly Plead Pre-Suit or Post-Suit Indirect Infringement for the Asserted Patents 5

1. IV failed to plausibly plead pre-suit indirect infringement 6

2. IV failed to plausibly plead post-suit indirect infringement 6

C. IV Failed to Plausibly Plead Infringement of the '844 Patent 10

1. IV failed to satisfy the three-factor test from *Bot M8 v. Sony* 10

2. IV failed to support its direct infringement allegations with facts sufficient to make them plausible 14

D. IV Failed to Plausibly Plead Infringement of the '722 Patent 17

1. IV failed to satisfy the three-factor test from *Bot M8 v. Sony* 18

2. IV failed to support its direct infringement allegations with facts sufficient to make them plausible 21

E. The Claims of the '582 Patent are Unpatentable Under the Current Alice Standard 22

1. Alice Step 1: the claims are directed to an abstract idea 22

2. Alice Step 2: the claims do not contain an "inventive concept" 24

F. The Claims of the '785 Patent are Unpatentable Under the Current Alice Standard 26

1. Alice step 1: the claims are directed to an abstract idea 26

2. Alice Step 2: the claims do not contain an "inventive concept" 29

IV. CONCLUSION 29

TABLE OF AUTHORITIES

Page(s)

CASES

Affinity Labs of Tex., LLC v. DIRECTV, LLC,
838 F.3d 1253 (Fed. Cir. 2016).....4

Alice Corp. v. CLS Bank Int'l,
573 U.S. 208 (2014)..... passim

Alza Corp. v. Mylan Lab'ys, Inc.,
391 F.3d 1365 (Fed. Cir. 2004).....11, 19

Ashcroft v. Iqbal,
556 U.S. 662 (2009).....2

BASCOM Glob. Internet Servs., Inc. v. AT & T Mobility LLC,
827 F.3d 1341 (Fed. Cir. 2016).....25, 26

Bell Atl. Corp. v. Twombly,
550 U.S. 544 (2007).....2, 5

Berkheimer v. HP, Inc.,
881 F.3d 1360 (Fed. Cir. 2018).....3, 4

Bot M8 LLC v. Sony Corp. of Am.,
4 F.4th 1342 (Fed. Cir. 2021) ..... passim

BSG Tech. L.L.C. v. Buyseasons, Inc.,
899 F.3d 1281 (Fed. Cir. 2018).....26

CardioNet, LLC v. InfoBionic, Inc.,
955 F.3d 1358 (Fed. Cir. 2020).....26

Chapterhouse, LLC v. Shopify, Inc.,
No. 2:18-cv-300-JRG, 2018 WL 6981828 (E.D. Tex. Dec. 11, 2018)..... passim

Cleveland Clinic Found. v. True Health Diagnostics LLC,
859 F.3d 1352 (Fed. Cir. 2017).....8

Content Extraction & Transmission LLC v. Wells Fargo Bank,
776 F.3d 1343 (Fed. Cir. 2014).....24

CyberSource Corp. v. Retail Decisions, Inc.,
654 F.3d 1366 (Fed. Cir. 2011).....28

CyWee Grp., LTD v. HTC Corp.,
312 F. Supp. 3d 974 (W.D. Wash. 2018).....7

Disc Disease Sols. Inc. v. VGH Sols., Inc.,
888 F.3d 1256 (Fed. Cir. 2018).....13, 15, 20

Elec. Power Grp. L.L.C. v. Alstom S.A.,
830 F.3d 1350 (Fed. Cir. 2016).....26, 28

First-Class Monitoring, LLC v. United Parcel Serv. of Am., Inc.,
389 F. Supp. 3d 456 (E.D. Tex. 2019).....3, 4

Fractus, S.A. v. TCL Corp.,
No. 2:20-CV-00097-JRG, 2021 WL 2483155 (E.D. Tex. June 2, 2011).....10, 13, 18, 20

Global-Tech Appliances, Inc. v. SEB S.A.,
563 U.S. 754 (2011).....5

Hourexchange, LLC v. Student Loan Benefits, Inc.,
No. 1:22-CV-00356-RP, 2023 WL 139150 (W.D. Tex. Jan. 9, 2023).....11

In re TLI Commc'ns LLC Patent Litig.,
823 F.3d 607 (Fed. Cir. 2016).....24, 28, 29

Intellectual Ventures I LLC v. Toshiba Corp.,
66 F. Supp. 3d 495 (D. Del. 2014).....6

Intellectual Ventures I LLC v. Southwest Airlines Co.,
No. 7:24-cv-00277 (W.D. Tex. Nov. 2, 2024).....1

KAIFI LLC v. T-Mobile US, Inc. et al.,
2:20-cv-00281-JRG (E.D. Tex.), Dkt. 216 3

Limelight Networks, Inc. v. Akamai Technologies,
572 U.S. 915 (2014).....10

McRO, Inc. v. Bandai Namco Games Am. Inc.,
837 F.3d 1299 (Fed. Cir. 2016).....3, 23

Microsoft Corp. v. DataTern, Inc.,
755 F.3d 899 (Fed. Cir. 2014).....7, 9

Motiva Patents LLC v. Sony Corp.,
408 F. Supp. 3d 819 (E.D. Tex. 2019).....6

Net MoneyIN, Inc. v. VeriSign, Inc.,
545 F.3d 1359 (Fed. Cir. 2008).....27

NXP USA Inc. v. MediaTek Inc.,
No. 2:21-cv-00318-JRG, 2022 WL 799071 (E.D. Tex. Mar. 15, 2022).....8

Pharmastem Therapeutics, Inc. v. Viacell, Inc.,
491 F.3d 1342 (Fed. Cir. 2007).....8

Quanergy Sys. V. Velodyne Lidar USA, Inc.,
24 F.4th 1406 (Fed. Cir. 2022) 17

RecogniCorp, LLC v. Nintendo Co.,
855 F.3d 1322 (Fed. Cir. 2017).....24, 25

Ruby Sands LLC v. Am. Nat'l Bank of Tex.,
No. 2:15-cv-1955-JRG, 2016 WL 3542430 (E.D. Tex. June 28, 2016)..... passim

SAP Am., Inc. v. InvestPic, LLC,
898 F.3d 1161 (Fed. Cir. 2018).....3

Semantic Search Techs. LLC v. Aldo U.S., Inc.,
425 F. Supp. 3d 758 (E.D. Tex. 2019).....4

Soar Tools, LLC v. Mesquite Oil Tools, Inc.,
No. 5:19-cv-243-H, 2021 WL 3030066 (N.D. Tex. 2021).....10, 14, 17, 21

STA Grp. LLC v. Motorola Sols, Inc.,
No. 2:22-cv-0381-JRG-RSP, 2023 WL 5166367 (E.D. Tex. July 7, 2023), *aff'd*, 2023
WL 5191977 (E.D. Tex. Aug. 11, 2023) 2, 18

Tierra Intelectual Borinquen, Inc. v. ASUS Computer Int'l, Inc.,
No 2:13-cv-38-JRG, 2014 WL 894805 (E.D. Tex. Mar. 4, 2014).....7, 9

Trading Techs. Int'l, Inc. v. IBG LLC,
921 F.3d 1084 (Fed. Cir. 2019).....3

Two-Way Media Ltd. v. Comcast Cable Communications, LLC,
874 F.3d 1329 (2017).....24, 25

UTTO Inc. v. Metrotech Corp.,
119 F.4th 984 (Fed. Cir. 2024) 14

Veritas Techs. LLC v. Veeam Software Corp.,
835 F.3d 1406 (Fed. Cir. 2016).....17

Versata Dev. Grp., Inc. v. SAP Am., Inc.,
793 F.3d 1306 (Fed. Cir. 2015).....25

Vervain v. Micron Technology, Inc.,
No. 6:21-cv-00487, 2022 WL 23469 (W.D.Tex. Jan. 3, 2022)..... passim

