Telling the Story of the Invention: How Narrative Coherence Helps Reinforce a Desired Claim Construction

I. Introduction

Patent practice often creates issues of meaning and interpretation. Patent prosecutors must translate the technical math, science, and engineering that give rise to an invention into a patent application. The patent application culminates in one or more claims, and if the patent application issues as a patent, the claims define the exact meets and bounds of the patent owner's right to exclude. Years later, litigators charged with asserting or defending against the patent must then translate the claims back into the real world to convince a fact finder whether an accused product infringes or whether the patent is invalid. Cases often rest on the precise meanings of a few terms.

Claim construction is the judicial process of assigning meaning to a claim term, and it is of critical importance in deciding the outcome of a patent case. Most claim construction briefs, however, are not exactly riveting. Typical briefs begin with a long list of citations followed by proposed constructions and supporting arguments.1 "They often have little human interest and are dry and devoid of any of the context that give rise to the definitional disputes they seek to resolve."2 But it does not have to be this way. The emerging technique of legal narrative offers an opportunity to make claim construction briefs not only more interesting, but also more persuasive. Therefore, I suggest that patent litigators should use narrative persuasion techniques that support their desired claim constructions.

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2 Id.
Parts II and III of this Paper review the governing law on patent claim construction. Part IV discusses the effectiveness of narrative techniques in legal writing. Part V analyzes whether narrative techniques should be incorporated into claim construction briefs. Part VI provides a case example illustrating the use of narrative techniques in claim construction. Finally, Part VII concludes that patent litigators should incorporate narrative techniques into their claim construction briefs.

II. What is Claim Construction and Why Does it Matter?

According to the Supreme Court, the claim is of primary importance in ascertaining precisely what it is that is patented.\(^3\) Claim construction, simply put, is the process of figuring out what the terms of a claim mean. In a typical case, the parties advance competing interpretations of disputed claim terms. The patentee will advance an interpretation that preserves the patent’s validity and brings the accused product within the scope of the claims. Conversely, the accused infringer will advance an interpretation that removes the accused product from the scope of the claims and/or renders the claims invalid. Claim construction is therefore often a dispositive issue in patent litigation. In fact, claim construction is so important that parties who lose on claim construction frequently concede summary judgment to fast track appellate review.\(^4\)

Interpreting claims can be easier said than done. As the Federal Circuit wrote in Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., “the nature of language makes it impossible to capture the essence of a thing in a patent application.”\(^5\) “Often the

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\(^3\) Merrill v. Yeomans, 94 U.S. 568, 570 (1876).


invention is novel and words do not exist to describe it. The dictionary does not always keep abreast of the inventor. It cannot. Things are not made for the sake of words, but words for things.""

III. Claim Construction Procedure

In Markman v. Westview Instruments, Inc., the Supreme Court held that "construction of a patent, including terms of art within its claims, is exclusively within the province of the court." This means that the trial judge decides claim construction as a matter of law. After Markman, most district courts began conducting pre-trial claim construction hearings, commonly referred to as "Markman hearings." While procedures vary somewhat from court to court, the parties typically submit claim construction briefs offering their proposed constructions of disputed claim terms. Then, the trial judge may hear oral presentations from the parties. Ultimately, the judge decides on the proper interpretation of each disputed claim term by adopting either a party's proposed construction or the judge's own construction."

Nine years after Markman, an en banc majority of the Federal Circuit decided Phillips v. AWH Corp. and provided some clarification on how claim construction should be conducted. The Court rejected the then-prevailing approach of relying primarily on dictionaries, encyclopedias, and treatises to determine the meaning of claim

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6 Id., quoting Autogiro Co. of America v. United States, 384 F.2d 391, 397 (Ct. Cl. 1967).
10 415 F.3d 1303 (Fed. Cir. 2005).
terms. Instead, the Court emphasized the importance of intrinsic evidence (i.e. the patent itself and its prosecution history). In particular, the Court held that the specification is “the single best guide to the meaning of a disputed term.”

Dictionaries and other types of extrinsic evidence like expert testimony are often useful but are generally “less reliable than the patent and its prosecution history in determining how to read claim terms.”

