

**IN THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

Kove IO, Inc.,

Plaintiff,

v.

Amazon Web Services, Inc.,

Defendant.

Civil Action No. 1:18-cv-08175

Judge Rebecca R. Pallmeyer

**KOVE'S MEMORANDUM IN OPPOSITION TO
AMAZON WEB SERVICES, INC.'S MOTION FOR JUDGMENT ON THE PLEADINGS**

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Plaintiff Kove IO, Inc. (“Kove”) files this opposition to Defendant Amazon Web Services, Inc.’s (“AWS”) Motion for Judgment on the Pleadings (“Motion” or “Mot.”) (Dkt. No. 133).

I. INTRODUCTION

AWS’s Motion fails *ab initio* because it requires claim construction and fact finding not possible in this early Rule 12(c) motion to dismiss on the pleadings. Patents are presumed valid, and AWS faces the heaving burden of proving invalidity by clear and convincing evidence. Obviousness-type double patenting (“ODP”) is a fact-intensive inquiry. AWS asks the Court to simply accept its representations about what highly technical terms mean and to conclude that different patent claims mean the same thing as a technical matter. The Court has been provided no legitimate basis to do so. The claims here do not have the same language — instead, they use very different language that, properly understood with the requisite claim construction and fact finding, mean different things. AWS’s Motion fails because evidence beyond its say so is required understand what these claims mean to one of ordinary skill in the art. As other courts have concluded, ODP analysis at the Rule 12(c) stage is premature and must be rejected.

Beyond these fatal factual problems, AWS’s Motion also fails under a recent Federal Circuit case holding that, for purposes of an ODP analysis, the original expiration date is controlling, not the extended expiration date. That case addressed this question in the context of patent term extensions, and it would apply with equal force to the patent term adjustment at issue here. Applying the reasoning of that case, the ’978 could not be invalidated under the ODP doctrine based on the ’640 and ’170 patents because all three shared the same original expiration date.

II. BACKGROUND

Kove IO, Inc. (“Kove”) filed this patent infringement action against Amazon Web Services, Inc. (“AWS”) on December 12, 2018. (Dkt. No. 1.) Kove alleged that AWS infringes U.S. Patent Nos. 7,233,978 (“the ’978 patent”), 7,103,640 (“the ’640 patent”), and 7,814,170 (“the ’170 patent”).

On April 5, 2019, AWS filed a motion to dismiss claiming these patents are invalid under 35 U.S.C. § 101 for lack of a patentable invention. (Dkt. No. 36.) The Court denied AWS's motion to dismiss on March 23, 2020. (Dkt. No. 110.) AWS served its Answer on May 1, 2020, and then on the same day, AWS filed the present Motion for judgment on the pleadings with respect to claims 1, 3, 6, 10, 14, and 31 of the '978 patent, asserting that those claims are invalid for obviousness-type double patenting in view of the claims of the '640 and '170 patents.

The three Kove patents are related – they are part of the same family of patents.¹ The '170 patent is a continuation of, and shares a common specification with, the '640 patent.² (Exs. B, C.³) The '978 patent is a continuation-in-part of the '640 patent, which means its specification contains additional disclosures from that of the '640 patent. (Ex. D.) The three patents on their face claim priority to multiple patent applications. (Exs. B, C, D.) Each patent's earliest priority claim is to Appl. No. 09/111,896, which was filed on July 8, 1998.⁴ (*Id.*) The original expiration date for all three patents was thus 20 years later, on July 8, 2018. *See* 35 U.S.C. § 154(a)(2).

But because each patent was subject to a patent term adjustment (“PTA”) by the U.S. Patent and Trademark Office (“PTO”), none actually expired on their original expiration date. PTAs are extensions to the expiration date of the patent determined by the PTO and intended to restore to patentees portions of their patent terms lost due to the PTO's delays during prosecution. *See* 35 U.S.C.

¹ A patent “family” generally refers to a collection of patents and/or patent applications covering related technical content that are related to each other through claims back to common patent applications.

² A “continuation” application is a patent application for an invention that was disclosed in, but not claimed by, an earlier patent application specification. Patents in the same family can, as is the case here, share a common specification, which means each patent's specification is the same. Specifications, which include figures and detailed descriptions of the subject matter, can contain multiple inventions – and when this is the case, they often will give rise to multiple patents, each of which has claims on inventions disclosed in the common specification. *See U.S. Water Servs., Inc. v. Novozymes A/S*, 843 F.3d 1345, 1348 (Fed. Cir. 2016).

³ Citations to lettered exhibits refer to the exhibits to AWS's Motion.

⁴ Notwithstanding the designation of priority, as issued, only claims 1 and 31 of the '978 patent find support in, and therefore can claim priority to, Appl. No.: 09/111,896.

§ 154(b). The amount of PTA granted to each patent is based on the factors set forth in § 154(b). Each Kove patent received varying amounts of PTA, with the '978 patent receiving the most, at 810 days.

During prosecution, the patent examiner rejected⁵ claims of the '170 patent on the basis that they were invalid for ODP (obviousness-type double patenting) in light of the claims of the '640 and '978 patents. Kove did not agree with the rejection, but as patentees often do, nevertheless filed a terminal disclaimer to overcome the rejection and thereby obtain issuance of the '170 patent.⁶ The terminal disclaimer effectively caused the '170 patent to expire when the '640 or '978 patent expired, whichever is earlier. No ODP rejection was made during the prosecution of the '978 patent, which is at issue here. That means that the PTO patent examiner did not consider the '978 to have ODP issues, despite being fully on notice of the '640 and '170 patents.

The key dates for the Kove patents are summarized in the table below.