Vervain, LLC v. Phison Elecs. Corp.,
No. 1:24-cv-00259-ADA, 2024 U.S. Dist. LEXIS 218371 (W.D. Tex. Dec. 2, 2024).....15

Vita-Mix Corp. v. Basic Holdings, Inc.,
581 F.3d 1317 (Fed. Cir. 2009).....5, 7

Voip-Pal.Com, Inc. v. Apple Inc.,
411 F. Supp. 3d 926 (N.D. Cal. 2019), *aff'd*, 828 F. App'x 717 (Fed. Cir. 2020) 3

STATUTES

35 U.S.C. § 101.....23, 27, 28, 29

35 U.S.C. § 271.....5, 8

OTHER AUTHORITIES

Fed. R. Civ. P. 12.....2

TABLE OF EXHIBITS

EXHIBIT	DESCRIPTION
1.	Excerpts of the Prosecution History of U.S. Patent No. 8,332,844
2.	Excerpts of the Prosecution History of U.S. Patent No. 7,949,785
3.	Excerpts of the Prosecution History of U.S. Patent No. 8,407,722
4.	Additional Excerpts of the Prosecution History of U.S. Patent No. 8,407,722

I. FACTUAL BACKGROUND

Intellectual Ventures Management is a Washington private equity firm that collects and asserts patents. It manages Plaintiffs Intellectual Ventures I LLC and Intellectual Ventures II LLC (collectively, "Intellectual Ventures" or "IV"). Defendant American Airlines, Inc. ("American") is an airline headquartered in Fort Worth, Texas.

On Friday, November 1, 2024, IV's counsel sent American a letter offering a license for six patents. Dkt. 1-8 at 2. On Saturday, November 2, 2024, IV filed suit against American in this Court for allegedly infringing those six patents. Dkt. 1 at ¶ 1. In addition to its allegations of direct infringement, IV accuses American of inducing and contributing to infringement by unidentified third parties. *E.g.,* Dkt. 1 at ¶¶ 123, 125. IV also accuses American of willfully infringing the six patents based on its November 1 letter. *E.g.*, Dkt. 1 at ¶ 122.

The six patents IV asserts against American are United States Patent Nos. 8,332,844 (the "'844 Patent"), 8,407,722 (the "'722 Patent"), 7,949,785 (the "'785 Patent"), 8,027,326 (the "'326 Patent"), 7,324,469 (the "'469 Patent"), and 7,257,582 (the "'582 Patent") (collectively, the "Asserted Patents"). Four of the Asserted Patents, the '844, '722, '785, and '582 Patents, relate to cloud computing (collectively, the "Cloud Computing Patents"). IV admits that it has licenses with certain cloud providers for each of the Cloud Computing Patents, and that those licenses may cover American's allegedly infringing activities. Dkts. 1-9, 1-10, 1-11, 1-13 at 2. To date, IV has not asserted the four Cloud Computing Patents against any cloud providers, but it has asserted them against other types of businesses, such as airlines, insurers, and banks. *See, e.g.,* Complaint for Patent Infringement at 1, *Intellectual Ventures I LLC v. Southwest Airlines Co.*, No. 7:24-cv-00277 (W.D. Tex. Nov. 2, 2024).

II. LEGAL STANDARD

A. Three-Factor test from *Bot M8 v. Sony* to state a patent infringement claim

Not just any claim can make it past the pleading stage. Only those that "state a claim upon which relief can be granted" may advance. Fed. R. Civ. P. 12(b)(6). IV needed to allege "sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" *Bot M8 LLC v. Sony Corp. of Am.*, 4 F.4th 1342, 1352 (Fed. Cir. 2021) (citations omitted). Only the "factual content" and "reasonable inference[s]" drawn from the allegations count. *Id.* (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009)). A "formulaic recitation of the elements of a cause of action will not do." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007) (citation omitted). Nor will "legal conclusion[s] couched as . . . factual allegation[s]." *Id.* (quoting *Papasan v. Allain*, 478 U.S. 265, 286 (1986)). Rank speculation is not enough. *See Twombly*, 550 U.S. at 555 ("Factual allegations must be enough to raise a right to relief above the speculative level . . . ." (citation omitted)). If the factual content in the complaint plus reasonable inferences do not "state[] a plausible claim for relief," then the plaintiff's claims must be dismissed. *Iqbal*, 556 U.S. at 679.

Patent owners must allege enough facts to put a defendant "on notice of what activity . . . is being accused of infringement." *Bot M8*, 4 F.4th at 1352 (citation omitted). The allegations need not "conclusively establish" infringement. *STA Grp. LLC v. Motorola Sols, Inc.*, No. 2:22-cv-0381-JRG-RSP, 2023 WL 5166367, at *8 (E.D. Tex. July 7, 2023), *aff'd*, 2023 WL 5191977 (E.D. Tex. Aug. 11, 2023). But simply "reciting the claim elements" and "concluding that the accused product has those elements" is not enough. *Bot M8*, 4 F.4th at 1353. Something more is needed. How much more turns on "a number of factors," including: (1) "the complexity of the technology," (2) "the materiality of any given element to practicing the asserted claim(s)," and (3) "the nature of the allegedly infringing device." *Id.*

B. Legal Standard for Patent Eligibility

The two-step analytical framework for evaluating patent eligibility is set forth in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014). "At the first step, the Court evaluates whether the claims are directed to ineligible subject matter, such as an abstract idea." *KAIFI LLC v. T-Mobile US, Inc. et al.*, 2:20-cv-00281-JRG (E.D. Tex.), Dkt. 216 at 4 (finding claims drawn to abstract idea). "At *Alice* step two, if the claims are directed to ineligible subject matter, the Court then determines whether the claims contain an 'inventive concept—*i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.'" *Id*. at 5 (quoting *Alice*, 573 U.S. at 217-18).

In the first step, the relevant analysis involves determining "whether the claims . . . focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery." *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). A claim that "fails to provide any specific or concrete means for achieving [a] desired result" is a claim drawn to an abstract idea. *Voip-Pal.Com, Inc. v. Apple Inc.*, 411 F. Supp. 3d 926, 963 (N.D. Cal. 2019), *aff'd*, 828 F. App'x 717 (Fed. Cir. 2020).

In the second step, the court must analyze whether "the claim limitations involve more than performance of well-understood, routine, and conventional activities previously known to the industry.'" *Berkheimer v. HP, Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018). When determining whether claim limitations set forth significantly more than the abstract idea itself, the "abstract idea itself cannot supply the inventive concept." *Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1084, 1093 (Fed. Cir. 2019); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018) ("There is, in short, nothing 'inventive' about any claim details, individually or in combination, that are not themselves in the realm of abstract ideas."); *First-Class Monitoring, LLC*

v. United Parcel Serv. of Am., Inc., 389 F. Supp. 3d 456, 470 (E.D. Tex. 2019) ("Where a claim's 'essential advance' is abstract, the court noted, 'a novel method of performing that advance does not avoid the problem of abstractness,'" quoting *Bridge & Post, Inc. v. Verizon Commc'ns, Inc.*, 778 F. App'x 882, 892 (Fed. Cir. 2019)).

The alleged "inventive concept" must be recited in the claims themselves. Claims that do "not recite any of the purportedly unconventional activities disclosed in the specification" lack an "inventive concept." *Berkheimer*, 881 F.3d at 1369; *see also Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1262 (Fed. Cir. 2016) (at *Alice* step two, "[w]e look to see whether there are any 'additional features' ***in the claims*** that constitute an 'inventive concept'") (emphasis added); *First-Class Monitoring*, 389 F. Supp. 3d at 468 ("Second, it is the claims, not the specification, that must contain the inventive concept necessary to render the claims patentable."); *Semantic Search Techs. LLC v. Aldo U.S., Inc.*, 425 F. Supp. 3d 758, 777 (E.D. Tex. 2019) ("The Court 'look[s] to see whether there are any "additional features" in the claims that constitute an "inventive concept," thereby rendering the claims eligible for patenting even if they are directed to an abstract idea,'" quoting *Intellectual Ventures I LLC v. Cap. One Fin. Corp.*, 850 F.3d 1332, 1341 (Fed. Cir. 2017)).

