IP Theory

Volume 8 | Issue 1 Article 2

2019

TC Heartland: It's Time to Take Stock

Daniel Kazhdan
Jones Day, dkazhdan@jonesday.com

Sanjiv P. Laud
Jones Day, slaud@jonesday.com

TC Heartland: It's Time to Take Stock

DANIEL KAZHDAN & SANJIV P. LAUD*

INTRODUCTION

It has been a little over a year and a half since the Supreme Court issued its groundbreaking venue decision in *TC Heartland LLC v. Kraft Foods Group Brands LLC*,[1] shaking up the status quo in U.S. patent infringement litigation. The first months after *TC Heartland* saw a flurry of activity as litigants and courts wrestled with the impact of the decision on pending cases, pondered the true meaning of a "regular and established place of business," and explored many other questions left by the *TC Heartland* decision. Eighteen months and several writs of mandamus later, it is now a good time to take stock of the newly emerging status quo in patent venue. This article does just that.

The article proceeds in four parts: First, it reviews the history and holding of the Supreme Court's *TC Heartland* decision. Second, it reviews the Federal Circuit's many decisions implementing *TC Heartland* and addressing divisions among the district courts. Third, the article outlines some of the remaining divisions among district courts. Finally, it looks at some statistics on how the change in venue law impacted courts since the *TC Heartland* decision.

I. THE SUPREME COURT'S *TC HEARTLAND* DECISION

The patent venue statute allows an action for patent infringement to be brought "in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business."[2] In 1957, the Supreme Court held in *Fourco Glass Co. v. Transmirra Products Corporation* that a company "resides," for these purposes, in its state of incorporation alone, rather than in all districts where it is incorporated, licensed to do business, or doing business, as was then true for most purposes.[3]

In 1990, the Federal Circuit held that Congress had abrogated the Supreme Court's *Fourco* decision by amending other sections of Title 28 that applied to corporations in general.[4] The court relied on the 1988 amendments to section 1391, which provided that, "[f]or purposes of venue under this chapter, a defendant that is a corporation shall be deemed to reside in any judicial district in which it is subject to personal jurisdiction at the time the action is commenced."[5] According to *VE Holding*, section 1391(c)'s definition of "reside" applied to section 1400, so "venue in a patent infringement case includes any district where there would be personal jurisdiction over the

---

* The authors are both associates at Jones Day. The views and opinions set forth herein, however, are the personal views and opinions of the authors; they do not necessarily reflect views or opinions of Jones Day. The authors wish to thank Gregory A. Castanias, Dr. Aaron Gurwitz, and Dr. Prakash Laud for their help. The authors also wish to thank Docket Navigator for providing the statistical tools and the necessary permissions that enabled Section IV.

[1] 137 S. Ct. 1514 (2017) (decided May 22, 2017).

[2] 28 U.S.C.A. § 1400(b) (Westlaw through Pub. L. No. 115-231).

[3] Fourco Glass Co. v. Transmirra Prods. Corp., 353 U.S. 222 (1957).

[4] VE Holding Corp. v. Johnson Gas Appliance Co., 917 F.2d 1574 (Fed. Cir. 1990), *abrogated by TC Heartland*, 137 S. Ct. 1514.

[5] 28 U.S.C.A. § 1391(c) (1988) (current version at 28 U.S.C.A. § 1391 (Westlaw through Pub. L. No. 115-244)).

corporate defendant at the time the action is commenced."[6] The upshot of *VE Holding* was that defendants generally had no reason to challenge venue. If personal jurisdiction existed, then so did venue. If personal jurisdiction did not exist, then a defendant could seek dismissal or transfer on that ground. *VE Holding* remained the law for 27 years.

As now PTO director Andre Iancu pointed out in 2011, the Eastern District of Texas experienced a "meteoric rise in popularity for litigating patent cases" under the venue rule announced by *VE Holding*.[7] Defendants often tried to have their cases transferred from that district, but they were largely unsuccessful.[8] By 2016, "nearly half of all patent infringement cases filed nationwide" were filed in the Eastern District of Texas.[9]

That all changed with *TC Heartland*. On January 14, 2014, Kraft Foods Group Brands LLC sued TC Heartland LLC in the District of Delaware alleging that TC Heartland infringed its patents by selling a fruit drink package. TC Heartland filed a motion to dismiss for lack of venue, suggesting that *VE Holding* was wrong when decided and was certainly overruled when Congress amended Section 1391 to remove the "under this chapter" provision. Magistrate Judge Burke issued a thirty-page report and recommendation concluding that *VE Holding* remained good law,[10] and Judge Stark adopted that ruling.[11] TC Heartland unsuccessfully petitioned the Federal Circuit for mandamus.[12]

On December 14, 2016, the Supreme Court granted certiorari,[13] and on May 22, 2017, it issued its decision. The Supreme Court found that *VE Holding* was wrong when it was decided, and that, "[a]s applied to domestic corporations, 'residence' in § 1400(b) refers only to the State of incorporation."[14] Other than reviving *Fourco*, the Supreme Court offered little guidance on how venue questions should be decided. It expressly declined to decide how to deal with unincorporated or foreign entities.[15]

One month after the Supreme Court's decision, the parties dismissed the *TC Heartland* case with prejudice.[16] Apparently, no one told the Federal Circuit. A month after the suit was dismissed, the Federal Circuit remanded the case to the district court "to consider in the first instance whether transfer is appropriate."[17]

---

[6] 917 F.2d at 1583.
[7] Andrei Iancu & Jay Chung, *Real Reasons the Eastern District of Texas Draws Patent Cases-Beyond Lore and Anecdote*, 14 SMU SCI. & TECH. L. REV. 299, 319 (2011).
[8] *Id.* at 314.
[9] R. Trevor Carter, Trenton B. Morton & Reid E. Dodge, *Developments in Intellectual Property Law: October 1, 2015 - September 30, 2016*, 50 IND. L. REV. 1281, 1293 (2017) (citing sources).
[10] Kraft Foods Grp. Brands LLC v. TC Heartland, LLC, No. CV 14-28-LPS, 2015 WL 4778828 (D. Del. Aug. 13, 2015).
[11] Kraft Foods Grp. Brands LLC v. TC Heartland, LLC, No. CV 14-28-LPS, 2015 WL 5613160 (D. Del. Sept. 24, 2015).
[12] *In re* TC Heartland LLC, 821 F.3d 1338 (Fed. Cir. 2016).
[13] TC Heartland LLC v. Kraft Food Brands Grp. LLC, 137 S. Ct. 614 (2016).
[14] TC Heartland LLC v. Kraft Foods Grp. Brands LLC, 137 S. Ct. 1514,1520, 1521 (2017).
[15] *See id.* at 1517 n.1, 1520 n.2.
[16] *See* Order Granting Agreed Motion to Dismiss, Kraft Foods Grp. Brands LLC v. TC Heartland, LLC, No. 1:14-cv-28 (D. Del. June 23, 2017), ECF No. 474.
[17] Order Remanding to Dist. Court, Kraft Foods Grp. Brands LLC v. TC Heartland, LLC, No. 1:14-cv-28 (D. Del. July 26, 2017), ECF No. 476.