	Filing Date	Claimed Priority Date	Patent Issuance Date	Terminal Disclaimer?	Original Expiration Date	Patent Term Adjustment (PTA) under § 154(b)	Expiration Date with PTA
Appl No.: 09/111,896	7/8/98	7/8/98	abandoned	N/A	N/A	N/A	N/A
U.S. 7,103,640	9/13/00	7/8/98	9/5/06	No	7/8/2018	640 days	4/8/2020
U.S. 7,814,170	2/13/06	7/8/98	10/12/10	Yes	7/8/2018	749 days	4/8/2020
U.S. 7,233,978	6/1/01	7/8/98	6/19/07	No	7/8/2018	810 days	9/25/2020

⁵ A "rejection" is a routine aspect of patent prosecution before the PTO. It refers to part of the back-and-for process between the PTO patent examiner and the applicant, in which the examiner rejects claims and the applicant comes back with amendments to the application to address the issue the examiner identified or arguments as to why the examiner's rejection was incorrect. If the issues identified in the rejections have been addressed to the examiner's satisfaction, the application continues on through the process, eventually resulting in issuance of the patent.

⁶ A "terminal disclaimer" is a statement made as part of the PTO process in which a patentee or applicant disclaims (or dedicates to the public) any part of the term of a patent. So, for example, if an applicant files a terminal disclaimer of patent '123 (which hypothetically expires on July 1, 2021) to patent '456 (hypothetically expiring on January 1, 2021), patent '123 would expire on January 1, 2021 – i.e., 6 month of patent '123's patent term would be disclaimed and dedicated to the public.

III. LEGAL STANDARDS

A Rule 12(c) motion for judgment on the pleadings is reviewed under “the same standard that applies when reviewing a motion to dismiss for failure to state a claim under Rule 12(b)(6). Thus, . . . the facts in the complaint [are viewed] in the light most favorable to the nonmoving party and [the Court] will grant the motion ‘only if it appears beyond doubt that the plaintiff cannot prove any facts that would support his claim for relief.’” *Buchanan-Moore v. Cty. of Milwaukee*, 570 F.3d 824, 827 (7th Cir. 2009) (internal citations omitted).

An issued patent claim is presumed to be valid. 35 U.S.C. § 282. Amazon faces a heavy burden of proving invalidity by clear and convincing evidence. *Symbol Techs., Inc. v. Opticon, Inc.*, 935 F.2d 1569, 1580 (Fed. Cir. 1991). The obviousness inquiry here is fact intensive and not susceptible to a motion to dismiss. *See Impax Labs. Inc. v. Lannett Holdings Inc.*, 893 F.3d 1372, 1378 (Fed. Cir. 2018) (“Obviousness is a question of law based on underlying factual findings relating to ‘the scope and content of the prior art,’ ‘differences between the prior art and the claims at issue,’ ‘the level of ordinary skill in the pertinent art,’ and ‘secondary considerations,’ such as ‘commercial success, long felt but unsolved needs, [and] failure of others.’”).

IV. ARGUMENT

AWS’s Motion fails for several reasons. It cannot meet its heavy “clear and convincing” burden at this early stage, given the fact-intensive nature of the inquiry. It seeks to bypass the required claim construction and factual determinations that would show the claims are patentably distinct by asking the Court to decide what highly technical words mean without the benefit of claim construction or the type of fact finding and expert testimony necessary to resolve these questions. Other courts have readily concluded that it is premature to consider an ODP challenge based on the pleadings alone. Moreover, under Federal Circuit law, ’640 and ’170 patents may not serve as ODP references to the ’978 patent’s claims.

A. AWS Cannot Meet Its Heavy Burden At This Early Stage.

“Double patenting is an affirmative defense” that must be “prove[n] . . . by clear and convincing evidence, a heavy and unshifting burden.” *Symbol Techs., Inc.*, 935 F.2d at 1580. “The obviousness-type double patenting analysis entails two steps: (1) construction of the claims in the earlier patent and the claim in the later patent to identify any differences, and (2) determination of whether the differences in subject matter between the claims render the claims patentably distinct.” *Amgen Inc. v. F. Hoffman-La Roche Ltd*, 580 F.3d 1340, 1361 (Fed. Cir. 2009). Each of these two steps requires “underlying findings of fact.” *Otsuka Pharm. Co. v. Sandoz, Inc.*, 678 F.3d 1280, 1290 (Fed. Cir. 2012); *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1372 (Fed. Cir. 2018) (“*Ezra*”) (“Obviousness-type double patenting is an issue of law premised on underlying factual inquiries.”). The second step includes an analysis of whether “the identified difference [between the claims of the ’978 patent and those of the ’640 patent and ’170 patent] renders the claims of the [’978 patent] non-obvious to a person of ordinary skill in the art in light of the prior art.” *Amgen Inc.*, 580 F.3d at 1361.

Where, as here, the patent was issued without an ODP rejection and without a terminal disclaimer, there is a “presumption of validity” — it is presumed that “awarding distinct patents would [not] constitute double patenting” and that “that all of the asserted content claims are patentably distinct from the claims of other patents.” *Helperich Patent Licensing, LLC v. New York Times Co.*, 778 F.3d 1293, 1295-96 (Fed. Cir. 2015) (internal quotations omitted). In order to overcome that presumption, AWS must show by clear and convincing evidence that the “‘later claim[s] [of the ’978 patent] [are] not patentably distinct from,’ *i.e.*, ‘[are] obvious over[] or anticipated by,’ an earlier claim [of the ’640 patent and ’170 patent].” *Abbvie Inc. v. Mathilda and Terence Kennedy Institute of Rheumatology Trust*, 764 F.3d 1366, 1374 (2014).

The prohibition against double patenting is “based on the core principle that, in exchange for a patent, an inventor must fully disclose [an] invention and promise to permit free use of it at the end of

[the] patent term.” *Gilead Scis., Inc. v. Natco Pharma Ltd.*, 753 F.3d 1208, 1212 (Fed. Cir. 2014). “If an inventor could obtain several sequential patents on the same invention, he could retain for himself the exclusive right to exclude or control the public’s right to use the patented invention far beyond the term awarded to him under the patent laws.” *Id.* “The key purpose of obviousness-type double patenting is thus to prevent a patent owner from controlling the public’s right to use the patented invention beyond the statutorily allowed patent term of that invention.” *Novartis Pharm. Corp. v. Breckenridge Pharm. Inc.*, 909 F.3d 1355, 1362 (Fed. Cir. 2018) (“*Breckenridge*”).⁷

1. An ODP Assessment Is Premature.

The first step in an ODP analysis is to “constru[e] . . . the claims in the earlier patent and the claim in the later patent to identify any differences” *Amgen Inc.*, 580 F.3d at 1361. Issues of claim construction are “not suitable for resolution on a motion to dismiss.” *Nalco Co. v. Chem-Mod, LLC*, 883 F.3d 1337, 1349 (Fed. Cir. 2018); *Abbvie*, 764 F.3d at 1374; *see Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015) (“[T]echnical words or phrases not commonly understood . . . may give rise to a factual dispute [and] [i]f so, extrinsic evidence may help to establish a usage of trade or locality” (internal quotations omitted)).