III. ARGUMENT

A. IV Failed to Plausibly Plead Unauthorized Use for the Cloud Computing Patents

IV failed to plead that American is using the Cloud Computing Patents in an unauthorized manner. Thus it has failed to state a claim regarding these Patents. First, IV clearly states that it is not "accus[ing] public clouds of American if those services are provided by a cloud provider with a license to IV's patents that covers American's activities." Dkts. 1-9 at 2, 1-10 at 2, 1-11 at 2, 1-14 at 2, and 1-15 at 2. Second, IV fails to allege any facts to demonstrate that American is using

any non-licensed public or private clouds. Without alleging any facts that American is using any non-licensed clouds to practice the Cloud Computing Patents, IV has failed to state a claim of infringement as to these Patents. As a result, IV failed to plead sufficient facts stating a plausible claim for relief. *Bot M8*, 4 F.4th at 1352. The claims asserting the Cloud Computing Patents should be dismissed. *See Twombly*, 550 U.S. at 555.

B. IV Failed to Plausibly Plead Pre-Suit or Post-Suit Indirect Infringement for the Asserted Patents

IV's allegations of indirect infringement are narrow in scope. At most, IV alleged that American was willfully blind to the Asserted Patents existence and "since receiving such notice[] that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the" Asserted Patents. Dkt. 1 at ¶¶ 42, 58, 74, 90, 106, 122. Indirect infringement, under Section 271(b)–(c), requires actual knowledge of or willful blindness to the Asserted Patents' existence. *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 765–66 (2011). Stating a claim for induced infringement requires both (1) a "third party's acts [that] constituted infringement," and (2) the defendant to have "specifically intended a third party to directly infringe the plaintiff's patent." *Ruby Sands LLC v. Am. Nat'l Bank of Tex.*, No. 2:15-cv-1955-JRG, 2016 WL 3542430, at *3 (E.D. Tex. June 28, 2016). IV failed to plausibly allege either. Nor did IV plead sufficient facts to support its contributory infringement claim, which occurs if American "sells an apparatus for use in practicing a patented method, knowing it to be 'especially made or especially adapted for use in an infringement of such patent, and *not* a staple article of commodity of commerce *suitable for substantial non-infringing use*.'" *Vita-Mix Corp. v. Basic Holdings, Inc.*, 581 F.3d 1317, 1327 (Fed. Cir. 2009) (quoting 35 U.S.C. § 271(c)) (emphasis added). Simply put, the Court should also dismiss IV's claims for indirect infringement.

1. IV failed to plausibly plead pre-suit indirect infringement

"[A] well-pleaded allegation of willful blindness is sufficient to adequately allege the knowledge requirements for [induced and] contributory infringement." *Motiva Patents LLC v. Sony Corp.*, 408 F. Supp. 3d 819, 830 (E.D. Tex. 2019). The knowledge requirement is met when a defendant "had knowledge that the product or component it sells is 'especially made or especially adapted for use in an infringement' of an asserted patent." *Id.* (citing *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1320 (Fed. Cir. 2009)). IV failed to plausibly allege American possessed such knowledge prior to the filing of this action.

IV alleges that American "has had actual knowledge of the [Asserted Patents] not later than receipt of a letter, dated September 30, 2024, and received on the same date." Dkt. 1 at ¶¶ 42, 58, 74, 90, 106, 122; *see also* Dkt. 1-8 (Notice Letter). But "notice of the infringement risk via [a] letter written only one day before the complaint was filed does not constitute a showing of objective recklessness on the part of the defendants." *Intell. Ventures I LLC v. Toshiba Corp.*, 66 F. Supp. 3d 495, 500 (D. Del. 2014). That is what happened here. IV actually sent its Notice Letter on Friday, November 1, 2024; not even one business day before the Complaint was filed on Saturday, November 2, 2024. *See* Dkts. 1, 1-8. So IV failed to plausibly allege American obtained pre-suit knowledge of the patents or an understanding of why its actions constituted infringement. *Toshiba Corp.*, 66 F. Supp. 3d at 500. Thus, IV failed to plausibly allege willful blindness, meaning the Court should dismiss IV's claims for pre-suit indirect infringement.

2. IV failed to plausibly plead post-suit indirect infringement

a) IV's allegations fail to plausibly allege that American possesses a *specific intent* to encourage any third-party's infringement.

IV fares no better in alleging that American "specifically intended a third party to directly infringe" the Asserted Patents. *Ruby Sands*, 2016 WL 3542430, at *3. "Such intent must be proven

by evidence of affirmative acts undertaken by a defendant to encourage or otherwise promote infringement." *Tierra Intelectual Borinquen, Inc. v. ASUS Computer Int'l, Inc.*, No 2:13-cv-38-JRG, 2014 WL 894805, at *5 (E.D. Tex. Mar. 4, 2014). While "[p]roviding instructions to use a product in an infringing manner is evidence of the required mental state for inducing infringement," *Microsoft Corp. v. DataTern, Inc.*, 755 F.3d 899, 906 (Fed. Cir. 2014), such instructions are not evidence of specific intent when they "teach an undisputedly non-infringing use," *Vita-Mix*, 581 F.3d at 1329. Nor do product instructions provided by a third party support that a defendant possessed the required specific intent, either. *Microsoft*, 755 F.3d at 905.

IV's Complaint does not itself provide any factual allegations supporting that American possessed the required specific intent. IV alleged that American "advertis[es], promot[es], and instruct[s] the infringing use of the Example American [] Products and Services." Dkt. 1 at ¶¶ 44, 60, 76, 92, 108, 124. But that allegation gives no "inkling as to what [American] asserted *in* those materials." *CyWee Grp., LTD v. HTC Corp.*, 312 F. Supp. 3d 974, 980 (W.D. Wash. 2018) (emphasis added). Thus, the Court "cannot reasonably infer" whether those materials evidence a specific intent to cause infringement. *Id.*

The Complaint also points to "Example American [] Products and Services," located in the claim charts, to demonstrate that American "encourag[es] and instruct[s] its partners, vendors, customers, and/or third parties" to commit infringement. Dkt. 1 at ¶¶ 43, 59, 75, 91, 107, 123. This is not the case. Not one screenshot shows website materials instructing any party, let alone a third-party, how to directly infringe. *Vita-Mix*, 581 F.3d at 1329. The claim charts do include LinkedIn job postings and purported screenshots from third-party websites. Yet these references to website materials hosted by third parties cannot show American possessed the requisite specific intent because IV did not allege that American produced those materials. *Microsoft*, 755 F.3d at 906.

b) IV's allegations fail to plausibly allege post-suit contributory infringement of the Asserted Patents.

Contributory infringement requires the sale of "a material or apparatus for use in practicing a patent process." 35 U.S.C. § 271(c). IV fails to plausibly allege how American—an airline—is selling software-based systems in end-user products to its customers in a manner that infringes the Asserted Patents. Indeed, the Complaint and the claim charts fail to identify at all which of American's products or services allegedly infringe the Asserted Patents. All the Complaint plausibly alleges is that American is an airline; the reasonable inference of which is that American is providing a service for compensation. That fails to show contributory infringement. *Pharmastem Therapeutics, Inc. v. Viacell, Inc.*, 491 F.3d 1342, 1356 (Fed. Cir. 2007) ("The district court construed the contributory infringement statute to require a sale or an offer of sale of a product; the statute is not satisfied, the court ruled, by the provision of a service for compensation."); *see also Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1363 (Fed. Cir. 2017) ("A party that provides a service, but no 'material or apparatus,' cannot be liable for contributory infringement."). Thus, IV's claims for post-suit contributory infringement should be dismissed.

c) IV's allegations fail to plausibly allege any *third party's* post-suit direct infringement of the Cloud Computing Patents.

