

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

R-BOC REPRESENTATIVES, INC., et al.,)
Plaintiffs-Counterclaim Defendants,)
v.)) No. 11 C 8433
JOHN T. ("TOM") MINEMYER,)) No. 07 C 1763
Defendant-Counterclaim Plaintiff.)) Magistrate Judge Jeffrey Cole
JOHN T. ("TOM") MINEMYER,)
Plaintiff,)
v.)
R-BOC REPRESENTATIVES, INC., et al.,)
Defendants.)

**MEMORANDUM OPINION AND
FINDINGS OF FACT AND CONCLUSIONS OF LAW**

A VERY BRIEF INTRODUCTION

These patent infringement cases, involving seemingly uncomplicated plastic couplers, have now spanned ten years, generated 17 written opinions, scores of substantive orders, two trials, and a contempt hearing.¹ The docket entries in the two cases encompass (according to the computer)

more than 21,000 pages. In the first trial, a jury in early 2012 found for Mr. Minemyer and awarded him \$1.5 million in damages. The Federal Circuit affirmed without opinion, *Minemyer v. R-BoC Representatives, Inc.* 515 Fed.Appx. 897 (Fed. Cir. 2013), and the Supreme Court's denied cross applications for certiorari. *U.S.* __, 134 S.Ct. 2133 (2014).

In December 2011, three months before the first trial began, the R-BOC defendants sued Mr. Minemyer, seeking a declaration that the R-BOC defendants' "redesigned" coupler did not infringe Mr. Minemyer's patent. [Dkt. #1 - 11 C 8423]. No mention was made of a change to the angle of the interior threads,² which was shown to be approximately 80 degrees.

Mr. Lundein conceded in his testimony in the instant case that his expert acknowledged in the first case that if the original coupler infringed on Claim 12 of the Minemyer patent – which involved the angle of the interior threads –³ then so too did the redesign, since, as Mr. Lundein told the jury in the first case, the redesign did not change the thread angle. (Tr. 266-269). As we shall see, Mr. Lundein and his group were to jettison that admission made in the first trial and proceed in this case in contravention of it.⁴ He would say in the instant case that "almost all the changes [were]

¹...continue
3757378 (N.D. Ill. 2009); 695 F.Supp.2d 797 (N.D.Ill.2009); 678 F.Supp.2d 691 (N.D.Ill.2009).

² One of the supposed changes – and the most important, the R-BOC group would later argue – involved the angle of the interior threads in the coupler (supposedly to make them less perpendicular and thus not violative of Claim 12 of Mr. Minemyer's patent). Thus, in the R-BOC group' view, the molds that had been *utilized* in manufacturing the infringing couplers had ceased to exist after the claimed redesign which occurred four years before the July 9, 2012 injunction, and which, it would be claimed, could not be turned over. In short, they had ceased to exist before the injunction issued. That, at least, was the theory advanced. (Tr. 70-71). But the molds involved far more than simply the cores, as the evidence showed. (Tr. 126).

³ Indeed, the jury found that the thread angles on the original infringing couplers, which was about 80 degrees, were "approximately perpendicular" and thus violated Claim 12 of Mr. Minemyer's patent.

⁴ The jury in the first case found, among other things, that Lundein's couplers infringed Claims 2, continue...

made immediately after [the first] trial.” (Tr. 278). He admitted that he approached WZ Tool to change some of the threads on the core inserts after the first trial and after Mr. Minemyer was seeking an injunction. (Tr. 279). It was after the first trial that he enlisted a Mr. David Nelson to remeasure the cores for him. (Tr. 280). He acknowledged that even after the first trial he did not have the thread angles of the existing cores changed. (Tr. 281). And while he claimed to have procured the changes in thread angle on four models, sixteen were not changed after the trial. (Tr. 282). And finally, he acknowledged that after the trial he continued to sell twelve models that had not been changed to Duraline. (Tr. 316). He said he didn’t know when that stopped. (Tr. 316).

The present action was tried to the court in December 2014, along with Mr. Minemyer’s alleged contempt for non-compliance with the July 9, 2012 permanent injunction that followed the jury trial in the first case and required the R-BOC defendants, among other things, to turn over for destruction “all molds *utilized* in the production of Infringing Products,” which were then listed by Part Numbers. (Dkt. #526)(Emphasis supplied). Nothing was turned over, as Mr. Lundeen admitted, even though he acknowledged that he understood the July 9, 2012 injunction to require the turnover of molds that had been utilized in the past to create couplers that violated Mr. Minemyer’s patent. (Tr. 292-294). He never questioned the wording or meaning of the injunction. Indeed, a month after the injunction issued he filed a statement of compliance with it. (Tr. 300).

The R-BOC defendants were, in this case, adamant that they had “redesigned” the couplers – actually the inner cores of the molds – in the fall of 2008 because of the “contentious” and “expensive” patent infringement case brought by Mr. Minemyer at the end of March 2007. It had,

⁴...continue

3, 4, and 12 – the latter involving the “approximately perpendicular” angles of the interior threads. (Tr. 267-68).

Mr. Minemeyer’s lawyer said, taken a “huge toll” on the company and its owners. (Tr. 68 -71). But Mr. Lundeen admitted that no changes had occurred in 2008 (Tr. 360-61) and that 12 of the 16 couplers did not have thread angle changes. (Tr. 282-86, 362).

According to the current story of the R-BOC defendants and their lawyers, in 2008, four years before the 2012 injunction issued, and three years before the R-BOC group sued Mr. Minemyer in this case, they claimed the couplers were “redesigned” to avoid infringing on the Minemyer patent. *Id.* And, so the theory goes, the 2008 redesign intentionally included a change in the interior thread angle. *Id.* That argument is unsupportable.