“[D]istrict courts have repeatedly held that if a court is required to construe the meaning of claim terms . . . the motion should be denied, because this type of analysis is inappropriate at the pleading stage” and “claim construction can be illuminated by the consideration of extrinsic evidence—evidence that is often not before the court at that stage.” *Lecat’s Ventriloscope v. MT Tool & Mfg.*,

⁷ Before the Uruguay Round Agreements Act (“URAA”) went into effect in 1995, patent terms were 17 years from the date of issuance. 35 U.S.C. § 154(c)(1). At that time, courts looked at the issuance date of a patent to determine whether a patent could be an ODP reference. *Breckenridge*, 909 F.3d at 1362. That is, a patent with an earlier issuance date could potentially qualify as an ODP reference for a later-issued patent. *Id.* After URAA, patent terms became 20 years from the earliest claimed priority date. 35 U.S.C. § 154(a)(2). Thus, after the URAA, courts began considering the patent’s expiration date to determine whether a patent could qualify as an ODP reference. *Breckenridge*, 909 F.3d at 1362-63. A patent with an earlier expiration date could potentially be used as an ODP reference against a patent with a later expiration date. *Id.*

No. 16 C 5298, 2017 WL 1362036, at *4 (N.D. Ill. Jan. 6, 2017) (internal quotations omitted). Courts in this district regularly deny motions for judgment on the pleadings and motions to dismiss that require claim construction. *See Liqui-Box Corp. v. Scholle IPN Corp.*, 2020 WL 1491144, at *6 (N.D. Ill. Mar. 27, 2020) (“Because a dispute over claim construction is ‘not suitable for resolution’ at this stage, the court denies Defendants’ motion to dismiss Plaintiff’s patent infringement claim.”); *Midwest Innovative Prod., LLC v. Kinamor, Inc.*, 2017 WL 2362571, at *4 (N.D. Ill. May 31, 2017); *FYF-JB LLC v. Pet Factory, Inc.*, 410 F. Supp. 3d 912, 920 (N.D. Ill. 2019). Extrinsic evidence and subsidiary fact findings are necessary for claim construction, but in any event “a claim construction analysis at the pleading stage does not benefit from the procedures (including . . . the exchange of proposed constructions and extensive briefing) that typically precede a *Markman* hearing.”⁸ *See Pressure Specialist, Inc. v. Next Gen Mfg., Inc.*, 2018 WL 572834, at *3 (N.D. Ill. Jan. 24, 2018).

In particular, the question here is what the technical terms in the patent claims mean. Understanding their meaning requires construction of the patents, and certainly would require a tutorial and perhaps testimony for the Court to understand the meanings of technical words to one of ordinary skill in the art. As an example, without claim construction, a tutorial, and testimony, it would be inappropriate to ask a court to decide whether a “cluster topology” is a “a plurality of location servers in the network stores only a portion of the data location information” (from claim 8 of the ’170 patent) where the “data location information for a plurality of data entities is stored in the data location server network . . . each one of the plurality of data location servers comprises . . . a portion of the data location information” (from claim 1 of the ’170 patent), as Amazon suggests. Op. Br. at 13-14.

In *Novartis AG v. Ezra Ventures, LLC*, the district court (as here) faced an ODP argument in the context of a Rule 12(c) motion for judgment on the pleadings. 2016 WL 5334464, *3 (D. Del.

⁸ Claim construction briefing is due to be completed on September 29, 2020. (Dkt. No. 137.)

September 22, 2016). The Court held that that “‘obviousness’ inquiries appear to raise fact issues (potentially requiring discovery and claim construction to resolve),” which left the court “not in a position to make [a] determination at the judgment on the pleadings stage of this case.” *Id.* The same is true here.

Indeed, AWS’s Motion raises numerous claim construction disputes (an exemplary list is included as Tab A). For example, AWS argues that the claim term “‘application server’ is simply the name of the server in the distributed network that stores data” because the specification states that “each machine in which some portion of the data in a distributed database may reside is called an application server” and refers to “an application server in the network containing data stored by the first client related to an entity represented by the identifier.” Op. Br. at 12-13. But while this may be its position, it cannot be resolved before claim construction. The Court is not in a position to decide in the abstract what technical words mean to one of skill in the art — and during claim construction, it would consider tutorials, full briefing on claim meaning, and even expert testimony.

As another example, in its chart comparing the claims of the ’978 patent to those of the ’640 and ’170 patents, AWS appears to argue that “location message” should be construed as “location information for use by the client to calculate a location of the data,” but cites nothing in support. Elsewhere, AWS imports (again, without analysis) the idea of a “cluster topology,” as recited by claim 10 of the ’978 patent, into the claims of the ’640 and ’170 patents, arguing that cluster topology “simply describe[s] the same concept in different words” as claim 6 of the ’170 patent. Op. Br. at 14. Each of AWS’s proposed claim constructions present a potential dispute requiring adjudication by the Court. AWS’s ODP argument cannot be resolved absent prior resolution of those disputes.