Induced infringement requires some "third party" whose acts "directly infringe the plaintiff's patent." *Ruby Sands*, 2016 WL 3542430, at *3. IV "need not identify a *specific* direct infringer." *NXP USA Inc. v. MediaTek Inc.*, No. 2:21-cv-00318-JRG, 2022 WL 799071, at *2 (E.D. Tex. Mar. 15, 2022). But that does not solve IV's two-fold problem.

First, IV failed to "plead[] facts sufficient to allow an inference that at least one direct infringer exists" at all. *Id.* The Cloud Patents' claim charts fail to allege that a third party performs each step of the Patents. Indeed, the claim charts plead away from that. IV's barebones allegations

accuse American's systems and services of practicing each claim limitation for the various systems and methods. *See generally* Dkts. 1-9, 1-10, 1-11, 1-14, 1-15. But those allegations are irrelevant to induced infringement because American's alleged direct infringement cannot be used to support a claim that American has induced some other "third party" to directly infringe. *Ruby Sands*, 2016 WL 3542430, at *3; *see also Tierra Intelectual Borinquen, Inc.*, 2014 WL 894805 at *3 (explaining that while direct infringement captures what a party does "personally or vicariously," indirect infringement guards against potential infringers "avoid[ing] liability simply by dividing their infringement among multiple parties").

Those deficiencies in IV's claim charts are not fixed by the allegations in IV's complaint. For the Cloud Computing Patents, IV alleges that American "induce[s] . . . infringement . . . by offering such products and services and . . . inducing its customers and third parties and/or employees to use such products and services that are associated with ***backend functionality.***" Dkt. 1 at ¶¶ 43, 59, 75, 123 (emphasis added). American is an *airline*, not a seller of cloud computing software. For example, IV "makes no factual allegations that even remotely suggest that [American]," *Ruby Sands*, 2016 WL 3542430, at *4, sells software-based systems that perform "[b]lock-[l]evel [d]istributed [a]pplication [m]anagement," let alone sells those systems to unidentified customers, third parties, and/or employees for use in unidentified end-user products in a manner that infringes, Dkt. 1 at ¶ 24. In fact, American is that very end-user of Docker, Kubernetes, Hadoop, and Spark according to IV's own claim charts. *See generally* Dkts. 1-9, 1-11, 1-14, 1-15. The Cloud Computing Patents' claim charts also fail to show any product literature *by American* instructing third parties to use a specific product in an infringing manner. *Microsoft*, 755 F.3d at 906; *see also* Dkts. 1-9, 1-10, 1-11, 1-14, 1-15. Thus, the Complaint's allegations of

third-party infringement are wholly "unrelated" to this suit and "irreconcilable" with the claim charts' alleged infringement theory. *Ruby Sands*, 2016 WL 3542430, at *5.

Second, since infringement of a patent can be induced only if there is direct infringement, IV's allegations in regards to the '722 and '844 Patents fail. *Limelight Networks, Inc. v. Akamai Technologies*, 572 U.S. 915, 921 (2014). IV failed to plausibly allege American infringes the '844 Patent. *See infra* III.C. IV likewise failed to plausibly allege American infringes the '722 Patent. *See infra* III.D. Thus, IV failed to plausibly allege American induces infringement of those patents.

C. IV Failed to Plausibly Plead Infringement of the '844 Patent

1. IV failed to satisfy the three-factor test from *Bot M8 v. Sony*

Patent owners must allege sufficient facts to put American "on notice of what activity … is being accused of infringement." *Bot M8*, 4 F.4th at 1352 (citation omitted). Merely "reciting the claim elements" and "concluding that the accused product has those elements" is not enough. *Id.* at 1353. More is required. How much more depends on "a number of factors," including, but not limited to: (1) "the complexity of the technology," (2) "the materiality of any given element to practicing the asserted claim(s)," and (3) "the nature of the allegedly infringing device." *Id.* Those factors required IV to include materially more than just barebones allegations of infringement.

a) IV's claims cover complex, software-based systems.

Claims fall on a spectrum, from simple to complex. Claims covering software-based systems are "necessarily abstract and inherently intangible," causing them to be complex. *Fractus*, 2021 WL 2483155, at *3; *Vervain v. Micron Technology, Inc.*, No. 6:21-cv-00487, 2022 WL 23469 (W.D. Tex. Jan. 3, 2022), at *5; *see also Bot M8*, 4 F.4th at 1344-45 (addressing claims covering "a mutual authentication program for video games"); *Soar Tools, LLC v. Mesquite Oil Tools, Inc.*, No. 5:19-cv-243-H, 2021 WL 3030066, at *4 (N.D. Tex. 2021) (recognizing "an apparatus for controlling the flow of oil and/or gas in a production well" as "complex technology");

Hourexchange, LLC v. Student Loan Benefits, Inc., No. 1:22-CV-00356-RP, 2023 WL 139150, at *4 (W.D. Tex. Jan. 9, 2023) (acknowledging that "technology relate[d] to software" makes "claims [] complex").

The '844 Patent's claims cover software-based systems and methods. They are no less complex than that those in *Bot M8*, which related to "a mutual authentication program for video games." 4 F.4th at 1344–45. The '844 Patent's claims relate to "operating system-independent system and method for distributing an application environment to a compute node" that store "blocks of a root image on a first storage unit and storing blocks of leaf images on respective second storage units."[1] Dkt. 1-2 at 2:35-36 ('844 Patent). Since the asserted claims cover software-based systems and methods, the Court should find that they cover complex technology. *Chapterhouse, LLC v. Shopify, Inc.*, No. 2:18-cv-300-JRG, 2018 WL 6981828, at *2 (E.D. Tex. Dec. 11, 2018). Therefore, the first *Bot M8* factor supports that IV must plead materially more than barebones allegations to state a claim for infringement. 4 F.4th at 1353.

b) IV's claims include a material leaf image limitation.

The Court should next consider "the materiality of any given element to practicing the asserted claim(s)." *Bot M8*, 4 F.4th at 1353. A limitation is "material to practicing the asserted claim" when it "capture[s] the point of novelty" making the invention "non-obvious." *Vervain*, 2022 WL 23469, at *5. In deciding a claim's alleged point of novelty, courts consider the patent's specification and prosecution history. *E.g.*, *Alza Corp. v. Mylan Lab'ys, Inc.*, 391 F.3d 1365, 1369-72 (Fed. Cir. 2004) (holding claims as non-obvious because the specification and prosecution

[1] A root image is "a read-only base image [in a branching store file system that is] … accessible by all compute nodes in the cluster." '844 Patent, at 2:13-15. Whereas, "leaf images [are the] additional data blocks not previously contained in the root image and changes made by respective compute nodes to the blocks of the root image." *Id.*, at 4:18-20.

history disclaimed prior art); *see also Vervain*, 2022 WL 23469, at *5 (considering prosecution history to decide which elements were material for stating a claim). The leaf image limitations are material to practicing the claims, at least because the specification and the relevant prosecution history suggest that these limitations capture the point of novelty.

The '844 Patent's specification shows that the alleged point of novelty for each claim is the leaf image limitations. Each of the claims require some variation of the leaf image limitation:

> [S]toring leaf images for respective compute nodes on respective second storage units, said leaf images including only additional data blocks not previously contained in said root image and changes made by respective compute nodes to the blocks of the root image, ***wherein said leaf images of respective compute nodes do not include blocks of said root image that are unchanged by respective compute nodes***[.]

'844 Patent at cl. 7 (emphasis added). The specification explains that cluster computing, which involves multiple computer nodes that work together to achieve a common task, was well known. *E.g.,* '844 at 1:31-48; *see also id.* at cl. 7 at preamble. The specification states its purported invention as improving cluster computing by "utilizing a root-leaf system of application environment storage, . . . allow[ing] creation of boot images on the fly without significantly diminishing bring-up time." *Id.* at 2:34-3:2 (explaining "that creating a new boot image does not require copying the contents of the root image" since the root image remains unchanged, rather the blocks that are changed are separately stored as leaf images).