IV. Narrative Techniques in Legal Writing

Narrative means telling a story, and a persuasive narrative argument requires telling a compelling one. Narrative, or narratio, is one of the six elements of classical argument for good reason; narrative is what grabs an audience’s interest. Wading through a legal brief, and particularly a claim construction brief, requires considerable effort from the reader. Certain questions will inevitably creep into a reader’s mind when grappling with a dense piece of writing (like this one): “why am I reading this, when will this get interesting, and where is the part that really matters?” An advocate can stave off these questions and keep the reader focused by using narrative to provide context for his or her arguments.

Lawyers widely acknowledge the importance of telling a good story when arguing in front of a jury. There is less consensus, however, on the appropriateness of narrative in technical briefs meant for the trained eyes of judges. Some critics believe that technical legal arguments should be entirely grounded in logos; such arguments

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11 Id. at 1320-1321. The Court explicitly declined to follow Texas Digital Systems, Inc. v. Telegenis, Inc., 308 F.3d 1193 (Fed. Cir. 200), which was the leading case emphasizing the use of dictionaries.
12 Id. at 1321.
13 Id. at 1318.
14 See Andea A. Liinsford et al., Everything’s an Argument 124 (6th ed. 2013). The six elements are exardium, narratio, partitio, confirmatio, refutatio, and peroratio.
should be “rigorous and linear, cold and dispassionate, impersonal and objective.”

But cognitive science tells a different story. The human brain is predisposed to use
narrative to understand the world. Narrative helps an audience to predict what will
(or more importantly in legal writing, what should) happen in a particular situation.

In addition, narrative helps the audience make sense of new situations by triggering
subconscious analogies to “stock stories” drawn from the mainsprings of human
experience.

Like in fiction writing, telling a compelling legal story involves developing a
setting, characters, conflict, plot, and theme. In legal writing, the setting includes both
the factual setting—the background information about how and why the dispute
occurred—and the legal setting, which is the relevant governing law. The characters
are the parties, with the lawyer’s client generally playing the role of the protagonist.
The conflict is what drives the writing, and like the setting, includes factual and legal
components. The factual conflict is the dispute that caused the parties to wind up in
court, and the legal conflict is the legal issue to be decided. The theme is the “bottom
line.” It explains why the client’s cause is just, or why the other side’s cause is unjust.
Finally, “[t]he plot line is the glue that holds all of the elements together.”

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16 Id. at 260.

17 Id. at 262.

18 See id.

19 For a detailed discussion and application of each of these elements in legal writing, see Kenneth Chestek, The Plot Thickens: The Appellate Brief as Story, 14 Legal Writing J. Legal Writing Inst. 127, 139 (2008).

20 Id.

21 Id. at 142.

22 Id. at 141.

23 Id. at 146.

24 Id. at 147.
these parts of the story fit together is known as narrative coherence, which is a key part of what makes a narrative psychologically persuasive.

Narrative coherence includes two elements: "internal consistency, how well the parts of the story fit together, and completeness, how adequate the sum total of the parts of the story seems." 25 Every legal advocate is asking the adjudicator to make inferences based on the evidence presented. These inferences, however, only feel natural if the underlying story structure is internally consistent and seems reasonably complete. Legal stories that lack internal consistency will seem ambiguous or even implausible." 26 Likewise, even a consistent story is unconvincing if it is incomplete and leaves the audience questioning what happens next or why expected elements have been left out. "A trier presented with a jumble of facts is . . . less likely to find for the party presenting those facts than a trier who receives the same factual information presented not as a jumble but as a coherent story." 27 Paying careful attention to narrative coherence can pay huge dividends.

V. Use of Narrative in Claim Construction Briefs

At present, patent litigators seldom incorporate narrative persuasive techniques into their claim construction briefs. 28 Instead, typical briefs begin with a long list of citations followed by proposed constructions and supporting arguments. 29 Narrative techniques do not initially appear well-suited for claim construction for the following reasons:

25 J. Christopher Rideout, Storytelling, Narrative Rationality, and Legal Persuasion, 14 LEGAL WRITING INST. 53, 64 (2008).
26 Id. at 65.
28 Supra note 1.
29 Id.
a) The intrinsic evidence favored under *Phillips* does not include the facts and circumstances that spawned the litigation. Thus, the overarching theme or “plot” envisioned for the case as a whole may not seem readily applicable to the claim construction proceeding.

b) Trial courts are frequently cutting down on the time allotted for claim construction.\textsuperscript{30} Under time pressure, parties may be tempted to focus on the technical details without considering a connecting narrative.

c) The scientific and highly technical nature of a patent does not, at first glance, make it seem like an ideal candidate for narrative story-telling.

d) Claim construction is a question for the judge, and judges may be less swayed by a “good story” than a jury would be.