One of the difficulties with the current theory is that, incredibly, the claimed alteration of the angle of the interior threads in 2008 was never disclosed to Mr. Minemyer, his counsel, the court, or anyone else, it would appear, in the years between 2008 and July 2012 – even though, as we shall see, there were repeated opportunities and the most compelling of reasons to have done so. Indeed, even in the Complaint filed in December 2011 by R-BOC against Mr. Minemyer claiming that the 2008 redesign did not offend the Minemyer patent, there was no claim that the angle of the interior threads had been reworked or redesigned. [Dkt. #1]. As we shall see, the current theory is unsupported and indeed contrary to the evidence in the case, and, of course, to Mr. Lundeen’s admission in the first case in early 2012 that the redesign did not embrace changes to interior thread angles.

Not surprisingly, the person who supposedly made the changes to the thread angles did not testify in this case, and cannot be found. And, as we have said, the owners of the company were silent on the alleged change to the thread angle over an extended period of many years. Finally, Ed Krajecki denied he was told anything about thread angle changes by Mr. Lundeen. (Tr. 721); *see*

infra at 27. Not unexpectedly, Mr. Lundeen told inconsistent and conflicting stories about virtually everything that mattered in the case. And the defendants' stunning and inexplicable silence on the matter of supposed changes to thread angles of the coupler between 2008 and 2012 is part of the extraordinary (and there is no other fitting adjective) evidentiary fabric of the case.

PROLOGUE

In Kurt Vonnegut, Jr.'s Hugo award-nominated book *The Sirens of Titan*, there is a good luck piece – a four-inch piece of metal that the young Chrono picked up off a flamethrower factory floor. Moreover, the good-luck piece turns out to be a part necessary for the repair of a spaceship meant to carry a stranded robot from Tralfamadore with nothing more than a message of greeting.⁵ It turns out that the entirety of human existence over the millennia – evolution, civilization, technology, love, brutal war, disease, death, etc. – culminating in space travel, the colonization of Mars, and war between the colony and earth – the reason for the flamethrower factory – had been to produce this inconsequential part – this good-luck piece – for the robot's ship just so someone could say "hello." That's all.⁶

⁵ Vonnegut's work lost out, rather famously, to Robert Heinlein's *Starship Troopers*. But Vonnegut's take on the absurdity of it all have been referenced by any number of distinguished judges. See, e.g., *PGA Tour, Inc. v. Martin*, 532 U.S. 661, 705 (2001)(Scalia, J., dissenting); *Central States, Southeast and Southwest Areas pension Fund v. Sherwin-Williams Co.*, 71 F.3d 1338, 1340 (7th Cir. 1995)(Easterbrook, J.); *In Trans Union Corp. Privacy Litigation*, 2011 WL 918396, 1 (N.D.Ill. 2011)(Gettleman, J.).

⁶ This is how Vonnegut described the history of the good-luck piece:

One day the school children were taken by Miss Fenstermaker on an educational tour of a flamethrower factory. The factory manager explained to the children all the steps in the manufacture of flamethrowers, and hoped that some of the children, when they grew up, would want to come to work for him. At the end of the tour, in the packaging department, the manager's ankle became snarled in a spiral of steel strapping, a type of strapping that was used for binding shut the packaged flamethrowers.

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Our good-luck piece is a “radial conduit coupler.” Although it is richly colored and three-dimensional,⁷ it’s not overly complicated. That’s been clear from the start. (07-cv-1763, Dkt. # 252, at 1). But it did merit a patent a decade ago – Patent No. 6,851,726 – and that is something not to be discounted. The couplers link together plastic pipes that are conduits for communications lines. They have internal threads tapering in from both ends toward the middle. The idea is that the plastic pipes that need to be connected get screwed in from both ends toward the center where there is a stop and the whole thing becomes sealed. It’s a useful item to the communications industry in the installation of underground communications lines.

Unlike the tale Vonnegut wove in *Sirens of Titan*, the parties haven’t been at it for millennia

⁶...continue

The spiral was a piece of jagged-ended scrap that had been cast into the factory aisle by a careless workman. The manager scratched his ankle and tore his pants before he got free of the spiral. He thereupon put on the first really comprehensible demonstration that the children had seen that day. Comprehensibly, he blew up at the spiral.

He stamped on it.

Then, when it nipped him again, he snatched it up and chopped it into four-inch lengths with great shears.

The children were edified, thrilled, and satisfied. And, as they were leaving the packaging department, young Chrono picked up one of the four-inch pieces and slipped it into his pocket. The piece he picked up differed from all the rest in having two holes drilled in it.

This was Chrono’s good-luck piece, It became as much a part of him as his right hand. His nervous system, so to speak, extended itself into the metal strap. Touch it and you touched Chrono.

102-103 (1959).

⁷ “We Americans require symbols that are richly colored and three dimensional and juicy . . .” Vonnegut, *Breakfast of Champions*, 302 (1973)

– only a “mere” ten years.⁸ Nevertheless, the history of our good-luck piece has covered two federal court cases, a jury trial, a bench trial, 805 docket entries totaling (according to the court’s computer system) 21,195 pages, comprising scores of motions and rulings, culminating in a trip to the Federal Court of Appeals in Washington, D.C., where the Federal Circuit rejected the approximately 16 challenges those rulings. That was followed by applications for *certiorari*, to the Supreme Court by both sides. Those petitions were unsuccessful. Children who were mere toddlers at the outset of this case are now approaching puberty. The Chicago Bears made their last Super Bowl appearance just weeks before the case was filed. A few months after this litigation started, the *Sopranos* cut to black to the strains of Journey’s *Don’t Stop Believing*, and *Mad Men* debuted – Peggy Olson was no more than Don Draper’s secretary at the time. Apple launched its first version of something called an iPhone.⁹ It’s been a terribly long time.