The '844 Patent's prosecution history shows the same alleged point of novelty. The '844 Patent was initially rejected during prosecution, including for anticipation, obviousness, and non-statutory subject matter. *See generally* Ex. 1. Applicants overcame those rejections by (a) narrowing the leaf image limitations, and/or (b) arguing that what the Examiner refers to as the leaf images in the prior art includes blocks of the root image that are unchanged by a compute node. *Id.* at 18-29. The intrinsic record thus shows that the claims' alleged point of novelty is the

claimed "leaf images comprising only changes made by respective compute nodes to the blocks of said root image, wherein said leaf images of respective compute nodes do not include blocks of said root image that are unchanged by respective compute nodes." *Id.* at 39 (emphasis in original). Thus, under *Bot M8*, IV had to plead facts with a "higher level of detail" that American practices the '844 Patent's alleged point of novelty. *Vervain*, 2022 WL 23469, at *5.

c) IV exclusively accused intangible, software-based systems of infringement.

The Court should lastly consider "the nature of the allegedly infringing device." *Bot M8*, 4 F.4th at 1353. Tangible devices with structures making infringement visibly plausible may require slightly more than a photo and a general allegation "that the accused products meet each and every element of [the asserted claims]." *Disc Disease Sols. Inc. v. VGH Sols., Inc.*, 888 F.3d 1256, 1257-58, 1260 (Fed. Cir. 2018); *see also Fractus, S.A. v. TCL Corp.*, No. 2:20-CV-00097-JRG, 2021 WL 2483155, at *1, 3 (E.D. Tex. June 2, 2011). This is not the case with intangible software. While the patent owner is not required to "provide source code," *Bot M8*, 4 F.4th at 1355, generically alleging that the software meets each claim limitation will not do, including when support is provided with unexplained screenshots, *id.*; *Chapterhouse*, 2018 WL 6981828, at *2. Nor does paraphrasing claim language to describe the accused software suffice to meet a patent owner's pleading burden. *Fractus*, 2021 WL 2483155, at *2-3. The patent owner must plead *facts*—facts that plausibly support that the software meets the claimed limitations. *Bot M8*, 4 F.4th at 1355; *Chapterhouse*, 2018 WL 6981828, at *2.

Here the nature of the allegedly infringing devices is intangible software. The claims cover complex, software-based systems. *See supra* Section III.C.1.a. IV's claim chart accused a third-party "system" or "platform"—Docker—purportedly used by American in its system and services. Dkt. 1 at ¶¶ 37-41 (pointing to the claim chart as identifying the accused products and services);

Dkt. 1-9 at 2 ('844 patent claim chart). The claim chart includes a bullet point list of job postings obtained from LinkedIn.com. *E.g.*, Dkt. 1-9 at 2 ('844 patent claim chart). The claim chart also points to screenshots purportedly obtained from American-operated tech.aa.com, as well as multiple third-party websites such as dxc.com, github.com, zoominfo.com, and chainguard.dev. *E.g.*, *id.* at 2-5.

Since the nature of the accused system and services is intangible software, the third *Bot M8* factor requires that IV provided materially more than barebones allegations to state a claim for infringement. 4 F.4th at 1353. IV must allege *facts* plausibly supporting that the accused software meets the claimed limitations. *Bot M8*, 4 F.4th at 1355; *see also Chapterhouse*, 2018 WL 6981828, at *2.

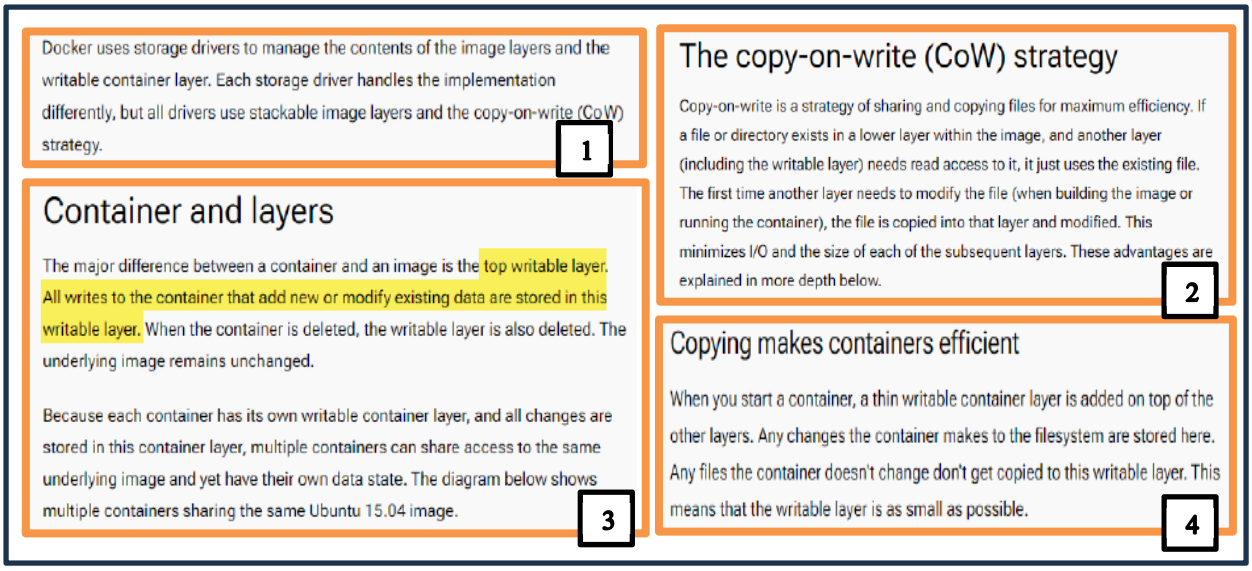
2. IV failed to support its direct infringement allegations with facts sufficient to make them plausible

To put American on notice of what IV is accusing of infringement, IV must allege facts showing American is infringing—particularly for the claimed leaf image limitations of the '844 patent. *Bot M8*, 4 F.4th at 1355; *see also Chapterhouse*, 2018 WL 6981828, at *2; *Vervain*, 2022 WL 23469, at *5 ("In cases involving complex technology, a complaint nakedly alleging that the accused product practices the claimed inventions point of novelty will rarely suffice."); *Soar Tools*, 2021 WL 3030066, at *11. IV has not. Additionally, regardless of how the Court ultimately construes the claims, there is no set of facts that could establish infringement. *See UTTO Inc. v. Metrotech Corp.*, 119 F.4th 984, 994 (Fed. Cir. 2024) ("[S]ometimes a claim's meaning may be so clear on the only point that is ultimately material to deciding the dismissal motion that no additional process is needed.").

IV's generic allegations of infringement do not rise above barebones pleading. IV generically alleged that "the Example American Count I Products and Services incorporated in the

chart satisfies all elements of the Example '844 Patent Claims." Dkt. 1 at ¶ 47; *see also Vervain*, 2022 WL 23469, at *7. Such an allegation is nearly identical to the generic barebones allegation of infringement in *Disc Disease* that the accused product "meet[s] each and every element of at least one claim of the [asserted] Patent, either literally or equivalently." 888 F.3d at 1260. IV also generically alleged that American directly infringes "by internal testing and use of the Example American Count I Products and Services." Dkt. 1 at ¶ 38. However, IV failed to point out which American products and services allegedly infringe the '844 Patent. IV merely provided job postings and blog posts to illustrate American's products and services. Dkt. 1-9 at 2-5. These posts included in Exhibit 8 attached to the Complaint, though, fail to carry the day. *See Vervain, LLC v. Phison Elecs. Corp.*, No. 1:24-cv-00259-ADA, 2024 U.S. Dist. LEXIS 218371, at *7-8 (W.D. Tex. Dec. 2, 2024) ("While these exhibits discuss Phison's business objectives and general capabilities, they do not show that Phison uses both SLC and MLC memory in all of its flash memory products."). Such barebones allegations are not plausible given the complexity of the claims, the lack of specifying the accused products and services, and the materiality of the separately stored leaf image limitation. *See supra* Sections III.C.1.a and III.C.1.b; *see also Bot M8*, 4 F.4th at 1352.