II. THE FEDERAL CIRCUIT'S POST-TC HEARTLAND VENUE DECISIONS

For all its impact, *TC Heartland* left open numerous questions. The pre-*VE Holding* caselaw was dated and not all that easy to apply: Methods of conducting commerce have drastically changed in the last three decades, and, besides, much of the pre-*VE Holding* appellate caselaw came from the regional circuits and not the Federal Circuit, which was created in 1982. Thus, the Federal Circuit and the district courts had a lot of ground to make up.

This section summarizes the Federal Circuit's post-*TC Heartland* decisions, and the next section selects some interesting district court decisions that have issued in that time.

A. The Early Cases

Within days of *TC Heartland*, defendants in patent infringement cases started petitioning for writs of mandamus seeking to have cases transferred. At first, the Federal Circuit was reluctant to grant these writs. In *In re Sea Ray Boats, Inc.*,[18] the district court had found that the defendants waived their venue challenge by raising it too late. The defendants then sought mandamus from the Federal Circuit, but the Federal Circuit refused, stressing the high burden for receiving mandamus. Over Judge Newman's dissent, the Court laconically concluded that, "[u]nder the circumstances, the court declines to grant mandamus relief."[19]

There followed a series of similar cases, where a district court found that a defendant waived its venue challenge, and the Federal Circuit refused to grant mandamus relying, in part, on the high burden for receiving mandamus.[20] Foreshadowing a later development, however, the Federal Circuit noted in *Techtronic* that the venue challenge could be raised on appeal.[21]

B. Cray

The Federal Circuit's first post-*TC Heartland* foray into venue was *In re Cray Inc.*,[22] where it addressed section 1400's provision that venue is proper "where the defendant has committed acts of infringement and has a regular and established place of business."[23] At issue was the definition of "regular and established place of business." Cray is a company with no offices in the Eastern District of Texas. However, it allowed two employees to work from home in the district. Judge Gilstrap held that venue was proper.[24] As part of that analysis, he ruled that "a fixed physical location in the district is not a prerequisite to proper venue."[25] The Federal Circuit reversed, setting out three requirements for showing "a regular and established place of business": "(1) there must be a physical place in the district; (2) it must be a regular and established place of business; and

---

[18] 695 F. App'x 543 (Fed. Cir. 2017) (per curiam) (decided June 9, 2017).
[19] *Id.* at 544.
[20] *See In re* Nintendo, Inc., No. 2017-127, 2017 WL 4581670 (Fed. Cir. July 26, 2017); *In re* Techtronic Indus. N. Am., Inc., No. 2017-125, 2017 WL 4685333 (Fed. Cir. July 25, 2017); *In re* Hughes Network Sys., LLC, No. 2017-130, 2017 WL 3167522 (Fed. Cir. July 24, 2017).
[21] 2017 WL 4685333, at *1.
[22] 871 F.3d 1355 (Fed. Cir. 2017) (decided September 21, 2017).
[23] 28 U.S.C.A. § 1400 (Westlaw through Pub. L. No. 115-231).
[24] Raytheon Co. v. Cray, Inc., 258 F. Supp. 3d 781, 799 (E.D. Tex. 2017).
[25] *Id.* at 797.

(3) it must be the place of the defendant."[26] "[A] virtual space" was not enough.[27] The Federal Circuit held that Cray's employees' homes were insufficient, because they were not properly attributable to Cray.[28] It ordered the district court to transfer the case.

Applying *Cray*, district courts have held that the following are insufficient to show a "regular and established place of business": employees having home offices in the district;[29] defendants being registered to do business in the district;[30] defendants having subsidiaries in the district—so long as corporate formalities are maintained;[31] defendants renting a shelf in the district;[32] and defendants having sales representatives in the district.[33]

C. Micron and Similar Cases

The Federal Circuit's next venture into venue law was to decide a deep district-court split about whether the Supreme Court's *TC Heartland* decision constitutes a change of law that forgives waiver. Under Federal Rule of Civil Procedure 12(g)(2) and 12(h)(1), a defendant waives its right to challenge venue if it files a different Rule 12 motion or responsive pleading without challenging venue. Rule 12(g)(2), however, only creates waiver for venue challenges that were "available." District courts were deeply divided on whether a venue challenge was available to defendants pre-*TC Heartland*. On the one hand, there was nothing stopping defendants from raising such challenges, just as TC Heartland had. On the other hand, there had been 27 years of Federal Circuit law that was uniform in applying *VE Holding*. In *Micron*, the district court ruled that such defenses were "available," so Micron's failure to challenge venue waived the challenge. Micron petitioned for mandamus.

The Federal Circuit granted the petition.[34] It held that the venue challenge was not "available" until *TC Heartland*. Before then, the district court was bound by *VE Holding*. However, the Federal Circuit added an important caveat: "[D]istrict courts have authority to find forfeiture of a venue objection" independent of Rule 12, although their "authority must be exercised with caution."[35] The Federal Circuit therefore remanded the case to the district court to consider in the first instance. The district court transferred the case to Delaware, Micron's state of incorporation.[36]

The Federal Circuit then remanded a number of other cases in light of *Micron*: Most of the cases were ones where the district court had found waiver, and the defendant moved for