2. AWS Cannot Meet Its Heavy Burden By Proving Up Fact Questions Based On The Patents Alone.

The second step in an obviousness-type double patenting analysis is to “determine[] . . .

whether the differences in subject matter between the claims render the claims patentably distinct.” *Amgen Inc.*, 580 F.3d at 1361. “This part of the obviousness-type double patenting analysis is analogous to an obviousness analysis under 35 U.S.C. § 103.” *Id.* “As with statutory obviousness under 35 U.S.C. § 103, obviousness-type double patenting is an issue of law premised on underlying factual inquiries.” *Eli Lilly & Co. v. Teva Parenteral Medicines, Inc.*, 689 F.3d 1368, 1376 (Fed. Cir. 2012); *Eli Lilly & Co. v. Zenith Goldline Pharm., Inc.*, 364 F. Supp. 2d 820, 911 (S.D. Ind. 2005), *aff’d*, 471 F.3d 1369 (Fed. Cir. 2006) (“[T]he factual inquiries set forth in *Graham* . . . are employed when making an obvious-type double patenting analysis,’ including ‘objective indicia of nonobviousness.’”). These underlying factual determinations can only be made on a fully developed record based on evidence. *See Nalco Co.*, 883 F.3d at 1350 (refusing to make factual determinations at the motion to dismiss stage). Obviousness-type double patenting therefore should not be decided at the pleading stage. *See, e.g., Milwaukee Elec. Tool Corp. v. Hitachi Koki Co.*, 2012 WL 1952977, at *7 (E.D. Wis. May 29, 2012) (“[A]lthough the [reference] patents are substantially similar to the [patent-in-suit], they are not identical. Whether or not the additional limitations are important will not be explored by the court for the purposes of this motion.”); *Novartis AG*, 2016 WL 5334464, at *3.

AWS simply offers charts mapping terms without providing the Court with any basis to conclude that the terms mean the same thing. They do not. The claims are distinct, which can be proven with the use of evidence necessary for this type of obviousness analysis. AWS’s request that the Court just take its word for it – or using color coding masquerading as analysis — falls far short of overcoming the patent’s presumption of validity by clear and convincing evidence. AWS ignores the foundational inquiries necessary to proving ODP, including determining the level of ordinary skill in the pertinent art, determining claim constructions, and evaluating objective indicia of non-obviousness – or even at a more basic level, providing the Court the tools to understand what the technical

terminology at issue even means. *See Amgen Inc.*, 580 F.3d at 1361-62; *Eli Lilly v. Teva*, 689 F.3d at 1381 (holding “a fact-finder ‘must withhold judgment on an obviousness challenge until it has considered all relevant evidence, including that relating to the objective considerations.’”).

Tab A identifies a non-exhaustive list of terms for which there is dispute as to their meaning and scope. Resolution of these disputes will show that the ’978 patent claims are not obvious in view of either the claims of ’640 patent or the ’170 patent.

3. **AWS’s Reliance On The Specification Is Improper In An ODP Analysis.**

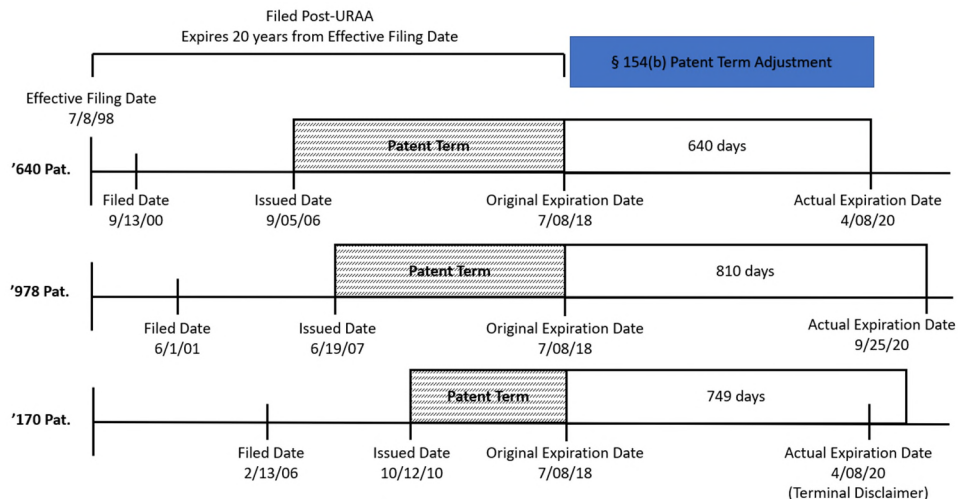
To overcome clear differences in the claims at issue, AWS seeks to rely on the patent specifications to support its ODP argument. *See, e.g.*, Op. Br. at 12 (“[A]lthough the words ‘transfer protocol’ do not appear in the ’640 patent claims, it is clear from the ’640 specification that the ’640 patent *describes* a ‘transfer protocol.’”) (emphasis in original); 12-13 (discussing “application server”); 13-14 (discussing “cluster topology”); *see also* Op. Br., Appendix A at 3-4, 10-11 (alleging claim limitations 10.a.1 and 10.a.3 are obvious based on the specification), 6 (same for claim limitation 31.a).

As a threshold matter, the meaning of these terms must be determined by claim construction. And case law makes clear that reliance on the specification for the ODP analysis is inappropriate – the question is the language of the claims themselves, not the specification. “[T]he correct double patenting analysis . . . turns on an evaluation of what [the patent holder] has claimed, not what it has disclosed.” *Eli Lilly v. Teva*, 689 F.3d at 1380; *Ortho Pharm. Corp. v. Smith*, 959 F.2d 936, 943 (Fed. Cir. 1992) (emphasis added, citations omitted). “It is the claims, not the specification, that define an invention. And it is the claims that are compared when assessing double patenting.” *Id.*; *see also Gen. Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272, 1281 (Fed. Cir. 1992) (“[D]ouble patenting rejections cannot be based . . . on the disclosures of the patents whose claims are relied on to demonstrate double patenting or on the ‘disclosures’ of their claims . . .”) (emphasis added).