Nor are these problems fixed by IV's screenshots of purported Docker features. IV pointed to screenshots of purported product literature from Docker to support that American performs the leaf image limitation of the '844 patent:



Dkt. 1-9 at 24-30. However, IV's screenshots lack sufficient factual allegations to support a reasonable inference that Docker practices the claimed leaf image limitations. *See Vervain*, 2022 WL 23469, at *5 ("The level of detail provided in [IV's] allegations did not meet the standard here, where the technology is not simple and the limitations-at-issue are material."). Rather, IV's approach to pleading "'reveal[s] an inconsistency' fatal to its infringement case for" the '844 Patent. *Vervain*, 2022 WL 23469, at *2 (citing *Bot M8*, 4 F.4th at 1354). Neither the Complaint nor the claim chart offers factual allegations supporting a plausible inference that Docker actually stores leaf images, where said leaf images ***include only additional data blocks not previously contained in said root image***. IV merely tracked the claim language. *See Bot M8*, 4 F.4th at 1353.

To the extent IV highlighted text from the purported Docker product literature, the highlights fail to plausibly allege infringement, too. Images 1-4 all allege that Docker can support copying a file from a ***read-only layer*** to a writable container layer. That cannot state a claim of infringement for the leaf image limitations. *Vervain*, 2022 WL 23469, at *5. Image 2's disclosure of copying a ***file*** into the writable layer to modify it is inconsistent with storing leaf images based on only additional ***data blocks*** not previously contained in said root image and changes made by

respective compute nodes to the blocks of the root image. *See Veritas Techs. LLC v. Veeam Software Corp.*, 835 F.3d 1406, 1410 (Fed. Cir. 2016) (explaining "that a person having ordinary skill in the art would understand that … blocks often make up a file"); *see also Quanergy Sys. V. Velodyne Lidar USA, Inc.*, 24 F.4th 1406, fn. 7 (Fed. Cir. 2022) (recognizing the difference between a file and blocks, "[a] file is essentially a named collection of blocks, which contain all of the data of the file"). No further claim construction will change this outcome. *See* '844 Patent at 5:49-58. Regardless of the ultimate claim construction, that cannot state a claim for infringement either, because it does not plausibly allege infringement in sufficient detail given the complexity of the claims, the lack of pointing to actual services or products, and the materiality of this limitation. *Bot M8*, 4 F.4th at 1354; *see also supra* III.C.1.a and III.C.1.b.

D. IV Failed to Plausibly Plead Infringement of the '722 Patent

IV accuses American's use of third-party software, Apache Kafka, of infringing the '722 Patent. Apache Kafka is an open-source software platform for distributed event streaming. (https://kafka.apache.org/). Being open-source, every detail regarding its functionality is publicly available. Yet IV mostly rests on conclusory infringement allegations. And while IV uses highlighting to point to apparent factual support, IV fails to meaningfully explain how those highlights relate to the asserted claim language. Simply put, IV's barebones allegations warrant dismissal. *Bot M8*, 4 F.4th at 1353; *Chapterhouse*, 2018 WL 6981828 at *2; *see also Soar Tools*, 2021 WL 3030066 at *4 ("[A] court should dismiss a patent-infringement claim where the IV merely recites that the American infringes a claim limitation but fails to identify the parts of the allegedly infringing instrumentality that perform the limitation or allege how the identified parts meet the text of the limitation."); *id.* at *4 n.1 (citing *Chapterhouse* approvingly).

1. IV failed to satisfy the three-factor test from *Bot M8 v. Sony*

Patent owners must allege enough facts to put the American "on notice of what activity . . . is being accused of infringement." *Bot M8*, 4 F.4th at 1352 (citation omitted). The allegations need not "conclusively establish" infringement. *STA Grp.*, 2023 WL 5166367 at *8. But simply "reciting the claim elements" and "concluding that the accused product has those elements" is not enough. *Bot M8*, 4 F.4th at 1353. Something more is needed. How much more depends on "a number of factors," including: (1) "the complexity of the technology," (2) "the materiality of any given element to practicing the asserted claim(s)," and (3) "the nature of the allegedly infringing device." *Id.* Those factors required IV to include materially more than just barebones allegations of infringement with uncorrelated supporting facts.

a) IV's claims cover complex, software-based systems.

Claims covering software-based systems are "necessarily abstract and inherently intangible," rendering them complex. *Fractus*, 2021 WL 2483155, at *3; *Vervain*, 2022 WL 23469 at *5; *see also Bot M8*, 4 F.4th at 1344-45 (addressing claims covering "a mutual authentication program for video games"). The asserted claim here covers a software-based system. The specification notes that "[t]his invention pertains in general to transferring information through digital networks and in particular to transferring information for remotely updating content at client devices through the digital networks." Dkt. 1-3 at 1:24-27. Further, IV has asserted its claims solely against the Apache Kafka software system. Dkt. 1-10.

Because the asserted claims cover software-based systems, the Court should find that they cover complex technology. *Chapterhouse*, 2018 WL 6981828, at *2. Thus, the first *Bot M8* factor supports that IV must provide materially more than barebones allegations to state a claim for infringement. 4 F.4th at 1353.

b) IV's claims include certain material limitations.

A limitation is "material to practicing the asserted claim" when it "capture[s] the point of novelty" making the invention "non-obvious." *Vervain*, 2022 WL 23469, at *5. Courts consider the patent's specification and prosecution history in deciding a claim's alleged point of novelty. *See, e.g.*, *Alza.*, 391 F.3d at 1369-72 (holding claims non-obvious because the specification and prosecution history disclaimed prior art); *see also Vervain*, 2022 WL 23469, at *5 (considering prosecution history to decide which elements were material for stating a claim).

The '722 Patent's specification demonstrates that one alleged point of novelty for the asserted claim includes updating live objects at client devices by using nodes in a routing network. For example, in reviewing the prior art, the specification notes that "there is a need in the art for an efficient way to provide dynamic content to a web page at a **client device**." Dkt. 1-3 at 3:4-5 (emphasis added). The specification then further notes that "[t]he above need is met by a dynamic content **routing network** that routes messages containing data for updating properties of live objects to **clients** displaying web pages or other representations of data containing live objects[.] The routing network is adapted to selectively send messages to **nodes** in the network." Dkt. 1-3 at 3:9-21 (emphasis added).

The '722 Patent specification further supports that this point of novelty was used to argue over anticipation and obviousness rejections. The applicant amended the claims to include elements that "state features not disclosed by the applied references," including "gateway device configured to . . . route the update message," "node," and "client device." Ex. 3 at 14-16.

The applicant further alleged that the claim element "identify a category of the update message based on the input source" is a further point of novelty. Ex. 4 at 13-19. The specification notes that the routing network is "adapted to use message categories, node types, and client proxies." Dkt. 1-3 at 4:33-34. The applicant further relied on this point of novelty when it noted in

its May 31, 2012 Appeal Brief that the prior art of record "does not teach or suggest at least [these] . . . distinguishing features." Ex. 4 at 13-19.

Thus, under *Bot M8*, IV had to plead facts with a "higher level of detail" that American practices the '722 Patent's alleged point of novelty. *Vervain*, 2022 WL 23469, at *5.

c) IV exclusively accused intangible, software-based systems of infringement.