---

[26] *Cray*, 871 F.3d at 1360.
[27] *Id.* at 1362.
[28] *Id.* at 1364–65.
[29] Personal Audio, LLC v. Google, Inc., 280 F. Supp. 3d 922, 935–36 (E.D. Tex. 2017).
[30] BillingNetwork Patent, Inc. v. Modernizing Med., Inc., No. 17-C-5636, 2017 WL 5146008, at *2 (N.D. Ill. Nov. 6, 2017).
[31] EMED Techs. Corp. v. Repro-Med Sys., Inc., No. 2:17-cv-728-WCB-RSP, 2018 WL 2544564, at *2–3 (E.D. Tex. June 4, 2018) (Bryson, J., sitting by designation).
[32] Peerless Network, Inc. v. Blitz Telecom Consulting, LLC, No. 17-cv-1725-JPO, 2018 WL 1478047, at *4–5 (S.D.N.Y. Mar. 26, 2018).
[33] Order Granting Motion to Transfer Venue, Edgewell Personal Care Brands, LLC v. Munchkin, Inc., No. 3:16-cv-00094-VLB (D. Conn. Mar. 29, 2018), ECF No. 75.
[34] *In re* Micron Tech., Inc., 875 F.3d 1091 (Fed. Cir. 2017).
[35] *Id.* at 1101.
[36] Order Transferring the Case to U.S. Dist. Court for the Dist. of Del., President & Fellows of Harvard Coll. v. Micron Tech., Inc., Doc. 166 (D. Mass. Nov. 30, 2017)..

mandamus relief.[37] In one case, though, the Federal Circuit recalled a transfer where a district court categorically found no waiver without considering non-Rule 12 bases for forfeiture.[38] In all but one of these cases, the district court dismissed or transferred the case.[39]

Yahoo![40] is the one exception. Judge Glasser refused to reconsider his decision that Yahoo waived its venue defense by not raising it pre-*TC Heartlan*d, primarily because he found that the Federal Circuit's *Micron* decision was wrong. *TC Heartland*, he maintained, was not a change in law and the venue defense was "available" even before the Supreme Court's decision. Not surprisingly, the Federal Circuit issued a writ of mandamus telling the district court to dismiss or transfer.[41]

D. HTC

A number of companies sued HTC Corp., a Taiwanese company, and HTC America for patent infringement in the District of Delaware.[42] HTC Corp. and HTC America moved to dismiss for improper venue. The district court granted HTC America's motion, but it ruled that HTC Corp., as "a foreign defendant[,] may be sued in any judicial district."[43]

HTC Corp. petitioned for mandamus, but the Federal Circuit denied the petition for two reasons. It first relied on the high burden for petitions for mandamus. The possibility of an unnecessary trial, the Federal Circuit ruled, was not enough.[44] Nonetheless, the Federal Circuit proceeded to analyze the merits at length. It concluded that a foreign defendant can be sued anywhere.[45]

E. ZTE

Notwithstanding the court's suggestion in *HTC* that mandamus is generally unnecessary for venue challenges, it was not long before the Federal Circuit issued more mandamus decisions. American GNC Corp. sued ZTE (USA) Inc. for patent infringement in the Eastern District of Texas. ZTE moved for dismissal for improper venue. The magistrate recommended denying the motion.[46] It held that ZTE had the burden of proving that venue was improper and that ZTE failed

---

[37] *See In re* Flopam Inc., 707 F. App'x 704 (Fed. Cir. 2017); *In re* Carbonite, Inc., 707 F. App'x 704 (Fed. Cir. 2017); *In re* Yahoo Holdings Inc., 705 F. App'x 955 (Fed. Cir. 2017); *In re* Asustek Computer Inc., 705 F. App'x 956 (Fed. Cir. 2017); *In re* DECA Int'l Corp., 705 F. App'x 955 (Fed. Cir. 2017).

[38] *In re* Cutsforth, Inc., No. 2017-135, 2017 WL 5907556 (Fed. Cir. Nov. 15, 2017).

[39] *See* SkyHawke Techs., LLC v. DECA Int'l Corp., No. 3:10-cv-708 Doc. 175 (S.D. Miss. Jan. 30, 2018); Cutsforth, Inc. v. LEMM Liquidating Co., No. 12-1200 Doc. 443 (D. Minn. Feb. 13, 2018); Koninklijke Philips N.V. v. Asustek Computer, Inc., No. 15-1125 Doc. 366 (D. Del. Mar. 27, 2018); Realtime Data LLC v. Carbonite, Inc., No. 6:17-cv-00121 Doc. 85 (E.D. Tex. Dec. 18, 2017); BASF Corp. v. SNF Holding Co., No. 4:14-cv-2733 Doc. 288 (S.D. Tex. Dec. 19, 2017) (on remand from *Flopam*).

[40] *See* AlmondNet, Inc. v. Yahoo! Inc., No. 16-cv-1557, 2018 WL 3998021 (E.D.N.Y. Aug. 21, 2018).

[41] *See* In re Oath Holdings Inc., No. 2018-157, 2018 WL 5930405 (Fed. Cir. Nov. 14, 2018). It transferred. *See AlmondNet*, No. 16-cv-1557 ECF 129 (E.D.N.Y. Dec. 6, 2018).

[42] In re HTC Corp., 889 F.3d 1349, 1351 (Fed. Cir. 2018).

[43] 3G Licensing, S.A. v. HTC Corp., No. CV 17-83-LPS-CJB, 2017 WL 6442101, at *2 (D. Del. Dec. 18, 2017).

[44] *HTC*, 889 F.3d at 1352–54.

[45] *Id.* at 1354–61.

[46] Am. GNC Corp. v. ZTE Corp., No. 4:17-cv-00620-ALM-KPJ, 2017 WL 5163605, at *1 (E.D. Tex. Oct. 4, 2017).

to meet its burden.[47] Although the finding that ZTE failed to meet its burden was the magistrate's primary basis for denying ZTE's motion, the magistrate also noted that ZTE contracted with a call center in the district, and the contracted company was in the district.[48] ZTE objected, but the district court denied ZTE's objections.[49]

The Federal Circuit granted ZTE's petition for mandamus.[50] At the threshold, it held that the plaintiff bears the burden of proving that venue is proper (resolving a district court split).[51] On the merits, the Federal Circuit held that the lower court had not sufficiently justified its conclusion that the third-party's activities in the district could be attributed to ZTE.[52] It remanded on that issue.

F. BigCommerce

BigCommerce addresses where a corporation "resides" if it is incorporated in a multi-district state.[53] BigCommerce, Inc. is incorporated in Texas. Its registered office and headquarters are in Austin, Texas, which is in the Western District of Texas. A number of companies sued BigCommerce in the Eastern District of Texas. BigCommerce argued that venue was improper, but the district court ruled that a company that is incorporated in a multi-district state can be sued in any district in that state. Other district courts disagreed.[54]

The Federal Circuit granted mandamus. It emphasized that Section 1400 talks about venue being proper in the specific "judicial district," not in a state.[55] *BigCommerce* therefore held that a defendant resides "only in the single judicial district within [a] state where it maintains a principal place of business."[56] If it does not maintain a principal place of business in the state, then venue is proper in "the judicial district in which its registered office is located." *Id.* The Federal Circuit therefore concluded that venue was not proper in the Eastern District of Texas.