Each of these reasons, however, is rebuttable, and in this section, I argue that there is a compelling story to tell in every claim construction proceeding.

a. **The intrinsic evidence does have a story to tell.**

According to speech communication theorist Walter Fisher, “[n]o matter how strictly a case is argued—scientifically, philosophically, or legally—it will always be a story.”\textsuperscript{31} The patent specification itself is a narrative that can tell the story of the invention. In the Federal Circuit’s words, “[t]he ‘written description’ requirement implements the principle that a patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor’s obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that


the patentee was in possession of the invention that is claimed."\textsuperscript{32} Further, according to MPEP 2163(1), the written description requirement promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention for the duration of the patent's term.

Accordingly, the specification should generally provide a savvy litigator with everything needed to "tell the story of the invention" and provide context for the claim terms in dispute. The prosecution history, also part of the "intrinsic evidence," can provide additional material for a compelling story. For example, the story might include why the applicant made certain amendments during prosecution, such as by describing what is in the prior art and why the amendments distinguished over the prior art.\textsuperscript{33} Ultimately, the story should explain how the claims came about and what they mean. In addition, the story should be one in which the claim terms necessarily have the meaning the court is being urged to adopt.\textsuperscript{34}

\textbf{b. Limited time increases the value of narrative persuasion.}

Local court rules often limit the number of terms a party can seek to construe, often times quite severely. For example, the Local Patent Rules for the Northern District of Illinois require the parties to agree upon just ten terms or phrases to be submitted to the court for construction.\textsuperscript{35} If the parties cannot agree on ten terms, each side only gets five.\textsuperscript{36} When so few terms are available for construction, the stakes for persuading the court to adopt each desired construction are high. In addition to

\textsuperscript{32} Capon v. Eskabar, 418 F.3d 1349, 1357, 76 USPQ2d 1078, 1084 (Fed. Cir. 2005).
\textsuperscript{33} Supra note 1.
\textsuperscript{34} id.
\textsuperscript{35} LPR 4.1, N. Dist. Ill.
\textsuperscript{36} id.
being limited to a relatively small number of terms, patent litigators are also typically limited to a tight page limit. In the Northern District of Illinois, claim construction briefs cannot exceed twenty-five pages absent leave from the court.\(^{37}\)

Given these constraints, patent litigators may feel pressured to cram as many supporting rules and legal arguments as possible to advocate for their desired constructions. With so much on the line, what room is there for background and context? Cognitive science strongly suggests, however, that narrative text is easier to comprehend and remember than expository text.\(^{38}\) Studies have proven that narrative enhances retention, comprehension, and subjective interest.\(^{39}\) Thus, incorporating narrative techniques in claim construction briefs is well worth the space.

c. Technical concepts can be made more understandable and relatable through storytelling.

Highly technical and scientific concepts are difficult to grasp for those who do not dedicate their careers or studies toward that particular subject matter. Science education commentators suggest that when science is portrayed as dogma—unequivocal knowledge divorced from context—outsiders looking to understand it feel alienated and frustrated.\(^{40}\) In addition, heavy use of technical language “sets up a barrier between those who can speak and understand and those who cannot.”\(^{41}\) The human brain is simply set up to understand concepts expressed as stories better than

\(^{37}\) LPR 4:2, N. Dist. Ill.


\(^{39}\) See id. at 12.

\(^{40}\) Id. at 2.

\(^{41}\) Id.
abstract principles. According to education researchers Avraamidou and Osborne, in the scientific context, a story functions as a “knowledge carrier.” In other words, narratives present “the solution to the problem of translating knowing into telling.” Technical concepts like the meaning of disputed claim terms can therefore be made more understandable and relatable through storytelling.

d. Judges are likely just as influenced by storytelling as lay jurors.