⁸ In 1990, Congress enacted the Civil Justice Reform Act, 28 USC §§471-82 in response to complaints from the bar of significant delays in the resolution of civil litigation. A Harris poll at the time indicated that 75% of corporate counsel, 70% of public interest litigators, and the majority of the rest of attorneys laid the blame for delay at the feet of the judiciary. The Civil Justice Reform Act of 1990 and the Judicial Improvements Act of 1990: Hearings Before the Comm. on the Judiciary, 101st Cong., 2d Sess. 98 (March 6 and June 26, 1990) (Study of Louis Harris and Associates, conducted for the Foundation for Change). Given such concerns, it is worth noting that in the instant case, the parties have combined to file no less than 22 requests for extensions of time. The lions’s share of these pleas came from R-BOC, although the longest single delay was precipitated by Mr. Minemyer. At one point, the parties were granted a *sixteen-month* extension of time for filing their pretrial order in 07-cv-1763, owing to Mr. Minemyer’s absence from the scene on an unrelated matter. (07-cv-1763, Dkt. # 272). Upon the expiration of those sixteen months, the parties asked for *another* month. (07-cv-1763, Dkt. # 364).

We do not in any way mean to be critical of the lawyers in this case, but for a variety of reasons, the case proceeded slowly at various points.

⁹ Given all this, our story necessarily violates one of Mr. Vonnegut’s rules of writing: “Start as close to the end as possible.” Vonnegut, “Bagombo Snuff Box: Uncollected Short Fiction” (New York: G.P.Putnam’s Sons 1999) 9-10.

There hasn't only been a lot of water under the bridge, there's been a lot of money. Our little good-luck piece has generated a million dollars in damages and probably more than that in legal fees.¹⁰ And it has cost the taxpayers untold tens of thousands of dollars. They are often forgotten, but they are, after all, footing the bill for the resolution of this protracted dispute, like the humans being manipulated by the Tralfamadorians toward an end that hardly seems worth it for them. But, so it goes.¹¹

I.

LITIGATION--CHAPTER I

**(wherein our inventor sues the infringers and wins,
but our infringers find the resultant injunction not quite to their liking.)**

A.

John Minemyer invented our “good-luck piece.” On March 29, 2007, he filed suit (07-cv-1763) against R-Boc, Carolyn Lundeen (the nominal “owner” of R-Boc), Robert Lundeen (R-Boc’s “nominal consultant,” Carolyn Lundeen’s husband and the major decision maker and indispensable participant in R-Boc’s business), Precision Custom Molders, Edward Krajecki (owner of Precision Custom Molders), Dura-Line, and Timothy Grimsley (Dura-Line vice president).¹² (“R-Boc group”).

¹⁰ But, of course. See Kurt Vonnegut, Jr., *God Bless You, Mr. Rosewater: or, Pearls Before Swine* 17-18 (1965) (“In every big transaction ... there is a magic moment during which a man has surrendered a treasure, and during which the man who is due to receive it has not yet done so. An alert lawyer will make that moment his own, possessing the treasure for a magic microsecond, taking a little of it, passing it on. . . the lawyer can often take as much as half the bundle, and still receive the recipient's blubbering thanks”).

¹¹ This is the fatalistic refrain, repeated over 100 times, in Vonnegut’s *Slaughterhouse Five, Or The Children’s Crusade: A Duty-dance With Death* (1969).

¹² Mr. Minemyer’s charges against Mr. Grimsley/Dura-Line are limited to inducing infringement, but that part of Mr. Minemyer’s case was left undeveloped at trial and in post-trial briefs, where it was limited to a couple of sentences. (11-cv-8433, Dkt. #180, at 56; Dkt. # 189, at 7). While the contention is continue...

Mr. Minemyer charged them with patent infringement and trade dress infringement. Mr. Minemyer was unable to stave off summary judgment on his trade dress claims, 678 F.Supp. 691(N.D.Ill. 2009) or on the invalidation of several Patent ‘726’s claims (1, 5, 10, 11, 13, 14, 15) under the on-sale bar of 35 USC §102(b). 695 F.Supp. 797 (N.D.Ill. 2009). But Mr. Minemyer’s patent infringement claims – covering claims 2, 3, 4, and 12 of Patent ‘726 – eventually went to trial before a jury in February 2012.

Around December of 2008, the R-BOC group claimed it changed the design of the accused couplers they had been selling. As we shall see, and as we discuss in detail, this “redesign” involved a change to the outer surface from groove to waffled and supposedly dispensed with the sealing surface that had been present in the accused coupler. However, Mr. Lundeen said nothing about changes – intentionally or otherwise – to the angle of the interior threads – at least so far as the evidence showed. Indeed, he would later admit to a jury in the first case that they were not part of the 2008 “redesign.” (Tr. 249, 264). The supposed change in angle of the interior threads was never discussed or mentioned by Mr. Lundeen at his 2008 deposition, although, it is now claimed to play

¹²...continue

sketchy, the gist seems to be that Mr. Grimsley/Dura-Line held contracts to supply couplers to AT&T and Verizon, they notified them that they would not be selling the R-Boc couplers to them anymore due to infringement litigation, but AT&T and Verizon continued to obtain the couplers through other distributors. (11-cv-8433, Dkt. #180, at 56; Dkt. #189, at 7; Trial Tr. at 661-62). It was unclear at trial, and remains so, how this constitutes inducement.