III. SPLITS BETWEEN DISTRICT COURTS

Since *TC Heartland*, there have been a number of district-court splits. The Federal Circuit has made liberal use of mandamus writs to resolve splits as they arise, but a few remain. Many potential splits are highly fact dependent and are therefore hard to pin down. However, there are a few notable *legal* disputes addressed below.

A. Where Do "Acts of Infringement" Take Place in ANDA Cases?

[47] *Id.* at *2–4.
[48] *Id.* at *4.
[49] Am. GNC Corp. v. ZTE Corp., No. 4:17CV620, 2017 WL 5157700 (E.D. Tex. Nov. 7, 2017).
[50] *In re* ZTE (USA) Inc., 890 F.3d 1008 (Fed. Cir. 2018).
[51] *Id.* at 1013–14.
[52] *Id.* at 1014–15.
[53] In re BigCommerce, Inc., 890 F.3d 978 (Fed. Cir. 2018).
[54] *See id.* at 981 (citing cases).
[55] *Id.* at 982–84
[56] *Id.* at 986.

Litigations between innovator and generic drug companies proceed somewhat differently from other patent litigations. Under 35 U.S.C. § 271(e), the innovator drug company can usually sue the generic drug company for "submit[ting]" an ANDA application but not for most other pre-submission actions. If the defendant does not reside in the district, the question is where has the defendant "committed acts of infringement" at the time it files its FDA application?

One possibility is Maryland, where the FDA is situated, which is the location *to which* the ANDA is submitted. However, in *Zeneca Ltd. v. Mylan Pharmaceuticals, Inc.*,[57] the Federal Circuit—in a very fractured decision, where Judge Gajarsa wrote the opinion for the Court, Judge Rader concurred in judgment, and Judge Rich dissented—held that a generic drug manufacturer's filing of a drug application with the FDA did not create *personal jurisdiction* over the generic drug company in Maryland. If that personal-jurisdiction analysis applies to venue as well, the generic's filing of an application with the FDA would not count as committing "acts of infringement" in Maryland for purposes of Section 1400.[58] Another possibility is that the "submi[ssion]" occurs in the location *from which* the ANDA was submitted.[59] Either approach would allow only a plaintiff to sue in only a very limited number of locations.

In *Bristol-Myers Squibb*, however, Judge Stark ruled that venue in ANDA cases is actually far broader. Instead of looking only at the acts the defendant *has committed already*, Judge Stark looked to the acts that the generic "intends to take"—including, frequently, nationwide marketing.[60] Thus, he held that if Mylan had a regular and established place of business in Delaware (which he later found it did not[61]), it could be sued there based on its intent to sell drugs everywhere in the United States, including Delaware. At least one other district court adopted this approach.[62]

However, Judge Lynn of the Northern District of Texas disagrees.[63] She sees the statute's requirement that the venue be one "'where the defendant *has committed* acts of infringement'" as unambiguously looking to past acts: The acts of infringement that the generic *intends to commit* are simply irrelevant.[64] Thus, the generic company in that case could not be sued in the district, notwithstanding its intent to market a drug in the district.

B. Must the "Acts of Infringement" Relate to the "Place of Business"?

In *Seven Networks, LLC v. Google, LLC*, Judge Gilstrap held that the "acts of infringement" need not be related to the "regular and established place of business."[65] As *Seven Networks* notes, that was the subject of a district-court split in the mid-twentieth century.[66] Google petitioned for

---

[57] 173 F.3d 829 (Fed. Cir. 1999).
[58] *Cf.* Bristol-Myers Squibb Co. v. Mylan Pharm. Inc., No. CV 17-379-LPS, 2017 WL 3980155, at *11 & n.13 (D. Del. Sept. 11, 2017) (not deciding whether *Zeneca* applies to venue issues).
[59] *Cf. id.* at *11 (noting that a defendant raised this possibility).
[60] *Id*. at *13.
[61] *See* Bristol-Myers Squibb Co. v. Mylan Pharm. Inc., No. CV 17-374-LPS, 2018 WL 5109836 (D. Del. Oct. 18, 2018).
[62] *See* Celgene Corp. v. Hetero Labs Ltd., No. 17-3387, 2018 WL 1135334, at *3 (D.N.J. Mar. 2, 2018) (citing a number of Delaware cases).
[63] *See* Galderma Labs, L.P. v. Teva Pharm. USA, Inc., 290 F. Supp. 3d 599 (N.D. Tex. 2017).
[64] *Id.* at 607 (emphasis in original) (quoting *Bristol-Myers Squibb*, 2017 WL 39080 155, at *12).
[65] 315 F. Supp. 3d. 933, 946 (E.D. Tex. 2018).
[66] *Id.* (citing cases).

mandamus, but the Federal Circuit denied the writ.[67] Although the Federal Circuit did not conclusively bless Judge Gilstrap's approach, it concluded that there was no "clear and indisputable error."[68]

C. Must a "Regular and Established Place of Business" Have an Employee at the Location?

District courts are split as to whether an inanimate object, like a computer server, can itself constitute a "regular and established place of business" for venue purposes. Some courts have held that Section 1400(b) requires a human employee or agent to be in the district.[69] Judge Gilstrap disagreed.[70]

D. When Must the Defendant Have a "Regular and Established Place of Business" in the District?

District courts are split on whether a defendant must have a "regular and established place of business" at the time the patentee files a complaint or whether it is sufficient if it had one a reasonable time beforehand. This dispute traces its origin back to *Welch Scientific Co. v. Human Engineering Institute, Inc.*, where the court summarized the various positions.[71] Welch sued the Human Engineering Institute ("HEI") in an Illinois district court for infringing its patents. HEI was an Ohio company, and it alleged that it no longer had a regular and established place of business at the time the complaint was filed. The Seventh Circuit disagreed, finding that venue is proper "if the defendant had a regular and established place of business at the time the cause of action accrued and suit is filed *within a reasonable time thereafter*."[72] As *Welch* itself notes, the question of when to assess venue in non-patent cases was hotly disputed even then.[73]