Markman put claim construction squarely in the hands of the judge. Although the Supreme Court in Markman reasoned that judges are better suited for interpreting claim language than lay jurors, the cognitive science supporting the persuasive influence of narrative does not include an asterisk exempting judges. After all, judges are humans too. In the technical and scientific arena of patent disputes, patent law scholar Andrew Lundgren argues that “even where complex terms and phrases may arise, the judge is usually no more skilled in technical and scientific language than is a jury. There is no indication that training in legal principles correlates to expertise in construing the meaning of nonlegal concepts.” In addition, judges tend to think about disputes in narrative form, culminating in the court’s opinion. “[T]he institutional requirement that judges produce a written record of their reasoning furthers the likelihood that a consistent story underlies a particular judgment.” Thus, judges are likely influenced by storytelling in the context of claim construction.

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62 See supra note 15 at 263.
63 Supra note 38 at 7.
64 Id.
65 Supra note 8 at 220. Lundgren criticizes the Supreme Court’s reasoning in Markman, arguing that there is little evidence judges are better than lay jurors at construing technical language.
66 Id. at 216.
VI. *Bo ler Co. v. Tuthill Corp.*

The previous section established that claim construction is amenable to the use of narrative techniques. This section illustrates a practical application of these techniques by analyzing the claim construction briefs from *Bo ler Co. v. Tuthill Corp.* ("The Bo ler Case"), a patent infringement suit out of the Southern District of Ohio.\(^{47}\) While undoubtedly important to the parties involved, the case is not particularly notable and did not generate any headlines. I selected this case, however, because the technology involved is mechanical in nature and relatively easy to comprehend. In addition, the claim construction dispute primarily focuses on a single phrase. Finally, the plaintiff’s claim construction brief is an example of what I consider to be a traditional claim construction brief that does not make much use of narrative, whereas the defendant’s claim construction brief makes obvious and effective use of narrative.

The Bo ler Case centered on Bo ler’s U.S. Patent No. 6,073,947 ("the ‘947 Patent"), entitled "Substantially Weld Free Frame Bracket Assembly." Generally, the patent is directed toward a bracket (reference number 39 in FIG. 3, reproduced below) that connects the suspension to the frame of a heavy duty vehicle. Claim 1 of the ‘947 Patent recites, among other things, "[a] substantially weld free frame bracket for connecting a wheel bearing axle suspension system to a frame member of a vehicle."

The '947 Patent - FIG. 3

The accused product included a hanger bracket, the pieces of which were welded together. Thus, a principle aspect of the claim construction dispute concerned whether the phrase "substantially weld free" could be construed to encompass Tuthill's hanger bracket, which included welds. Tuthill argued it could not, and Boler argued it could.

a. Boler's Brief does not make use of narrative techniques.

Plaintiff Boler's claim construction brief begins uneventfully, with more than a page devoted to the recitation of the "basic principles" of claim construction. Boler then introduces the claims before launching right into its argument for its proposed construction of the claim term "substantially weld free":

The term "substantially" has a recognized meaning in patent law and is used in the Boler '947 patent according to this meaning. In this respect, the definition in col. 5, Ins. 34-37 for "substantially weld free"

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contemplates within its scope the allowance for any "minor weldment," and is simply in accord with the recognized, conventional meaning and scope of the term "substantially" as used in patent law and the English language. Thus, the term "substantially" is interpreted here as it was in Ecolab, Inc. v. Envirolec, Inc., 264 F.3d 1358, 1366 (Fed. Cir. 2001) [quoting from Webster's 9th New Collegiate Dictionary, p. 1176 (9th Ed. 1983)], to mean "considerable in ... extent" or "largely but not wholly that which is specified."\(^{49}\)

Boler's argument is straightforward. "Substantially" has been recognized in patent law as a broadening term. "Substantially" modifies "weld free." Therefore, "substantially weld free" must allow for some quantity of welds to be present. Boler's argument makes logical sense, but the reader has no sense of why it is important. Boler provides no context for its assertion; we do not know the setting, the characters, the conflict, or the plot. There is no good guy; there is no bad guy. The only discernable theme is \textit{stare decisis}. Thus, Boler's story is incomplete, and as a result, the reader is left wondering how much welding is permissible, and why does that matter?