The statute prohibits “actively induc[ing].” 35 U.S.C. §271(b). That means Mr. Minemyer must prove that Mr. Grimsley/Dura-Line engaged in culpable conduct that encouraged AT&T and Verizon to continue selling the infringing couplers. *See Supreme Inc. v. Int’l Trade Comm’n*, 796 F.3d 1338, 1359 (Fed. Cir. 2015)(collecting cases); *ePlus, Inc. v. Lawson Software, Inc.*, 789 F.3d 1349, 1360 (Fed. Cir. 2015)(“. . . induced infringement requires active steps to encourage direct infringement and an ‘affirmative intent that the product be used to infringe.’”). It’s quite a leap from telling a customer you won’t be selling couplers anymore to actively encouraging customers to get them from somewhere else and continue selling themselves. Mr. Minemyer provides no evidence or argument to bridge that gap. Accordingly, I cannot find Mr. Grimsley/Duraline liable for inducing infringement.

a pivotal role in the outcome of this case and the contempt.

For now, it is enough to say that Mr. Minemyer learned of the “redesign” at the 2008 deposition of Mr. Lundeen.¹³ But, significantly, as we have said, Mr. Lundeen never testified (or claimed) then, or for years thereafter, that the angle of the interior threads had been purposefully changed as part of a “redesign” in 2008! His “silence on the matter was deafening.” *Muhammad v. Oliver*, 547 F.3d 874, 877 (7th Cir. 2008)(Posner, J.). And, even then, his story about the angle change would be anything but clear or consistent. As we shall see, Mr. Lundeen’s essential silence on the matter of the change in the angles of the interior threads has great evidentiary significance in this case, as does the vacillation in the stories he told. *See cases infra* at 23.¹⁴

B.

In Mr. Minemyer’s view, the changes to the couplers about which Mr. Lundeen had testified – *i.e.*, the change in the exterior pattern, the elimination of the seal land and stop were insignificant. He, therefore, claimed that the “redesigned” couplers were also infringing and wanted to have them included as part of his proof at the first trial. His claim was that the 2008 couplers were merely colorable variations of the accused coupler. The defendants moved *in limine* to exclude the 2008 redesigned couplers from the jury’s consideration. I granted that motion and did not allow Mr. Minemyer “to add this 2008 coupler” on the “eve of trial” to the accused products that the jury would learn about. (R.367 at 6-9, 3/23/11).

¹³ At that time, Mr. Lundeen had brought with him the “redesigned” coupler.

¹⁴ *See also* Jean Edward Smith, John Marshall: Definer of a Nation (1996) (“More than five weeks have elapsed since the Supreme Court declared the necessity of proving the fact, if it exists. Why is it not proved? Chief Justice Marshall said he could not assume that the government was remiss in seeking the proof; the only conclusion was that the evidence did not exist.”).

Eventually, in February of 2012, a jury sat through a two-week trial. (07-cv-1763, Dkt. #443-448, 458-459). The evidence showed that R-Boc blatantly copied Mr. Minemyer's couplers – to which, of course, they had had ready access while they had been distributors. 2012 WL 2155240, *15-16 (N.D.Ill. June 13, 2012); (07-cv-1763, Dkt. #515, at 20, 25); (Tr. 439; parts were “copied well”)). Evidence also showed conclusively that they deliberately passed off their accused couplers as Mr. Minemyer's to at least one major customer, Verizon and others. (07-cv-1763, Dkt. #452, #515, at 20, 25).¹⁵ The evidence presented satisfied the jury that, not only had R-Boc infringed on claims 2, 3, 4, and 12 of Mr. Minemyer's patent, but that they had done so willfully. (07-cv-1763, Dkt. #468). The jury assessed damages at a bit over \$1.5 million, accounting for Mr. Minemyer's lost profits. *Id.*, (07-cv-1763, Dkt. #468, at 7). After post-trial motions were considered, I concluded that Federal Circuit case law – *Seagate* and its progeny – required that the jury's finding of willful infringement be overruled, despite the indisputable evidence of purposeful copying and passing off. (Dkt. # 515, at 21-26).¹⁶

On July 7, 2012, I entered a permanent injunction. (07-cv-1763, Dkt.#526). Parsing Mr. Minemyer's various requests for relief proved a bit more complicated than the usual case, as he insisted on once again bringing in the R-BOC defendants' 2008 couplers, and revisiting the issue of willful infringement. This was, perhaps, in line with my pretrial granting of one of the defendants'

¹⁵ Mr. Minemyer had failed to provide any foundation for the evidence of this during the summary judgment proceeding on his trade dress claims.

¹⁶ Given the evidence of R-Boc's conduct, the ruling, while reluctant, perhaps turned out to be accurate, for it was upheld on appeal by the Federal Circuit. (07-cv-1763, Dkt. # 532, 590). In the wake of the Supreme Court's overruling of the Federal Circuit's test for willfulness in *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, – U.S.–, 136 S.Ct. 1923 (2016), the result would likely be much different today. More on that later.

motions *in limine* which held that while it was too late for Mr. Minemyer to bring in as an accused product the 2008 redesign, Mr. Minemyer could, in all likelihood, use the redesigned couplers in calculating lost profits. [Dkt. #367 at 8]. As a result of the inevitably extended briefing of that motion and several post-trial motions,¹⁷ the entry of a final order was delayed more than might normally be the case. (07-cv-1763, Dkt. #477, #501, #505, #508, #527).