B. The '640 Patent And '170 Patent Are Not ODP References To The '978 Patent.

As explained in the Background section, the Kove patents each claim the benefit of the same effective filing date. This would ordinarily lead them to all expire on the same date. Had this come to pass, there would be no debate that ODP does not apply, as no claim would receive any more time than any other claim, patentably indistinct or not. *See Zimmer Surgical, Inc. v. Stryker Corp.*, 365 F. Supp. 3d 466, 485 (D. Del. 2019) (holding that “obviousness-type double patenting does not apply as a matter of law” because “the patent term for both patents expires on the same day”); *see Gilead Scis., Inc.*, 753 F.3d at 1213 (noting that any ODP issues are cured when the patents have “align[e]d [] expiration dates”); *Breckenridge*, 909 F.3d at 1364.

Due to varying delays by the PTO during examination, however, each Kove patent was granted a different amount of PTA, resulting in the '978 patent expiring 170 days later than the '170 and '640 patents.⁹ The effect PTA had on extending the expiration dates of the Kove patents is depicted below:

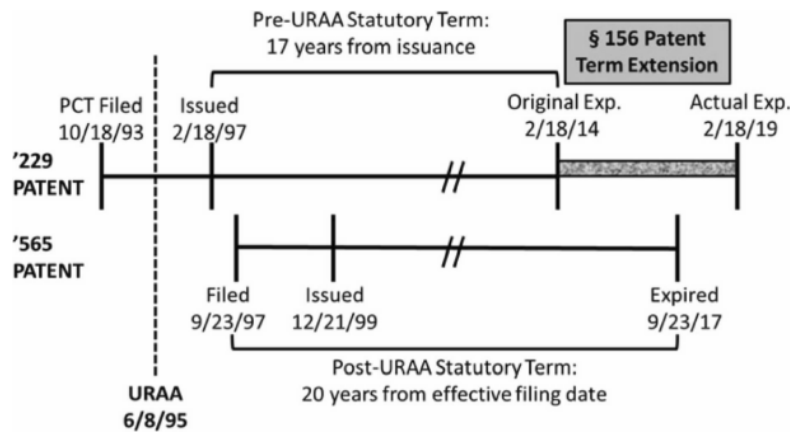


⁹ PTA extensions are not within the control of the patentee — they are calculated through a formula used by the PTO, as set forth in § 154(b). There is no way to predict *ex ante* the length of a PTA. That the '978 patent now expires after the '640 patent (or the '170 patent) is a matter of pure happenstance. The '978 patent could easily have had fewer delays during prosecution and been awarded a shorter PTA, making it expire before its family members. Likewise, the '640 patent could have received a longer PTA, causing it to expire after the '978 patent.

These circumstances raise a critical and unresolved legal issue: can a statutorily granted patent term adjustment transform a previously non-ODP reference into an ODP reference? The recent *Ezra* decision compels that the answer is no.

1. Under *Ezra*, PTEs Are Not Considered For The ODP Analysis.

In *Ezra*, the Federal Circuit addressed the issue of whether a patent term extension (“PTE”) under 35 U.S.C. § 156 could create an ODP problem where one would not otherwise exist. *Ezra*, 909 F.3d at 1375.¹⁰ The timeline below from *Ezra*, at 1370, shows the relevant dates at issue in that case.



The defendant argued that the full term of the awarded PTE should not be granted to the '229 patent because it would render the '229 patent invalid for ODP. *Id.* at 1374. The defendant contended that the PTE would cause the '229 patent's term to extend past the term of the patentably indistinct '565 patent, thereby granting the invention additional life beyond the full term of a patent. *Id.* The Federal Circuit disagreed, stating that the proper analysis was to consider whether, *without* taking into account PTE, there was ODP. *Ezra*, 909 F.3d at 1374-75. In other words, to determine whether to conduct the ODP analysis, the question is whether the original expiration date of the target patent (there, the '229

¹⁰ Patent Term Extension (PTE) under §156 was enacted to “restore the value of the patent term that a patent owner loses during the early years of the patent because the product cannot be commercially marketed without approval from a regulatory agency (e.g., Food and Drug Administration approval).” *Ezra*, 909 F.3d at 1368. Patent Term Adjustment (PTA) under § 154(b) restores the patent owner's patent term where the patent's issuance is delayed “due to the failure of the Patent and Trademark Office” during prosecution. § 154(b).

patent) is later than the reference patent (there, the '565 patent). If the original expiration date of the target patent is no later than the reference patent, then the target patented cannot be invalidated based on the ODP doctrine – or in the jargon, the reference patent is not an appropriate ODP reference. *Id.* In short, the inquiry focuses on the original expiration date, not the extended expiration date (extended by PTE).

The Federal Circuit reasoned that, since obviousness-type double patenting is a “‘judge-made doctrine’ that is intended to prevent extension of a patent beyond a ‘statutory time limit,’” it does not stand to reason that it should be used to “cut off a statutorily-authorized time extension.” *Id.* As determined in *Merck* and as recognized in *Ezra*, a known and necessary outcome of §156 is that patents may receive extended patent terms that would not be permitted under a traditional ODP analysis. *See id.* at 1374 (“[I]f a patent is terminally disclaimed to another patent to overcome an obviousness-type double patenting rejection and then term-extended under § 156 (as in *Merck*), it necessarily will expire after the patent to which it had been subject to an obviousness-type double patenting rejection.”) The Federal Circuit declined to extend ODP to deprive a patentee of the benefits of PTE in such situations, as doing so would preclude an intended result of the statute. *See id.* at 1374-75. The Federal Circuit further noted that the policy consideration of preventing gamesmanship, such as those that existed in *Gilead* and *Abbvie*, were not at issue. *Ezra*, 909 F.3d at 1374-75.

2. Similarly, PTAs Should Not Be Considered For The ODP Analysis.

The Federal Circuit’s reasoning in *Ezra* that statutorily-authorized patent term should not be cut short by the judge-made law of ODP applies equally here.