\textbf{b. Tuthill's Brief takes advantage of narrative techniques to increase its persuasive effect.}

In contrast to the approach taken by Boler, Tuthill immediately begins by setting the scene, providing roles for the characters, and giving context for its story of how the litigation began:

Tuthill Corporation, ("Tuthill") manufactures and sells, \textit{inter alia}, add-on suspension systems for trucks, trailers and other heavy duty vehicles. So does Plaintiff, The Boler Corporation ("Boler"). Like all businesses, each party strives to achieve market share and competitive advantages over its competition, including, over each other. Here, Boler pursues Tuthill on a claim of patent infringement; Tuthill, in turn, believes that Boler has brought a baseless claim in an effort to extort a license or settlement from its much smaller \textit{competitor}.

\(^{49}\) Id. at 8.

Tuthill believes that Boler's claims are baseless because long ago, when it applied for its patent, Boler defined the terms it used in the claims of U.S. Patent No. 6,073,947 (the '947 Patent). At that time, and during those ex parte proceedings, the meaning of those claims was forever fixed. That meaning is reflected in the public record of the patent application proceedings, which in turn, puts the world on notice of what Boler claims. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582-83 (Fed. Cir. 1996). Based upon a correct analysis of that record, Tuthill believes that it would be improper as a matter of law to permit the claim construction Boler now seeks and which it developed for this litigation only after it learned of Tuthill's product.51

The first four sentences of Tuthill's brief prime the reader to root for Tuthill, the small business being bludgeoned over the head with a "baseless" patent suit. Tuthill builds on these characters to develop its theme for claim construction—Boler wants to extort money out of Tuthill, so it is unfairly stretching the meaning of its claims to cover Tuthill's product. Tuthill emphasizes this theme throughout its argument section and builds a plot based on the intrinsic evidence of the '947 Patent.

The '947 Patent specification provides such a guide for interpretation as it makes repeated reference to where and when welds may exist in a hanger bracket that still falls within the patent's definition of the phrase substantially weld free. . . . Any doubt that this definition was intended by the applicant is eliminated by reference to its statements to the Patent Office during the application process. . . . Accordingly, this Court should apply the meaning of "substantially weld free" provided by Boler years before it commenced this litigation.52

Knowing that the law of claim construction places the most weight on the intrinsic evidence, Tuthill uses the '947 Patent's specification and prosecution history to create a compelling plot line. Boler defined "substantially weld free" both in the specification and in arguments to the Patent Office. It was only when Boler saw Tuthill's product and filed a "baseless" suit to "extort a license or settlement from its

51 Id. at 2-3.
52 Id. at 20-21.
much smaller competitor" that the definition advanced by Boler took form. Tuthill’s narrative is coherent—the characters as defined play the roles we expect, and we get a fairly complete picture of the parties’ conflict. Thus, the narrative supports the inference that Tuthill wants the judge to make: Boler’s proposed construction should fail as nothing more than a litigation tactic that overly stretches of the “truth” of what the ‘947 Patent can permissibly cover.

c. **Tuthill wins and Boler concedes summary judgment.** The Federal Circuit affirms *per curiam*.

Tuthill’s narrative-infused claim construction brief carried the day. The Court held that “Boler’s proposed construction fails to track the intrinsic record.” In addition, as often happens in patent litigation, claim construction was dispositive. Boler conceded summary judgment after the Court found in favor of Tuthill on claim construction. Boler appealed unsuccessfully, with the Federal Circuit affirming the trial court in a *per curiam* decision.

**VII. Conclusion**

Given the critical importance of claim construction in determining the outcome of patent litigation, advocates should consider taking advantage of the persuasive power of narrative in arguing for their preferred claim construction. It is irrelevant that claim construction is a question of law decided by the judge. Narrative is not just a useful tool for persuading juries; judges also undertake a subconscious story-building exercise when making a decision, even in the seemingly dry and technical field of claim construction. An advocate has a greater chance of success when he or she can provide

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the judge with that story. The Boler Case example discussed in this paper illustrates that a coherent and compelling narrative can indeed be crafted drawing only upon the intrinsic evidence in the patent. Accordingly, advocates should analyze the patent at issue and develop a narrative that makes the desired claim construction seem like a natural fit.