In the end, the injunction precluded the R-BOC defendants:

- 1) from making, using, offering to sell, selling or importing into the United States, the Infringing Products listed below and all other products that are only colorably different therefrom in the context of claims 2, 3, 4 and 12 of United States Patent No. 6,851,726, and from otherwise infringing or inducing others to infringe those claims;
- (2) the above named defendants are further ordered to, within thirty (30) days of the issuance of this Order, destroy all inventory of Infringing Products, and ship to Moldrite Products, Inc., 2442 Waynoka Rd., Colorado Springs, CO, at their own cost and for destruction all molds *utilized* in the production of Infringing Products. The Infringing Products are as follows: Part Nos. BC02-148, BC02-154, BC02-1540, BC02-158, BC02-166, BC02-117, BC02-1315, BC02-188, BC02-189, BC02-190, BC02-166TB, BC02-2348, BC02-2375, BC02-190 Clear, BC01-166 Clear, BC02-154130, BC02-166154, BC02-188154.

(07-cv-1763, Dkt. #526)(emphasis supplied).

Straightforward enough, one would imagine, and the defendants did not complain that what they were ordered to do was unclear. But we were in store for more Vonnegut-style absurdity. As noted earlier, the parties filed appeals of a number of rulings. The R-BOC defendants filed a motion requesting that I stay enforcement of the judgment without the R-BOC defendants posting a supersedeas bond. They premised their motion on the claim that they had plenty of money to pay

¹⁷ Ridiculously, five years into the case and following a two-week jury trial, one of the R-BOC defendants filed a motion to dismiss for lack of personal jurisdiction. We observed that the parties like to keep things to themselves. As the foregoing discussion demonstrates, that was certainly true of Mr. Lundein and the R-Boc defendants and the supposed 2008 change to the interior thread angle.

the damages award of about \$1.6 million within 30 days, but would struggle to pay a bond of just \$35,000. (07-cv-1763, Dkt. # 546, at 4-5; Dkt. # 550).

Then came the question of the R-BOC defendants' compliance with the injunction. The short answer to the question is they didn't comply with it. As already noted, The R-BOC defendants asserted that they made some changes to their version of Mr. Minemyer's couplers late in 2008. Among other things, the injunction that issued July 7, 2012, required the R-BOC defendants to turn over the molds they used to manufacture the infringing products for destruction by August 7, 2012. They never have. Yet, in this case, Mr. Lundein admitted that the "mold" was made up of more than the cores and included the core insert, the cavity, and the base which was composed of large pieces of steel. (Tr. 275).

At a hearing on the matter on August 8th, the R-BOC defendants insisted that there was nothing to turn over for destruction because they had retooled the molds in 2008 – before any injunction issued – and therefore the "molds utilized in the production of Infringing Products" (07-cv-1763, Dkt. No. 526 at 2) no longer existed. Therefore, they said, with the utmost earnestness, there were no molds to be turned over that were in existence that fit within the injunction and therefore there could be no contempt. (07-cv-1763, Dkt. #535, at 3). The illogic of the argument is stunning. It ignores the injunction; it ignores the evidence in the case relating to the claimed changes in 2008 to the interior threads of the coupler; it ignores the explicit and straightforward language of the injunction which embraced molds that had been utilized. Thus, even if changes were made in 2008 to the angle of the interior threads, it ignores the ability of the R-BOC defendants to again change the interior threads on the molds to again produce infringing products. In short, the argument was nonsensical, contrived, and too clever by half.

Destruction of those molds, which clearly had been utilized in the manufacture of the offending products was also necessary to ensure the R-BOC defendants could not and would not be able to engage in future infringement. *See* 35 U.S.C. § 283 (“The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.”). *See Johns Hopkins University v. CellPro, Inc.*, 152 F.3d 1342, 1366 n.31 (Fed.Cir. 1998); *Newspring Industrial Corp. v. Sun Gem Plastics Enterprise Co., Ltd.*, 66 Fed.Appx. 863 (Fed. Cir. 2003)(upholding injunctive relief including seizure of molds that had been used to produce infringing products).

Even now, the R-BOC defendants wager all on testimony from Mr. Minemyer’s “expert” that the old infringing products cannot be made with the retooled molds. (11-cv-8433, Dkt. # 190, at 95; Dkt. #192, at 9). It’s a bit of semantics coupled with metaphysics that would not be out of place in Vonnegut or, at a more pop-cultural level, *Star Wars* – as in “these aren’t the molds you’re looking for” – but it doesn’t get the R-BOC defendants out from under a finding of contempt. They might as well argue that internal metabolic changes mean that they are not the same people they were when the case started.¹⁸

¹⁸ As another of Vonnegut’s characters, Billy Pilgrim, learned from the Tralfamadorians:

All moments, past, present and future, always have existed, always will exist. The Tralfamadorians can look at all the different moments just that way we can look at a stretch of the Rocky Mountains, for instance. They can see how permanent all the moments are, and they can look at any moment that interests them. It is just an illusion we have here on Earth that one moment follows another one, like beads on a string, and that once a moment is gone it is gone forever.”

Vonnegut, *Slaughterhouse Five, Or The Children’s Crusade: A Duty-dance With Death*, 26-27 (1969).