The language of § 154(b), similar to §156, commands that the term of a patent “shall be extended” if the conditions set forth in it are met. *See* 35 U.S.C. § 154(b); *Merck*, 482 F.3d 1317, 1321. Section 154 also indicates Congress’ awareness that multiple patents may claim patentably indistinct

inventions and that PTA may intersect with terminal disclaimers (and thus the law of ODP). Specifically, the statute states, *inter alia*: “No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.” 35 U.S.C. § 154(b)(2)(B). The reference to terminal disclaimers indicates that Congress was aware that there would be multiple, patentably indistinct patents receiving PTA, and it did not foreclose them from receiving PTA — but instead merely set a limitation on the PTA any such patent could receive.¹¹ Given the unpredictable formulas of § 154(b), an inevitable outcome when patentees file multiple patents covering the same invention, as contemplated by the statute, is that § 154 will cause patentably indistinct claims to have different expiration dates. Which is precisely what happened here. As with PTE under § 156, permitting PTA to render a patent invalid due to ODP when ODP would not otherwise apply, as AWS contends, would prevent a natural result of § 154.

Further, the policy concerns that undergird ODP apply here. AWS does not contend that Kove has engaged in a ploy to improperly obtain additional patent term. Rather, AWS claims that it has found a highly technical defect caused by the operation of 35 U.S.C. § 154 that cannot now be cured and so deprives Kove of an entire patent.¹² That would mean that a judge-made doctrine is being used to invalidate a patent based on a statutorily-authorized time extension outside the patentees control.

3. **Abbvie Does Not Support AWS’s Position**

AWS’s reliance on *Abbvie* is misplaced because it involved very different circumstances. In *Abbvie*, the applicant serially filed two patent applications that did not claim the same priority date and

¹¹ This statutory language precluding PTA from causing a patent term to exceed the limit imposed by a terminal disclaimer does not effect the present analysis, as the ’978 patent does not have any terminal disclaimers.

¹² For these claims, invalidating the ’978 patent would deprive Kove of even a single patent’s full term for its invention. Also, because the patents all have the same filing date and the expiration date with PTA is not controllable by the patentee, a two-way analysis should be applied. *In re Braat*, 937 F.2d 589, 593 (Fed. Cir. 1991). AWS did not conduct a two-way analysis as required.

so would expire at different times. 764 F.3d at 1370, 1373. This resulted in a situation where, through the deliberate and controllable acts of the patentee, the later-filed patent provided patent protection for time beyond the term of the earlier-filed patent, even though both patents claimed essentially the same invention.¹³ *Id.* at 1373-74. The court thus held that ODP applies in this scenario, in which an inventor acts to “secur[e] a second, later expiring patent for the same invention.” *Id.* at 1373.¹⁴

The court in *Abbvie* was not faced with the present situation, where a later expiration date is caused solely by PTA, and so is inapplicable here. AWS quotes language from *Abbvie* where the court merely notes that PTA can create a situation where patentably indistinct claims do not all expire at the same time — but omits explanation that the court left unresolved whether, in that scenario, the patent term granted by PTA constitutes “*undue* patent term extension.” *Id.* at 1373 (emphasis added).¹⁵

V. CONCLUSION

For the foregoing reasons, AWS’s Motion should be denied.

¹³ The district court conducted an extensive, factual ODP analysis, including claim construction to decide the claims were patentably indistinct. *See id.* at 1379–81.

¹⁴ *Gilead* involved highly-similar fact pattern to that in *Abbvie*. 753 F.3d at 1210, 1214-17. Specifically, the patentee sought to obtain additional patent term by filing a second, patentably indistinct patent application nearly two years after the initial patent application, where the second application did not claim priority to the initial application. *Id.* As recognized in *Breckenridge*, both *Gilead* and *Abbvie* involve the post-URAA scenario “where an inventor, seeking to prolong his exclusivity rights over his invention, applies for a second patent on an obvious variant of his invention protected by a first patent but chooses a different, later priority date than the one relied on for the first patent so that the second patent expires later than the first patent.” 909 F.3d at 1365. Those circumstances are not present here.

¹⁵ Although all claims of the ’978 patent expire later than the claims of the ’640 and ’170 patents, claims 1 and 31 of the ’978 patent actually predate all of the claims of the ’640 and ’170 patents. Only claims 1 and 31 of the ’978 patent have priority to the July 8, 1998 patent application, and the others have priority to October 28, 1999. It makes no sense for claims covering a later-in-time invention to render obvious the claims of an earlier-in-time invention. AWS’s Motion does not address this issue.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on May 29, 2020, I electronically filed the foregoing document with the Clerk of the Court, using the CM/ECF system, which sent notification of such filing to all counsel of record.

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TAB A

TAB A

<u>U.S. Patent No. 7,233,978</u>	<u>U.S. Patent No. 7,103,640</u>	<u>Disputed Claim Limitations¹</u>
[1.Preamble] A system having a plurality of location servers for managing location information and providing location information to location queries, the system comprising: [1.a.1] a first location server containing a first set of location information corresponding to at least one entity, [1.a.2] the location information comprising an identifier and at least one location string associated with the identifier, [1.a.3] wherein the identifier identifies an entity and the location string specifies a location of data pertaining to the entity [1.b] a second location server comprising a second set of location information, wherein at least a portion of the second set of location information differs from the first set of location information; and [1.c.1] programming logic stored on each of the location servers responsive to a location query identifying a desired entity to return a location message,	[18 Preamble] A system for retrieving data location information for data stored in a distributed network, the system comprising: [18.a] a data repository configured to store data, wherein the data is associated with an identifier string; [18.b] a client responsive to a data query to query a data location server for location information associated with the identifier string; [18.c] a data location server network comprising a plurality of data location servers, at least one of the plurality of data location servers containing location information associated with the identifier string, wherein each of the plurality of data location servers comprises computer executable code configured to execute the following steps in response to receiving a data location request from the client: [18.d] if the data location server contains the location string associated with the identification string provided in the data location request, data location server transmits location information for use by the client to calculate a location of the data associated with the identification string; [18.e] if the data location server does not contain the location string associated with the identification string,	Claim 1: [1.Preamble] • “A system...for managing location information” [1.a.2] • “the location information comprising an identifier and at least one location string associated with the identifier” [1.a.3] • “wherein the identifier identifies the entity” [1.b] • “a second location server comprising a second set of location information” • “wherein at least a portion of the second set of location information differs from the first set of location information.” [1.c.1] • “a location message” [1.c.2] • “the location message comprising at least one location of data pertaining to the desired entity”

¹ These terms are intended to be exemplary. Because AWS does not identify specific terms requiring construction or present any argument relating thereto, Kove is unable to ascertain at this stage which terms will ultimately be in dispute.