That dispute has resurfaced post-*TC Heartland*. A number of courts agree with *Welch* that venue is proper so long as the patentee sued within a "reasonable" time after the cause of action accrued.[74] Other courts, however, hold that the defendant must have a "regular and established place of business" in the district *at the time of suit*.[75]

---

[67] In re Google LLC, No. 2018-152, 2018 WL 5536478 (Fed. Cir. Oct. 29, 2018).
[68] *Id.* at *3.
[69] Peerless Network, Inc. v. Blitz Telecom Consulting, LLC, No. 17-cv-1725 (JPO), 2018 WL 1478047, at *4 (S.D.N.Y. Mar. 26, 2018).
[70] *Seven Networks*, 315 F. Supp. 3d at 961 (after citing *Peerless*).
[71] 416 F.2d 32 (7th Cir. 1969).
[72] *Id.* at 35 (emphasis added).
[73] *Id.* at 35 n.2 (citing cases and sources).
[74] *See* Precision Fabrics Grp., Inc. v. Tietex Int'l, Ltd., No. 1:13-cv-645, 2017 WL 5176355, at *10 n.15 (M.D.N.C. Nov. 7, 2017); Free-Flow Packaging Int'l, Inc. v. Automated Packaging Sys., Inc., No. 17-cv-01803, 2017 WL 4155347, at *4 (N.D. Cal. Aug. 29, 2017); Raytheon Co. v. Cray, Inc., 258 F. Supp. 3d 781, 787–88 (E.D. Tex. 2017), *vacated sub nom. on other grounds* In re Cray Inc., 871 F.3d 1355 (Fed. Cir. 2017).
[75] *See* See Infinity Comput. Prod., Inc. v. OKI Data Ams., Inc., No. 12-6797, 2018 WL 1035793, at *10 (E.D. Pa. Feb. 23, 2018); Pers. Audio, LLC v. Google, Inc., 280 F. Supp. 3d 922 (E.D. Tex. 2017); *see also* Incipio, LLC v. Argento SC, No. 17-01974 (C.D. Cal. July 18, 2018) (collecting cases).

E. Do Computer Servers Counts as a "Regular and Established Place of Business"?

Although this is a very specific disagreement, it is interesting that judges within the Eastern District of Texas itself are split on whether Google's servers in that district create a regular and established place for Google's business. In *Seven Networks*, Judge Gilstrap held they did based on a number of case-specific facts, expressly disagreeing with Judge Clarke's earlier ruling that they were not.[76] Judge Lynn of the Northern District of Texas agrees with Judge Clarke.[77] The Federal Circuit noted this disagreement, but, over a dissent by Judge Reyna, it found that the issue was too case-specific to merit the drastic remedy of mandamus.[78]

IV. VENUE POST-HEARTLAND, BY THE NUMBERS

As expected, the *Heartland* decision has had a major impact on patent litigation venues around the country. The biggest impact by far fell on the Eastern District of Texas. In 2015, prior to *Heartland*, the Eastern District received a whopping 44% of all new patent cases filed in United States district courts. The pace of filings slowed only slightly since then, and, in the eighteen months immediately prior to *Heartland*, over 37% of all new cases nationwide were filed in the Eastern District of Texas, more than triple the share of the next busiest court, the District of Delaware. In the eighteen months after *Heartland*, filings in the Eastern District fell by two thirds to just 14% of all cases nationwide. While that was still enough to make the Eastern District of Texas the second busiest court in the country for new cases, it was a remarkable decline from years past.[79]

The District of Delaware also felt a significant impact from the *Heartland* decision. In the eighteen months after the decision, case filings more than doubled over the eighteen months prior. Already a popular venue, the District of Delaware now sees roughly 24% of all patent cases filed nationwide—more than any other court. This likely reflects the fact that so many companies are incorporated in the single-district state of Delaware, making it easy to establish venue there in many cases. Numbers were also up in the Northern and Central Districts of California, with the Northern District doubling its share from 4.1% to 8.4% of cases nationwide and the Central District rising from 6.2% to 8.8% of cases nationwide.

Filings were mostly stable in the next several busiest courts, with modest increases or decreases in the Northern District of Illinois, District of New Jersey, Southern District of Florida, and District of Massachusetts.

One interesting effect of *Heartland* was a significant uptick in case filings in Texas courts other than the Eastern District. In the eighteen months before *Heartland*, the Northern, Southern, and Western Districts of Texas each saw between 56 and 79 patent cases. That represented approximately 1% of cases filed nationwide each and some 30 to 40 times fewer than the Eastern District. In the eighteen months after *Heartland*, the Northern, Southern, and Western Districts

---

[76] 2018 WL 3634589, at *11-12 (disagreeing with *Pers. Audio, LLC v. Google, Inc.*, 280 F. Supp. 3d at 933).
[77] Cupp Cybersecurity LLC v. Symantec Corp., No. 3:18-cv-1554 (N.D. Tex. Jan. 16, 2019).
[78] *In re* Google LLC, 2018 WL 5536478 (Fed. Cir. Oct. 29, 2018).
[79] Interestingly, the Federal Circuit's decision in *Cray* seems to have had little effect on the district. Between when the Supreme Court decided *TC Heartland* (May 22, 2017) and when the Federal Circuit decided *Cray* (Sept. 21, 2017), 12.1% of cases nationwide were filed in Eastern District of Texas. Since *Cray*, that number remains mostly unchanged. 12.3% of cases were filed there.

each saw between 90 and 138 new patent cases, an increase of roughly 75%. Does this suggest that patent plaintiffs have an abiding taste for Texas justice even after the *Heartland* decision? Will the other Texas districts continue to rise as the Eastern District falls? Only time will tell.