It is important to reiterate the salient portion of the injunction – regardless of whether one subscribes to the unpersuasive claim that the interior angles were changed to a non-infringing degree as part of the 2008 redesign. The R-BOC defendants were to turn over “all molds *utilized* in the production of Infringing Products.” (Emphasis supplied). Retooled or not, the molds they hung onto were, indeed, the ones they “utilized” to produce their infringing products. If the injunction meant otherwise, it would have targeted molds *capable of still* producing the infringing products or molds that could be retooled so that they could produce the infringing products. But it did not. The order clearly targeted the molds that had been utilized to make the infringing couplers. *See, e.g., Ohr ex rel. National Labor Relations Bd. v. Latino Exp., Inc.*, 776 F.3d 469, 474 (7th Cir. 2015)(district court’s order set forth an unambiguous command).¹⁹ It didn’t matter what condition they were in. What if the molds were rusty or were damaged and could not be used any longer to make the infringing couplers? Would the R-BOC defendants have refused to turn such molds over as well? Apparently they would have, but that’s contempt.²⁰ The molds would still have been utilized to make infringing products, and that is the evil the order explicitly dealt with.

It is telling, perhaps – and suggestive of their knowledge of their culpability – that the R-BOC defendants took 30 days before they informed the court of that – in their little “chrono-synclastic

¹⁹Regional circuit law governs contempt proceedings that do not raise issues unique to patent law. *Energy Recovery, Inc. v. Hauge*, 745 F.3d 1353, 1356 (Fed.Cir. 2014).

²⁰Indeed, at trial, counsel for the R-BOC defendants didn’t even have a handle on the terms of the injunction. He said the injunction did not preclude the R-BOC defendants from selling products that were no more than colorably different than the products that were found to infringe (*Minemyer Chapter II*, Trial Tr. 95). But it clearly covered “the Infringing Products listed below and all other products that are only colorably different therefrom . . .” (07-cv-1763, Dkt. #526).

infundibulum.”²¹ (This is a phrase Judge Easterbrook is fond of: *Sherwin-Williams Co.*, 71 F.3d at 1340-41 (“Neither the arbitrator nor the district court directly confronted the Fund’s central argument: that when Sherwin-Williams sold its stock in Lyons, the old Sherwin-Williams group vanished, as if it had fallen into one of Kurt Vonnegut’s chrono-synclastic infundibulums.”)).

In the defendants’ view, the molds “no longer existed” because a (meaningless) waffle pattern had been added and (the equally unimportant) sealing lands had been replaced with additional threads (that extended from the original internal thread to replace the sealing land and occupy the space the latter had formerly occupied). In short, under the defendants’ view, if the interior angle had not been changed as part of the redesign or otherwise, the molds would nonetheless have ceased to exist. The argument is silly.

More telling, the R-BOC defendants stood mute on the topic when Mr. Minemyer initially asked that destruction of the molds be part of any injunction order in March 2012. (07-cv-1763, Dkt. #477-1; Dkt. #501). They and their lawyers made absolutely no mention of the molds anywhere in their 34-page response to Mr. Minemyer’s request for a preliminary injunction that ordered the molds be destroyed. (07-cv-1763, Dkt. #501). And yet, the R-BOC defendants and its counsel knew full well what the molds were: indeed, the R-BOC lawyer admitted that the molds had multiple components. (Tr. 126, 127, 397). It was Mr. Minemyer’s counsel’s view, enunciated at the outset of the trial (Tr. 6) and ultimately proved by evidence, that the molds had multiple parts which included the base, and, that in fact, was still using the ones Mr. Backman made initially for R-BOC, and were

²¹ In *Sirens of Titan*, Vonnegut coined the term, “chrono-synclastic infundibulum” – a phenomenon in space “where all different kinds of truths fit together.” At least, that’s how it was explained by his character Dr. Cyril Hall in that character’s work, *The Child’s Cyclopedia of Wonders and Things to Do*.

the ones utilized in manufacturing the infringing parts. (Tr. 6). In short, as the photographs at the trial revealed, the molds had multiple parts, some quite large, which were never changed and Mr. Lundeen never claimed were different from the day Mr. Backman made and installed them. And yet, these were never turned over as required by the injunction.

Now it's too late, even if the injunction could have been more specific (and it should be noted the R-BOC defendants make no such claim). "Where a party faced with an injunction perceives an ambiguity in the injunction, it cannot unilaterally decide to proceed in the face of the injunction and make an after-the-fact contention that it is unduly vague." *TiVo*, 646 F.3d at 885. The molds the R-BOC defendants used to make the infringing couplers existed and they had them. And they didn't ship them for destruction as ordered.

All this makes for clear and convincing evidence that the R-BOC defendants violated a significant portion of the injunction. *Latino Exp., Inc.*, 776 F.3d 469, 474 (7th Cir. 2015)(clear and convincing evidence that defendant violated command, that violation was significant, and that defendant failed to make reasonable effort to comply). We now move on to the balance of the injunction, and the matter of "colorable differences" and continued infringement. So it goes.

II.

A BRIEF INTERLUDE FROM LITIGATION (wherein one must come to grips with what "colorably different" means)

From here, we can segue into the meatier disputes remaining in this case. But we shall pause to take up a threshold issue, and that is: the standard for contempt. In other words, how does a court go about determining if the R-BOC defendants were in contempt of the permanent injunction.

In *TiVo Inc. v. EchoStar Corp.*, 646 F.3d 869 (Fed. Cir. 2011), the Federal Circuit scrapped the quarter-century old contempt analysis of *KSM Fastening Systems v. H.A. Jones Co.*, 776 F.2d

1522 (Fed.Cir.1985) and came up with a new two-step analysis that in the court’s word clarified the procedure. 646 F.3d at 876-77. This was the second go-round for the Federal Circuit on this issue. Previously, a three-judge panel had affirmed the district court’s application of the contempt analysis set out in *KSM Fastening Systems v. H.A. Jones Co.*, 776 F.2d 1522 (Fed.Cir.1985) and found that the defendant was in contempt of the district court’s permanent injunction order. The defendant petitioned for a rehearing *en banc* and, ultimately, the Federal Circuit reversed itself and held that “the two-step *KSM* analysis is unsound in contempt cases and . . . clarif[ied] the standards governing contempt proceedings in patent infringement cases.” 646 F.3d at 876.