[1.c.2] the location message comprising at least one location of data pertaining to the desired entity, if the location server receiving the location query contains location information for the desired entity.	the location server transmits a redirect message to the client, wherein the redirect message contains redirect information for use by the client to calculate a location of a different data location server in the plurality of data location servers, wherein the different data location server contains the location string.	
[3] The system of claim 1, wherein the programming logic further comprises logic responsive to the location query to return one of a location message or a redirect message, wherein the location server receiving the query returns the location message if the queried location server contains location information for the desired entity, and wherein the queried location server returns a redirect message if the queried location server lacks location information for the desired entity, the redirect message comprising information for finding a location server known to have location information relevant to the location query.	See claim 18 above.	Claim 3: [1.Preamble] • “A system...for managing location information” [1.a.2] • “the location information comprising an identifier and at least one location string associated with the identifier” [1.a.3] • “wherein the identifier identifies the entity” [1.b] • “a second location server comprising a second set of location information” • “wherein at least a portion of the second set of location information differs from the first set of location information.” [1.c.1] • “a location message” [1.c.2] • “the location message comprising at least one location of data pertaining to the desired entity” [3] • “the redirect message comprising information for finding a location server known to have information relevant to the location query.”

[6] The system of claim 1, wherein the location information in the location server is maintained in an indexed location store indexed by a hash table.	See claim 18 above. [24] The system of claim 18, wherein the location information comprises a portion of a hash table distributed over the plurality of data location servers.	Claim 6: [1.Preamble] • “A system...for managing location information” [1.a.2] • “the location information comprising an identifier and at least one location string associated with the identifier” [1.a.3] • “wherein the identifier identifies the entity” [1.b] • “a second location server comprising a second set of location information” • “wherein at least a portion of the second set of location information differs from the first set of location information.” [1.c.1] • “a location message” [1.c.2] • “the location message comprising at least one location of data pertaining to the desired entity” [6] • “the location information...is maintained in an indexed location store”
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[10.Preamble] A system having a plurality of location servers for managing location information and providing location information to location queries, the system comprising: [10.a.1] a plurality of location servers containing location information corresponding to a plurality of entities, the location information formatted according to a transfer protocol configured for manipulating location information, [10.a.2] and comprising at least one application server address, [10.a.3] wherein the plurality of location servers are arranged in a cluster topology such that each location server contains a unique set of location information of an aggregate set of the location information; and [10.b] programming logic stored on each of the plurality of location servers responsive to a location query for a desired identifier to return one of a location message, wherein a queried location server returns a location message if the queried location server contains location information for the desired identifier, and a redirect message if the queried location server does not contain location information relevant to the desired identifier, wherein the redirect message comprises information for finding a location server having location information related to the desired identifier.	See claim 18 above.	Claim 10: [10.Preamble] • “A system...for managing location information” [10.a.1] • “a plurality of location servers containing location information corresponding to a plurality of entities” • “location information formatted according to a transfer protocol” [10.a.2] • “comprising at least one application server address” [10.a.3] • “a cluster topology” • “each location server contains a unique set of location information” [10.b] • “a location message” • “the redirect message comprises information for finding a location server having location information related to the desired identifier.”
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[14.Preamble] A method of handling location queries in a network, the network comprising a plurality of location servers, each location server containing a unique set of location information of an aggregate set of location information correlating each of a plurality of identifiers with at least one location, the method comprising: [14.a] receiving a location query from a client at one of the plurality of location servers, the location query requesting an entity's location; [14.b] sending a location response message to the client if the queried location server contains location information relevant to an entity identified in the query, the location response message comprising location information identifying at least one application server containing information relevant to the entity identified in the query; and [14.c] sending a redirect message to the client if the queried location server does not contain data location information relevant to the entity identified in the query, the redirect message comprising information for finding a location server storing the entity identified in the query.	See claim 18 above.	Claim 14: [14.Preamble] • “each location server containing a unique set of location information” [14.b] • “location response message” [14.c] • “the redirect message comprising information for finding a location server storing the entity identified in the query.”
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[31.Preamble] A system for managing location information and providing location information to location queries, the system comprising: [31.a] a location server operating in accordance with a transfer protocol, the transfer protocol comprising instructions for manipulating an identifier and at least one location associated with the identifier, wherein the identifier uniquely specifies an entity and wherein each location specifies a location of data in a network pertaining to the entity, the location server containing location information corresponding to at least one entity and formatted according to the transfer protocol, and wherein the location of data for the location comprises an application server in communication with the network; and [31.b] programming logic stored on the location server responsive to a location query identifying a desired entity to return a location message, the location message comprising locations associated with the desired entity, wherein the location server returns the location message if the location server contains location information for the desired entity.	See claim 18 above.	Claim 31: [31.Preamble] • “A system for managing location information” [31.a] • “location information...formatted according to the transfer protocol” • “wherein the identifier uniquely specifies an entity” • “wherein the location of data...comprises an application server in communication with the network.” [31.b] • “location message comprising locations associated with the desired entity” • “location query identifying a desired entity”
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<u>U.S. Patent No. 7,233,978</u>	<u>U.S. Patent No. 7,814,170</u>	<u>Disputed Claim Limitations</u>
[1.Preamble] A system having a plurality of location servers for managing location information and providing location information to location queries, the system comprising: [1.a.1] a first location server containing a first set of location information corresponding to at least one entity, [1.a.2] the location information comprising an identifier and at least one location string associated with the identifier, [1.a.3] wherein the identifier identifies an entity and the location string specifies a location of data pertaining to the entity [1.b] a second location server comprising a second set of location information, wherein at least a portion of the second set of location information differs from the first set of location information; and [1.c.1] programming logic stored on each of the location servers responsive to a location query identifying a desired entity to return a location message, [1.c.2] the location message comprising at least one location of data pertaining to the desired entity, if the location server receiving the location query contains location information for the desired entity.	[6.Preamble] A system for managing data location information and providing the data location information in response to location queries, the system comprising: a location server configured to receive a location addition request, the location addition request formatted in conformance with a transfer protocol, the location addition request comprising an identifier and at least one location to associate with the identifier, wherein the identifier identifies an entity and wherein each of the at least one location specifies a location of data in a network pertaining to the entity; wherein the location server includes a processor; and programming logic stored on the location server, wherein the programming logic is configured to return, in response to a location query related to a desired entity, a location message, the location message in conformance with the transfer protocol and comprising at least one location associated with the desired entity, wherein the programming logic is further configured to return the location message if the location server contains location information for the desired entity, and wherein the programming logic is further configured to return a redirect message if the location server lacks the location information for the desired entity, the redirect message comprising a list of at least one other location server known to have the location information for the desired entity.	Claim 1: [1.a.2] • “location information comprising an identifier and at least one location string associated with the identifier” • “location string” [1.b] • “a second location server comprising a second set of location information” • “wherein at least a portion of the second set of location information differs from the first set of location information.”