The Court should finally consider "the nature of the allegedly infringing device." *Bot M8*, 4 F.4th at 1353. Tangible devices with structures making infringement visibly plausible may require little more than a photograph and a general allegation "that the accused products meet each and every element of [the asserted claims]." *Disc Disease*, 888 F.3d at 1257-58, 1260; *Fractus*, 2021 WL 2483155, at *1, *3. Not so with intangible software. Although the patent owner need not "provide source code," *Bot M8*, 4 F.th at 1355, generically alleging that the software meets each claim limitation will not do, including when supported with unexplained screenshots, *id.*; *Chapterhouse*, 2018 WL 6981828, at *2. Nor does paraphrasing claim language to describe the accused software suffice to meet a patent owner's pleading burden. *Fractus*, 2021 WL 2483155, at *2-3. The patent owner must allege *facts*—facts that plausibly support that the software meets the claimed limitations. *Bot M8*, 4 F.4th at 1355; *Chapterhouse*, 2018 WL 6981828, at *2.

IV's claim charts accuse a third-party's "system" or "platform"—Apache Kafka—purportedly used by American. Dkt. 1-9. The claim charts point to screen shots purportedly obtained from third party websites, kafka.apache.org, cloudurable.com, www.oreilly.com, levelup.gitconnected.com, docs.confluent.io, www.cloudkarafka.com, and from a book, Kafka: The Definite Guide (2nd Ed.). Dkt. 1-10.

Because the nature of the accused devices is intangible software, the third *Bot M8* factor requires that IV provide materially more than barebones allegations to state a claim for

infringement. 4 F.4th at 1353. It must allege facts plausible supporting that the accused software meets the claimed limitations. *Bot M8*, 4 F.4th at 1355; *Chapterhouse*, 2018 WL 6981828, at *2.

2. IV failed to support its direct infringement allegations with facts sufficient to make them plausible

IV failed to put American on notice of what IV is accusing of infringement, especially with regard to facts relevant to the claimed points of novelty. *Bot M8*, 4 F.4th at 1355; *Chapterhouse*, 2018 WL 6981828, at *2; *Vervain*, 2022 WL 23469, at *5; *Soar Tools*, 2021 WL 3030066, at *11. IV's factual support relies exclusively on screen shots from third party websites with certain highlighted language. IV makes no effort to attempt to correlate the highlighted text to any actual claim language, leaving American to guess as to the purported relevance or applicability to the claim language.

For example, with regard to element 14[a], IV fails to identify "a processing device of an input source," "a routing network," "one live object," "an object identifier (ID) of the live object," "register for updates of the live object with the routing network," and "registering the client device with the routing network provides client connection information to a node in the routing network." In fact, none of the cited material uses the words "input source," "routing network," "live object," "object identifier," or "node in the routing network." As a result, IV failed to provide any explanation for how it alleges that American performs this claim of the '722 Patent. *Chapterhouse*, 2018 WL 6981828, at *2.

With regard to element 14[b], IV fails to identify "sending…an update message to the routing network." Instead, IV provides a series of highlighted text and boxed information but once again fails to correlate any of that information to the actual claim language, leaving American to guess as to the nature of the allegations. Of note, nothing in the highlighted or boxed information relates to sending any information to a "routing network," and none of the highlighted or boxed

information uses the phrase "routing network." Simply "reciting the claim elements" and "concluding that the accused product has those elements" is not enough. *Bot M8*, 4 F.4th at 1353.

Similarly, with regard to element 14[c], IV fails to identify what it alleges is "a gateway device at the routing network," "identify a category of the update message based on the input source," "determine a node type to which the identified category maps," or "route the update message to the node, having the node type, at the routing network." IV's provided highlights, at best, show a message that is sent, but fails to identify any gateway devices, categories of update messages, nodes, or node types. Such untethered allegations are insufficient to put American on notice of what IV alleges is an infringing act.

For claim 14[d], IV again failed to correlate its factual allegations to certain claim elements, including "node is configured to identify the client device as a registered device." And for claim 14[e], IV failed to correlate its factual allegations to the claim element "the client device processes the update message upon receipt to update the property of the live object at the client device."

IV's failure to satisfy its obligations with regard to correlating software functionality to claim language is not dependent on discovery. The accused third-party software is open-sourced and freely available to IV, no discovery from American is needed to determine how the software works. Because IV failed to identify so many of patentee's claimed points of novelty in this complex software claim, it failed to allege facts plausibly supporting that the accused software meets the claimed limitations. *Bot M8*, 4 F.4th at 1355; *Chapterhouse*, 2018 WL 6981828, at *2.

E. The Claims of the '582 Patent are Unpatentable Under the Current Alice Standard

1. Alice Step 1: the claims are directed to an abstract idea

The '582 Patent issued on August 14, 2007, several years before the Supreme Court's decision in *Alice*. During prosecution of the application that resulted in the '582 Patent, the

Examiner did not apply the current standard on inventiveness under § 101. A proper application of the inventiveness standard, as described in *Alice* and subsequent cases, demonstrates that the '582 Patent claims patent-ineligible, abstract concepts.

Sole independent claim 1 recites the following limitations:

> 1. A method of effecting on a preexisting input file a computer-executable process comprised of a plurality of subtasks, the method comprising the steps of:
>
> (a) automatically determining file allocation and logically subdividing records of said input file into a plurality of partitions;
>
> (b) distributing descriptions of all of said partitions to each of a plurality of subtask processors
>
> c) simultaneously executing at least a respective one of the subtasks of the computer-executable process in each of at least some of said processors on a respective one of the partitions with each subtask reading and processing the respective partition so as to process the respective partition and produce respective subtask output and;
>
> d) thereafter repeating step (c) in at least some of the subtask processors each with another unprocessed partition on a first-come/first-served basis; and
>
> (e) generating at least one output combining all of the subtask outputs and reflecting the processing of all of said subtasks.

Claim 1 is directed to the abstract idea of subdividing a file into partitions which are each run as separate subtasks on multiple processors and then the output results are combined. This claim breaks the concept into broad, functional terms: (1) determining file allocation and logically dividing records into partitions, (2) distributing descriptions of the partitions to a plurality of subtask processors, (3) executing the subtasks in processors for a partition, (4) repeating the last step for another partition, and (5) generating an output combining all of the subtask outputs.

This is an abstract idea under *Alice* step one. Claim 1 is directed to a result or effect that itself is an abstract idea and merely invokes generic processes and machinery. *McRO*, 837 F.3d at 1314. Claim 1 requires the functional results of "determining," "distributing," "executing," "repeating," and "generating" but "does not sufficiently describe how to achieve these results in a

non-abstract way." *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, 874 F.3d 1329, 1337 (2017) (citing *Affinity Labs*, 838 F.3d at 1258–59 (holding that claims were directed to an abstract idea where they claimed "the function of wirelessly communicating regional broadcast content to an out-of-region recipient, not a particular way of performing that function")).

This claim provides no specific direction (let alone a specific technological improvement) for allowing users to determine file allocation, distribute descriptions of partitions, execute subtasks, or generate an output combining the subtask outputs. And this claim requires no specific implementation, instead mere claiming that the claim is to be executed on a "processor." As a result, far from a "specific implementation of a solution to a problem in the software arts," this claim focuses on "an abstract end result" and "generalized steps to be performed on a computer using conventional computer activity." *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326-27 (Fed. Cir. 2017).

And no proposed constructions could save this claim; there is no hardware structure or architecture that the elements of this claim can be construed to include. *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (holding that, despite reciting "concrete, tangible components," the claims were directed to an abstract idea where "the physical components merely provide[d] a generic environment in which to carry out the abstract idea"). The claim is therefore directed to an abstract idea.

2. Alice Step 2: the claims do not contain an "inventive concept"

This claim is not saved under *Alice* step two. In considering the claim, both individually and as an ordered combination, nothing transforms the nature of the claim into a patent-eligible application of the abstract idea. *Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Merely reciting the use of a generic computer or processor

cannot convert a patent-ineligible abstract idea into a patent-eligible invention. *Alice*, 573 U.S. at 223; *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1332 (Fed. Cir. 2015).