Like *Tivo*, *KSM* also provided a two-step analysis, but the first step was determining whether a contempt proceeding should be allowed. 776 F.2d at 1532. To make that determination, the court would compare the new accused product to the adjudged infringing product to see if there was “more than colorable difference” between the two. If there were not, a contempt proceeding was appropriate, and the court could move on to an infringement analysis. If there were a colorable difference, a contempt proceeding was inappropriate, and a new trial on infringement was necessary. 776 F.2d at 1532. *Tivo* found this unworkable because, as a practical matter, courts don’t determine the propriety of a contempt proceeding before moving on to the merits. Accordingly, *Tivo* “telescope[d] the . . . two-fold *KSM* inquiry into one, eliminating the separate determination whether contempt proceedings were properly initiated.” 646 F.3d at 881. Notwithstanding the “telescoping” of two *KSM* steps into one, the end result in *Tivo* was another, rather similar two-step analysis.

Noting the Supreme Court’s admonition that “contempt ‘is a severe remedy, and should not be resorted to where there is a fair ground of doubt as to the wrongfulness of the defendant’s conduct’” *Tivo*, 646 F.3d at 881-82 (quoting *Cal. Artificial Stone Paving Co. v. Molitor*, 113 U.S.

609, 618 (1885)), the Federal Circuit explained that:

[t]he primary question on contempt should be whether the newly accused product is so different from the product previously found to infringe that it raises “a fair ground of doubt as to the wrongfulness of the defendant's conduct.” The analysis must focus not on differences between randomly chosen features of the product found to infringe in the earlier infringement trial and the newly accused product, but on those aspects of the accused product that were previously alleged to be, and were a basis for, the prior finding of infringement, and the modified features of the newly accused product. Specifically, one should focus on those elements of the adjudged infringing products that the patentee previously contended, and proved, satisfy specific limitations of the asserted claims. Where one or more of those elements previously found to infringe has been modified, or removed, the court must make an inquiry into whether that modification is significant. If those differences between the old and new elements are significant, the newly accused product as a whole shall be deemed more than colorably different from the adjudged infringing one, and the inquiry into whether the newly accused product actually infringes is irrelevant. Contempt is then inappropriate.

646 F.3d at 882. The patentee has the burden of demonstrating that the differences between the infringing product and the new product are no more than colorable. 646 F.3d at 883. The first problem here is, what is the meaning of the phrase “colorable difference”?

While some have found the phrase, “colorably different,” not as helpful as they might have wished, the Federal Circuit and the field of patent law have been fond of it for quite a while. *See, e.g., Farnham v. United States*, 1913 WL 1293, 8 (Ct.Cl. 1913).²² Of course, in previous generations, the court conceded the nebulousness of the phrase. It even woodshedded a patent examiner for using it in *Application of Plank*, 399 F.2d 241 (Cust. & Pat.App. 1968), calling the modifier “colorable” “unsatisfactory . . . as a means of communicating a clear idea” 399 F.2d at 244 n.5. The court went on to say that patent law would “progress toward clarity with greater alacrity if the use of the word is abandoned and rejections are stated in less ambiguous terms.” 399 F.2d at 244 n.5.

²² Of course, it’s in patent statutes as well. *See, e.g.,* 35 USC §289.

Nonetheless, the phrase was often used thereafter, from *Interdent Corp. v. United States*, 1975 WL 339906, 7 (Ct.Cl. 1975) through *Tivo* and most recently in *ePlus, Inc. v. Lawson Software, Inc.*, 789 F.3d 1349, 1354 (Fed.Cir. 2015).

“Colorable” or “colorably” in the context of the degree of changes or differences comes up in the context of not just contempt procedure – as in *KSM* and *Tivo* – but in claim preclusion, *see, e.g.*, *Nystrom v. Trex Co., Inc.*, 580 F.3d 1281, 1285 (Fed.Cir. 2009); *Hallco Mfg. Co., Inc. v. Foster*, 256 F.3d 1290, 1297 (Fed.Cir. 2001), design patent infringement, *see, e.g.*, *Pacific Coast Marine Windshields Ltd. v. Malibu Boats, LLC*, 739 F.3d 694, 701 (Fed.Cir. 2014), and the doctrine of equivalents, which is likely its origin. *See Charles Greiner & Co., Inc. v. Mari-Med Mfg., Inc.*, 962 F.2d 1031, 1036 (Fed.Cir.1992)(citing *Odiorne v. Winkley*, 18 F.Cas. 581, 582 (D.Mass. 1814) (Story, J.)).

In any event, we are told to focus on “those aspects of the accused product that were previously alleged to be, and were a basis for, the prior finding of infringement, and the modified features of the newly accused product.” *Tivo*, 646 F.3d at 882. If one or more of the elements previously found to infringe has been modified or removed, then we must determine whether that modification is significant. *Id.* “The significance of the differences between the two products is much dependent on the nature of the products at issue.” *Id.* As such, a modification that, given the prior art, would be obvious to one skilled in the art would tend to lead to a finding of no colorable difference. *Id.* On the other hand, “[a] nonobvious modification may well result in a finding of more than a colorable difference.” *Id.* at 882-83. But, given the court’s language, neither of these hints seem to be dispositive.