[3] The system of claim 1, wherein the programming logic further comprises logic responsive to the location query to return one of a location message or a redirect message, wherein the location server receiving the query returns the location message if the queried location server contains location information for the desired entity, and wherein the queried location server returns a redirect message if the queried location server lacks location information for the desired entity, the redirect message comprising information for finding a location server known to have location information relevant to the location query.	See Claim 6 above.	Claim 3: [1.a.2] “location information comprising an identifier and at least one location string associated with the identifier” “location string” [1.b] “a second location server comprising a second set of location information” “wherein at least a portion of the second set of location information differs from the first set of location information.” [3] “a redirect message comprising information for finding a location server known to have location information relevant to the location query”
[6] The system of claim 1, wherein the location information in the location server is maintained in an indexed location store indexed by a hash table.	See Claim 6 above. [9] The system of claim 6, wherein the location information in the location server is maintained in an indexed location store. [10] The system of claim 9, wherein the indexed location store comprises a string store indexed by a hash table.	Claim 6: [1.a.2] “location information comprising an identifier and at least one location string associated with the identifier” “location string” [1.b] “a second location server comprising a second set of location information” “wherein at least a portion of the second set of location information differs from the first set of location information.”

		[6] • “the location information...is maintained in an indexed location store”
[10.Preamble] A system having a plurality of location servers for managing location information and providing location information to location queries, the system comprising: [10.a.1] a plurality of location servers containing location information corresponding to a plurality of entities, the location information formatted according to a transfer protocol configured for manipulating location information, [10.a.2] and comprising at least one application server address, [10.a.3] wherein the plurality of location servers are arranged in a cluster topology such that each location server contains a unique set of location information of an aggregate set of the location information; and [10.b] programming logic stored on each of the plurality of location servers responsive to a location query for a desired identifier to return one of a location message, wherein a queried location server returns a location message if the queried location server contains location information for the desired identifier, and a redirect message if the queried location server does not contain location information relevant to the desired identifier, wherein the redirect message comprises information for finding a location server having	See Claim 6 above.	Claim 10: [10.a.1] • “location information formatted according to a transfer protocol” [10.a.2] • “at least one application server address” [10.a.3] • “a cluster topology” • “each location server contains a unique set of location information” [10.b] • “redirect message comprises information for finding a location server having location information related to the desired identifier.”

location information related to the desired identifier.		
[14.Preamble] A method of handling location queries in a network, the network comprising a plurality of location servers, each location server containing a unique set of location information of an aggregate set of location information correlating each of a plurality of identifiers with at least one location, the method comprising: [14.a] receiving a location query from a client at one of the plurality of location servers, the location query requesting an entity's location; [14.b] sending a location response message to the client if the queried location server contains location information relevant to an entity identified in the query, the location response message comprising location information identifying at least one application server containing information relevant to the entity identified in the query; and [14.c] sending a redirect message to the client if the queried location server does not contain data location information relevant to the entity identified in the query, the redirect message comprising information for finding a location server storing the entity identified in the query.	[15.Preamble] A method of handling location queries in a network, the network comprising a plurality of location servers including data location information, the method comprising: [15.a] correlating each one of a plurality of identifiers with at least one of a plurality of locations in the network, each one of the plurality of identifiers identifying a respective one of a plurality of data entities, wherein the data entities are stored in corresponding locations in the network; [15.b] receiving a location query from a client at one of the plurality of location servers, the location query requesting location information identifying a location of a data entity included in the data entities; [15.c] determining which of the plurality of location servers includes the location information; [15.d] sending a location response message to the client in response to determining the one of the plurality of location servers includes the location information, the location response message comprising the location information; and [15.e] sending a redirect message to the client in response to determining the one of the plurality of location servers fails to include the location information, the redirect message identifying which of the plurality of location servers includes the location information.	Claim 14: [14.Preamble] • “each location server containing a unique set of location information” [14.b] • “location response message” [14.c] • “the redirect message comprising information for finding a location server storing the entity identified in the query.”

[31.Preamble] A system for managing location information and providing location information to location queries, the system comprising: [31.a] a location server operating in accordance with a transfer protocol, the transfer protocol comprising instructions for manipulating an identifier and at least one location associated with the identifier, wherein the identifier uniquely specifies an entity and wherein each location specifies a location of data in a network pertaining to the entity, the location server containing location information corresponding to at least one entity and formatted according to the transfer protocol, and wherein the location of data for the location comprises an application server in communication with the network; and [31.b] programming logic stored on the location server responsive to a location query identifying a desired entity to return a location message, the location message comprising locations associated with the desired entity, wherein the location server returns the location message if the location server contains location information for the desired entity.	See claim 6 above.	Claim 31: [31.a] • “location information...formatted according to the transfer protocol” • “the location server containing location information corresponding to at least one entity” • “wherein the identifier uniquely specifies an entity” • “wherein the location of data...comprises an application server in communication with the network.” [31.b] • “location query identifying a desired entity”
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