To save a patent at step two, an inventive concept must be evident in the claims. *RecogniCorp*, 855 F.3d at 1327. Here the claims recite functional results and not the means for achieving those results. Claim 1 recites multiple unknown and unclaimed processes, including, for example, "automatically determining file allocation," "logically subdividing records of said input file into a plurality of partitions," "distributing descriptions of all of said partitions to each of a plurality of subtask processors," "simultaneously executing at least a respective one of the subtasks," "reading and processing the respective partition so as to process the respective partition and produce respective subtask output," "repeating step (c) in at least some of the subtask processors," and "generating at least one output combining all of the subtask outputs." And whatever scant algorithms are discussed in the specification are not claimed, "precluding their contribution to the inventive concept determination." *Two-Way Media*, 874 F.3d at 1339 (citing *Clarilogic, Inc. v. FormFree Holdings Corp.*, 681 Fed. App'x. 950, 954–55 (Fed. Cir. 2017) (holding claim ineligible where it recited an "unknown and unclaimed process" to allegedly transform data)).

Further, there is no inventive concept in the ordered combination of the limitations of Claim 1. *BASCOM Glob. Internet Servs., Inc. v. AT & T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) ("[A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces."). The claim uses a conventional ordering of steps—first determining allocation and logically subdividing into partitions, then distributing a partition, executing the partition, repeating the execution step, and then combining the outputs into a single output—with conventional technology to achieve its desired result. Merely reciting an abstract

idea performed on a set of generic computer components, such as a processor, as claim 1 does here, would "not contain an inventive concept." *Id.* (citing *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011)). Claim 1 fails to transform the abstract idea into something more. *Elec. Power Grp. L.L.C. v. Alstom S.A.*, 830 F.3d 1350, 1355–56 (Fed. Cir. 2016).

The dependent claims 2 through 14 do nothing to fix any of the abstract idea issues of claim 1. For example, claims 2 and 12 to 14 further claim the location of the generic processors. Claims 3 through 5 further claim additional abstract language with regard to the merging of subtask output files. Claims 6 and 7 only identify the location of the input file. Claims 8 through 11 identify separate abstract execution process types.

F. The Claims of the '785 Patent are Unpatentable Under the Current Alice Standard

1. Alice step 1: the claims are directed to an abstract idea

Alice step one, which asks whether the claim is directed to an abstract idea, is a legal question for the Court. *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1372 (Fed. Cir. 2020) ("*Alice* step one presents a legal question."). The "analysis at *Alice* step one involves examining the patent claims in view of the plain claim language, statements in the written description, and the prosecution history, if relevant." *Id.*

As to *Alice* step one, the Court should find that the '785 Patent claims are directed to an abstract idea based solely on the intrinsic evidence. As outlined herein, the intrinsic evidence, particularly the prosecution history of the '785 Patent, demonstrates that the claims of the patent are directed to a non-patentable, abstract idea.

Patent claims that are not directed to an improvement in the functioning of computers, but rather are directed to "abstract ideas" for which computers are invoked merely as a tool, are not patent eligible. *E.g., Alice*, 573 U.S. 208; *BSG Tech. L.L.C. v. Buyseasons, Inc.*, 899 F.3d 1281,

1287-88 (Fed. Cir. 2018). Here, the claims of the '785 Patent are directed to patent-ineligible subject matter as evidenced by the prosecution history.

In the Complaint, IV asserted claim 30, but did not make any arguments with respect to the other independent claims, which include language like that in claim 30. Therefore, these claims rise or fall with claim 30. *E.g.*, *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1365 n.2 (Fed. Cir. 2008) ("NMI does not make any arguments with respect to claims 13 or 14, which contain language similar to that in claim 1. We view this as a concession that these claims rise or fall with claim 1."). Additionally, since "the system claims are no different in substance from the method claims[, and] [t]he method claims recite the abstract idea implemented on a generic computer[,] the system claims recite a handful of generic computer components configured to implement the same idea." *Alice*, 573 U.S. at 210.

The method of originally filed claim 64 (which issued as claim 48)[2] did not include any requirement that the steps of the claim be performed by a computer. On February 4, 2009 (5 years before the *Alice* decision), the Examiner rejected claim 64 under 35 U.S.C. § 101, applying the *Bilski* "machine-or-transformation" test for patentable subject matter that existed in 2009. Ex. 2 at 3-4. In other words, without the recitation of a "machine" (i.e., a computer), the claims were not patentable under § 101.

In response to the Section 101 rejection, the Applicants amended claim 64 to be "computer-implemented" as none of the originally-filed claims required the use of a computer. *Id.* at 22, 32-46. Although an amendment requiring that the method be performed by a computer was sufficient

[2] Independent claims 1, 32, 53, 64, 80, and 93 that were pending in the '785 patent application correspond to independent claims 1, 30, 38, 48, 62, and 75 of the '785 patent, respectively.

in 2009/2010 to overcome the Examiner's Section 101 rejections, this is not the case today. Under current Supreme Court and Federal Circuit law, the *Alice* steps apply.

The '785 Patent Applicants' computer-implemented amendment to independent claim 64 establishes two points. *First*, the amendment demonstrates that the Applicants understood that the method described in the '785 Patent and claimed in the originally-filed claim 64 could be practiced without the use of a computer, *i.e.*, the method could be performed in the human mind, or by a human using a pen and paper. *E.g.*, *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011) (holding that a claim whose "steps can be performed in the human mind, or by a human using a pen and paper" is directed to an "unpatentable mental process[]"); *Elec. Power Grp.*, 830 F.3d at 1355 ("[C]laims focusing on organizing, characterizing, and/or sorting information are patent-ineligible because they are not significantly differentiable from ordinary mental processes."). *Second*, this amendment demonstrates that the focus of the claims of the '785 Patent is not on any specific asserted improvement in computer capabilities. *In re TLI Commc'ns L.L.C. Pat. Litig.*, 823 F.3d at 612 ("[T]he claims were not directed to specific improvement to computer functionality. Rather, they are directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two.").

Under *Alice*, a claim that is unpatentable without the recitation of a computer does not become patentable by reciting a computer. In other words, the law changed: a claim that was unpatentable without the recitation of a computer is still unpatentable post-*Alice*, adding the recitation of a computer does not save it. That the claims of the '785 Patent merely implement the non-statutory subject matter on a generic computing device is plain from the fact that the

originally-filed claims did not require that the claimed systems and methods include or be performed by a computer, respectively. Ex. 2 at 32-46.

The prosecution history and the change in the law provides everything necessary for the Court to hold the asserted claim unpatentable under Section 101.

2. Alice Step 2: the claims do not contain an "inventive concept"

Having demonstrated that the claims of the '785 Patent are directed to non-statutory subject matter, the Court must move to step two, and determine whether the elements of each claim, both individually and as an ordered combination, "'transform the nature of the claim[s]' into a patent-eligible application." *Alice*, 573 U.S. at 218-19. Here, the claims of the '785 Patent recite nothing more than using conventional, generic computing devices to execute non-statutory subject matter; thus, there is no inventive concept recited in the claims of the '785 Patent. *In re TLI Commc'ns.*, 823 F.3d at 613 ("It is well-settled that mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea. Rather, the components must involve more than performance of well-understood, routine, conventional activit[ies] previously known to the industry.") (citations omitted).

Therefore, the claims of the '785 Patent are invalid as being directed to patent ineligible subject matter pursuant to 35 U.S.C. Section 101.

IV. CONCLUSION

For the above reasons, American respectfully asks the Court to grant its motion to dismiss IV's claims that (i) American directly infringes the Cloud Computing Patents, and (ii) American indirectly infringes the Asserted Patents.

Dated: January 27, 2025

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document has been served on all counsel of record via the Court's ECF system on January 27, 2025.

/s/ John B. Campbell
John B. Campbell