STATISTICAL APPENDIX

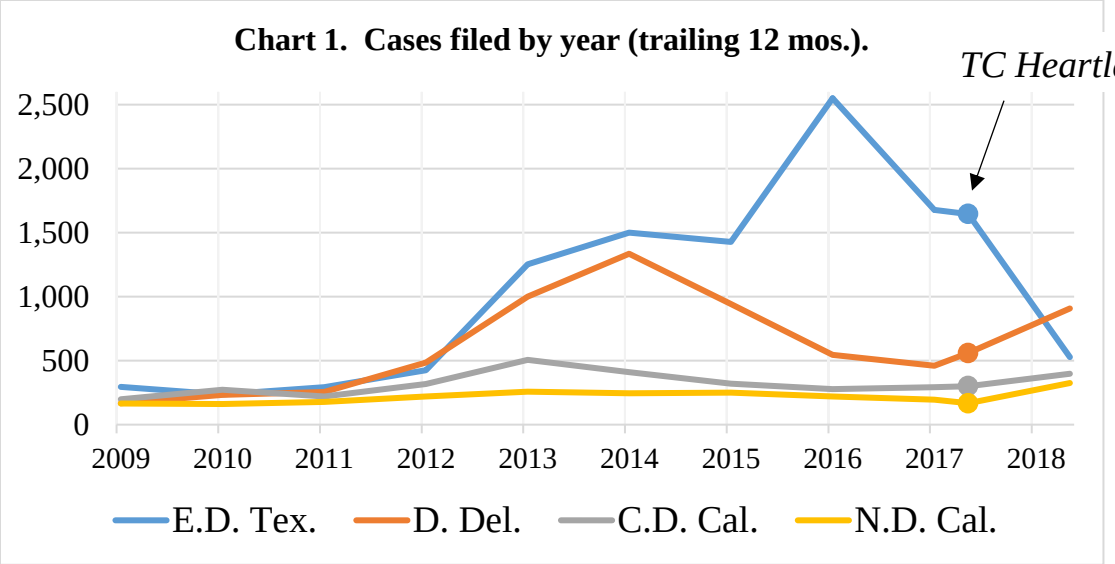
This appendix is intended for readers who are mathematically inclined and are interested in a more detailed look at the statistics around venue post-*TC Heartland*. We begin by presenting our data and explaining our analysis supporting the conclusions stated in the main piece. We end by drawing some tentative conclusions about the significance of *TC Heartland*'s impact.

To assess *TC Heartland*'s impact on courts around the country, we focused on the nine busiest patent venues during the year prior to the decision: the Eastern District of Texas, District of Delaware, Central District of California, Northern District of California, Northern District of Illinois, District of New Jersey, Southern District of Florida, Southern District of New York, and District of Massachusetts. To demonstrate the disproportionate number of cases filed in the Eastern District of Texas, we also gathered data on the much sleepier Northern, Southern, and Western Districts of Texas. For each court we studied, we used Docket Navigator to determine the number of cases filed in the district in calendar years 2008 through 2016, and for the year immediately prior to the *Heartland* decision (May 23, 2016 – May 22, 2017) and for the year immediately after the decision (May 23, 2017 – May 22, 2018).[80] These numbers are reflected in the table and chart below.

Table 1. Cases filed by year.

	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**12 mos. Pre-TC**	**12 mos. Post-TC**
All courts	2594	2544	2772	3624	5452	6093	5007	5789	4651	4772	4404
E.D. Tex.	296	236	287	422	1252	1499	1428	2553	1678	1646	528
D. Del.	167	232	254	486	1001	1335	942	544	459	559	907
C.D. Cal.	198	272	218	318	506	411	320	278	293	300	398
N.D. Cal.	164	161	175	221	257	246	250	220	196	176	324
N.D. Ill.	144	133	180	221	239	218	151	162	250	228	241
D.N.J.	160	146	153	183	160	144	282	270	192	175	211
S.D. Fla.	33	45	68	66	132	185	112	129	144	119	92
S.D.N.Y.	108	110	105	152	141	131	117	153	115	109	145
D. Mass.	50	61	72	87	79	119	54	68	62	103	88
N.D. Tex.	41	38	41	47	58	78	60	116	55	46	88
S.D. Tex.	31	35	35	36	43	51	42	39	35	42	74
W.D. Tex.	14	23	35	42	56	53	51	70	37	55	93

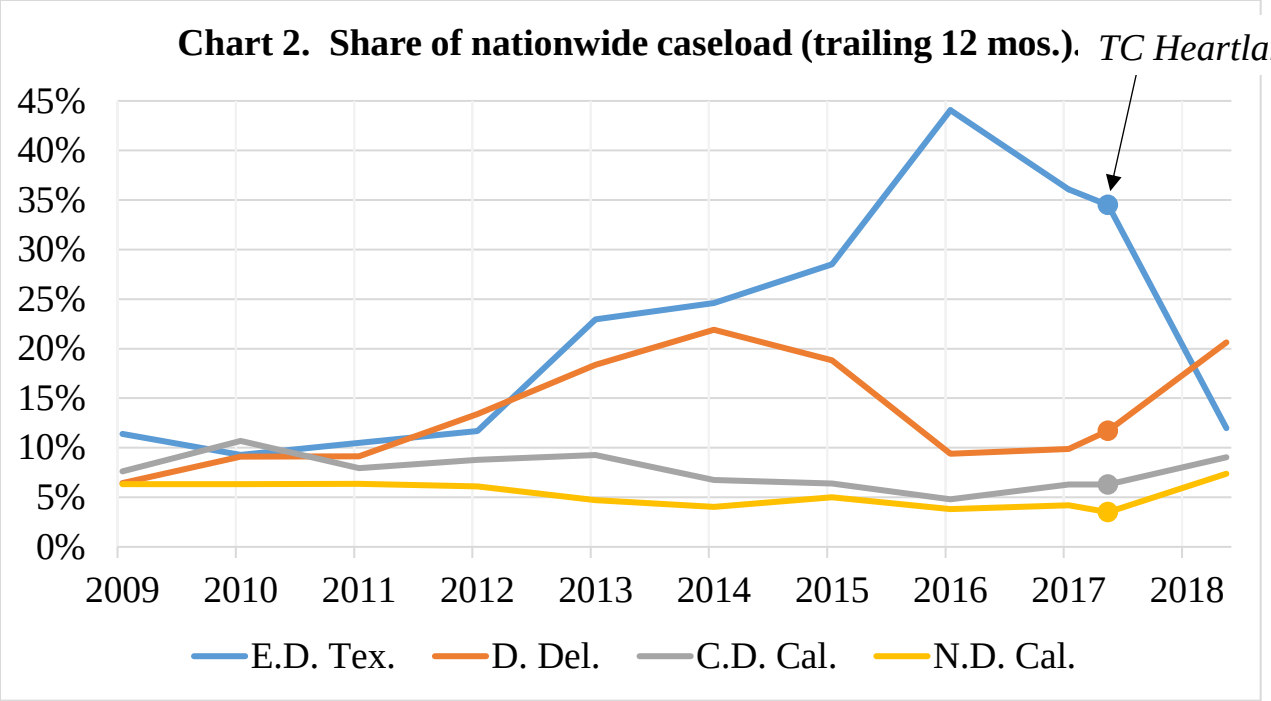
[80] Although the pre- and post-*TC Heartland* statistics in Section IV are based on eighteen months of data each, we use twelve-month periods here to better compare the data with past calendar years.



We converted each of the numbers above to a relative share of the nationwide caseload, as reflected in the table below. This effectively normalized our data for changes in patent filings nationwide. For example, from 2011 to 2012 the number of patent cases increased 50% nationwide, likely due to the America Invents Act, which restricted the joinder of multiple defendants in a single action. *See* 35 U.S.C. § 299. Considering each district's share of the nationwide caseload as opposed to the total number of cases allowed us to home in on the relative prominence of each district compared to others.

Table 2. Share of nationwide caseload

	2008	2009	2010	2011	2012	2013	2014	2015	2016	12 mos. Pre-TC	12 mos. Post-TC
E.D. Tex.	11.41%	9.28%	10.35%	11.64%	22.96%	24.60%	28.52%	44.10%	36.08%	34.49%	11.99%
D. Del.	6.44%	9.12%	9.16%	13.41%	18.36%	21.91%	18.81%	9.40%	9.87%	11.71%	20.59%
C.D. Cal.	7.63%	10.69%	7.86%	8.77%	9.28%	6.75%	6.39%	4.80%	6.30%	6.29%	9.04%
N.D. Cal.	6.32%	6.33%	6.31%	6.10%	4.71%	4.04%	4.99%	3.80%	4.21%	3.69%	7.36%
N.D. Ill.	5.55%	5.23%	6.49%	6.10%	4.38%	3.58%	3.02%	2.80%	5.38%	4.78%	5.47%
D.N.J.	6.17%	5.74%	5.52%	5.05%	2.93%	2.36%	5.63%	4.66%	4.13%	3.67%	4.79%
S.D. Fla.	1.27%	1.77%	2.45%	1.82%	2.42%	3.04%	2.24%	2.23%	3.10%	2.49%	2.09%
S.D.N.Y.	4.16%	4.32%	3.79%	4.19%	2.59%	2.15%	2.34%	2.64%	2.47%	2.28%	3.29%
D. Mass.	1.93%	2.40%	2.60%	2.40%	1.45%	1.95%	1.08%	1.17%	1.33%	2.16%	2.00%
N.D. Tex.	1.58%	1.49%	1.48%	1.30%	1.06%	1.28%	1.20%	2.00%	1.18%	0.96%	2.00%
S.D. Tex.	1.20%	1.38%	1.26%	0.99%	0.79%	0.84%	0.84%	0.67%	0.75%	0.88%	1.68%
W.D. Tex.	0.54%	0.90%	1.26%	1.16%	1.03%	0.87%	1.02%	1.21%	0.80%	1.15%	2.11%



A few interesting conclusions can be drawn from these numbers even apart from the impact of *TC Heartland*. The statistics for the Eastern District of Texas reveal a dramatic rise in the court's share of patent cases nationwide, from around 10% in 2008-11 to more than 33% in 2015 and 2016. As shown in Table 3 below, the numbers also show that the Eastern District's share of cases fluctuated considerably from year to year independent of *Heartland* and the AIA. In the period from 2012 to 2016, for example, the Eastern District's average share of patent cases was 31.24% with a standard deviation of 8.77%, 28% of the mean.[81] The District of Delaware, Central District of California, Northern District of Illinois, District of New Jersey, and District of Massachusetts showed similar variability during that time frame.

[81] Standard deviation is a measure of how widely the data in a sample vary from the average. Higher standard deviation means more variance. If the Eastern District of Texas had exactly a 30% share of nationwide patent cases every year, it would have a standard deviation of zero because every year would be the same. If it alternated yearly between 10% and 50%, the average would still be 30% but the standard deviation would be higher.

Coefficient of variation measures the size of the standard deviation in comparison with the average value. Like standard deviation, a higher coefficient of variation means more variance, but two samples with equal standard deviations may have different coefficients of variation. If the Eastern District of Texas alternated yearly between a 30% and 70% share of patent cases, the standard deviation would be the same as if it alternated between 10% and 50%; however, the coefficient of variation would be lower in the first case because the variance would be smaller compared to the average share of 50%.

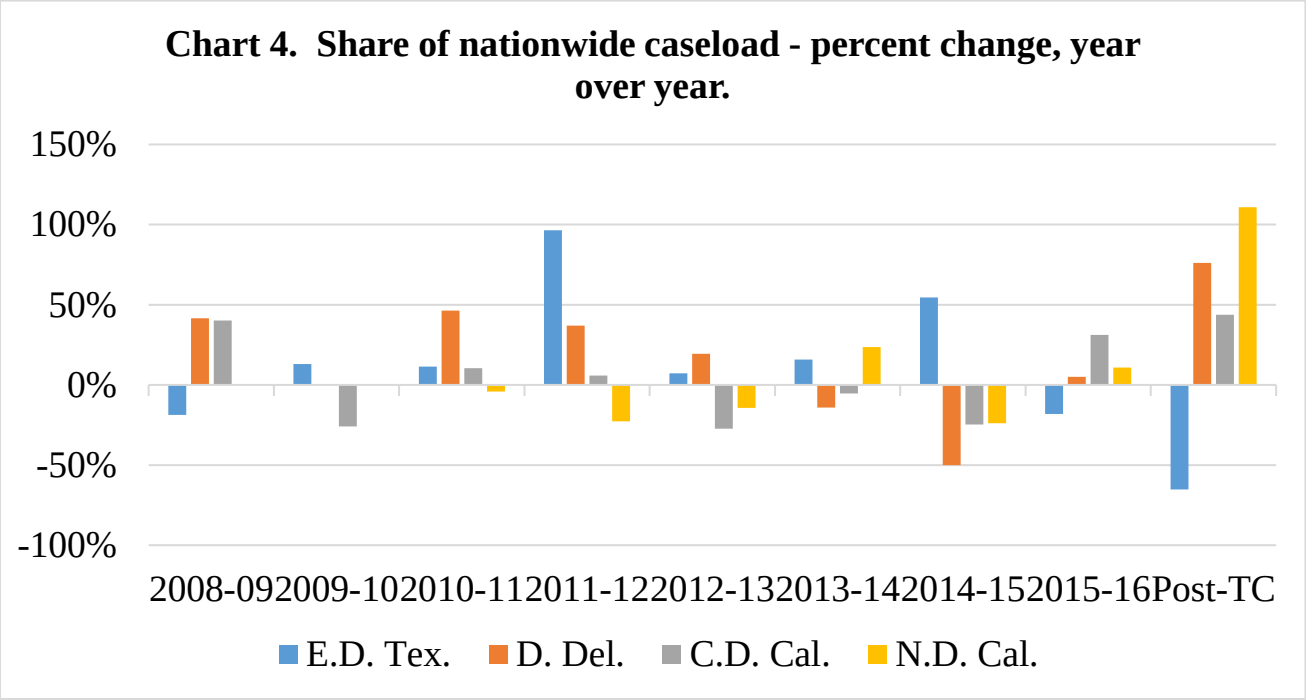
Table 3. Share of nationwide caseload – standard deviation and coefficient of variation.

	STD '08-16	CV '08-16	STD '10-16	CV '10-16	STD '12-16	CV '12-16
E.D. Tex.	12.52%	0.57	12.22%	0.48	8.79%	0.28
D. Del.	5.45%	0.42	5.25%	0.36	5.68%	0.36
C.D. Cal.	1.79%	0.23	1.56%	0.22	1.62%	0.24
N.D. Cal.	1.07%	0.21	0.99%	0.20	0.49%	0.11
N.D. Ill.	1.34%	0.28	1.49%	0.33	1.06%	0.28
D.N.J.	1.31%	0.28	1.26%	0.29	1.32%	0.33
S.D. Fla.	0.59%	0.26	0.46%	0.18	0.43%	0.17
S.D.N.Y.	0.91%	0.28	0.78%	0.27	0.20%	0.08
D. Mass.	0.58%	0.32	0.61%	0.36	0.34%	0.24
N.D. Tex.	0.28%	0.20	0.31%	0.23	0.38%	0.28
S.D. Tex.	0.25%	0.26	0.20%	0.22	0.07%	0.09
W.D. Tex.	0.23%	0.23	0.17%	0.17	0.16%	0.16

To assess the specific effect of the *Heartland* decision, we computed the percent change in share of patent cases, year over year, for each district we studied. This data is shown in the table below. A few data points jump out. From 2011 to 2012, nearly every district we studied saw a sizeable change in its share of patent cases nationwide. The Eastern District of Texas alone jumped 97%. Similarly, from the year pre-*Heartland* to the year post-*Heartland*, most districts we studied saw sizeable changes again, with the Eastern District falling by two thirds, the District of Delaware increasing by 75%, and the Northern District of California doubling its share. Large changes in a district's share of patent cases were also relatively commonplace in years not correlated with the AIA or the *TC Heartland* decision; from 2013 to 2014, the District of New Jersey more than doubled its share of patent cases with no immediately apparent precipitating cause.

Table 4. Share of nationwide caseload – percent change, year over year.

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Post-TC
E.D. Tex.	-18.70%	11.61%	12.47%	97.21%	7.13%	15.93%	54.63%	-18.19%	-65.24%
D. Del.	41.65%	0.48%	46.36%	36.91%	19.34%	-14.13%	-50.05%	5.02%	75.81%
C.D. Cal.	40.07%	-26.45%	11.58%	5.77%	-27.32%	-5.25%	-24.86%	31.18%	43.75%
N.D. Cal.	0.10%	-0.24%	-3.40%	-22.70%	-14.35%	23.67%	-23.89%	10.89%	99.47%
N.D. Ill.	-5.82%	24.21%	-6.09%	-28.12%	-18.38%	-15.71%	-7.21%	92.08%	14.53%
D.N.J.	-6.96%	-3.82%	-8.51%	-41.88%	-19.47%	138.31%	-17.19%	-11.49%	30.65%
S.D. Fla.	39.04%	38.68%	-25.76%	32.94%	25.41%	-26.33%	-0.38%	38.94%	-16.23%
S.D.N.Y.	3.85%	-12.40%	10.73%	-38.34%	-16.87%	8.68%	13.10%	-6.45%	44.14%
D. Mass.	24.40%	8.32%	-7.57%	-39.64%	34.79%	-44.78%	8.92%	13.49%	-7.42%
N.D. Tex.	-5.50%	-0.98%	-12.32%	-17.97%	20.33%	-6.39%	67.22%	-40.99%	107.29%
S.D. Tex.	15.12%	-8.23%	-21.32%	-20.60%	6.13%	0.21%	-19.69%	11.70%	90.91%
W.D. Tex.	67.51%	39.66%	-8.21%	-11.37%	-15.31%	17.10%	18.71%	-34.21%	83.22%



These numbers raised a question in our minds: Are the post-*Heartland* changes in the Eastern District of Texas and the District of Delaware really significant compared to fluctuations in prior years? Or are they just the latest changes in an ever-changing system? To answer that question, we ranked the year-over-year change in each district from 2008 to 2016 and from pre- to

post-*TC Heartland*. Judged on an absolute logarithmic scale,[82] we found that the post-*Heartland* drop in the Eastern District of Texas was the largest annual change in either district during that time period, and the post-*Heartland* increase in the District of Delaware was the fourth largest change in either district (as well as the second largest in the District of Delaware after 2014-15). These numbers are reflected on the table below.

Table 5. Biggest annual changes in E.D. Tex. and D. Del.

Rank	Change factor	District/Year
1	2.88	E.D. Tex. Post-*Heartland*
2	2.00	D. Del. 2014-15
3	1.96	E.D. Tex. 2011-12
4	1.75	D. Del. Post-*Heartland*
5	1.55	E.D. Tex. 2014-15
6	1.46	D. Del. 2010-11
7	1.42	D. Del. 2008-09
8	1.36	D. Del. 2011-12
9	1.23	E.D. Tex. 2008-09
10	1.22	E.D. Tex. 2015-16
11	1.19	D. Del. 2012-13
12	1.16	D. Del. 2013-14
13	1.16	E.D. Tex. 2013-14
14	1.13	E.D. Tex. 2010-11
15	1.12	E.D. Tex. 2009-10
16	1.07	E.D. Tex. 2012-13
17	1.05	D. Del. 2015-16
18	1.00	D. Del. 2009-10

While it is difficult to draw causal relationships from statistics such as these, it seems likely that the extreme changes seen in the Eastern District of Texas and District of Delaware after *TC Heartland* were caused by the decision itself rather than year-to-year fluctuations. If all fluctuations were random, the odds that any given year would have both the first and fourth-most significant changes are less than 4%.

[82] An absolute logarithmic scale treats an increase by a given factor equally with a decrease by the same factor. So, for example, if a district's share doubled from one year to the next and then fell by half the next, the two changes would be considered equal in magnitude.