Of course, we must be mindful of *Tivo*'s injunction that "the policy that *legitimate* design-around efforts should always be encouraged as a path to spur further innovation." 646 F.3d at 883. (Emphasis supplied). But, seemingly tidy formulas do not alone decide – nor were they intended to decide – specific cases or determine of their own force who is a winner and who is a loser in a case. *Compare* Decisions in an area of law that seeks to compensate injured plaintiffs while at the same time ensuring future innovation are inherently tricky, and thus perhaps not as precise as many would wish.²³ *Compare* *Lochner v. New York*, 198 U.S. 45, 76 (1905)(Holmes, J., dissenting)(But "general propositions do not decide concrete cases."); *Behrens v. Pelletier*, 516 U.S. 299, 324 (1996)(Breyer, J., dissenting)([M]eaning in law depends upon an understanding of purpose. Law's words, however technical they may sound, are not magic formulas; they must be read in light of their purposes, if we are to avoid essentially arbitrary applications and harmful results.").

III.

THE LITIGATION-CHAPTER II

(wherein the infringers sue the inventor claiming they don't infringe and the inventor claims the infringers are in contempt of the preliminary injunction and are infringing)

The time has come to further look at the changes the R-BOC defendants made in the 2008 couplers – as opposed to – the changes they claim they made. The two are quite different. *Tivo*, 646 F.3d at 883. It is the R-BOC defendants' current position that in 2008 they consciously and

²³ Those who seek to find ready answers in *Tivo* to complicated situations and issues may be making a significant mistake. Many years ago Vonnegut was retained by the New York Times to write a review of the new Random House Dictionary. He wound up saying: "I wonder now what Ernest Hemingway's dictionary looked like, since he got along so well with dinky words that everybody can spell and truly understand." Vonnegut, *The Last Word: Review of The Random House Dictionary of the English Language*, The New York Times, (October 30, 1966).

legitimately redesigned their infringing couplers to implement what they now say are four changes: deletion of the waffle pattern on the exterior of the coupler (which is conceded to be of no consequence); the removal of the sealing surface on the interior in basically the middle of the coupler; the addition of one or two additional interior threads to replace the sealing surface where it had been removed; and a change to the angle of the interior threads.

While we shall discuss these changes individually, they are not necessarily being agreed to nor are they to be considered in isolation. It's important and informative to examine them separately given the odd, to say the least, and suspicious chronology that the changes are claimed to be a part of. We can quickly dispense with the waffle pattern. As the R-BOC defendants conceded at the second trial the waffle pattern was no more than "a cosmetic change" that was uninvolved in any of the claims in the second case. (*Minemyer Chapter II*, Trial Tr. 44-45). So it can't possibly enter into the calculus when the discussion is about changes that are more than "colorably different." *See Tivo*, 646 F.3d at 682 (to be more than colorable, modification must be "significant"); *Proveris Scientific Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1371 (Fed. Cir. 2014)(no colorable difference where it "it is not at all clear from the record whether . . . purported change actually had any effect.").

That leaves three purported changes, but the extension of the threads and removal of the sealing land may be considered together. After the sealing land had been removed in 2008, extension of one or two threads to fill that space seemed logical. And that's what occurred.²⁴ It turns out, when all the evidence is considered, if they happened at all, it was a lot like the production of the part for the robot's spaceship in *Sirens of Titan*. Extending one or two threads was most likely

²⁴ This is quite easy to visualize by looking at the interiors of the cutaways of the couplers that were introduced as exhibits at trial.

happenstance, with no meaningful purpose other than to fill a small eliminated space.²⁵

But, throughout the trial in this case it was difficult, if not impossible, to see what – if anything – prompted the claimed change in the angles of the interior threads, or how the change, if any, came about. It should have been simple, given the overarching importance that the angle of the threads played in this and the previous case, given Claim 12 of Mr. Minemyer’s patent. Yet, counsel for the R-BOC group was unable to provide a succinct explanation of what had occurred. (*Minemyer Chapter II*, Trial Tr. 1392-1424). And the entire story involving the mysterious Mr. Calvacca – who it was claimed without any evidence had made changes to the thread angles – of course never testified in this case.

If one cannot relate, in simple fashion, how it was that the uncomplicated act of extending a few threads on a mold was conceived and carried out, the story is troublesome, to say the least. Truth and simplicity often go hand in hand. *Compare United States v. Klein*, <http://social.excite.co.uk/Fashion-Beauty/Beauty/How-the-prettiest-girl-in-the-world-changed?page=3> U.S. 128, 148 (1871); *Lozman v. City of Riviera Beach, Fla.*, 133 S. Ct. 735, 744 (2013); *Kilgore Corp. v. United States*, 613 F.2d 279, 289 (Ct. Cl. 1979).

Throughout most of the proceedings in this case, the supposed change in the angle of the interior threads could not be persuasively explained, which is why counsel for Mr. Minemyer often

²⁵ While the R-BOC group make much of the fact that I observed that the change in the core inserts wasn’t the result of any miracle but through the human intervention of Mr. Calvacca, (11-cv-8843, Dkt. #190, ¶93), I didn’t mean to validate Mr. Calvacca’s supposed role in this case or that suddenly the explanation for the change in the thread angle was revealed, only that the extension of the threads into the former sealing land had been. The change in the angle of the threads still had no apparent source, and I was certainly not rejecting the position of Mr. Minemyer’s counsel. It is an inescapable fact that Mr. Calvacca never testified and that no documents from him or his claimed company were produced in this case or introduced by anyone.

derisively described the supposed change as a “Christmas miracle” – the new thread angle claimed to have come into being around December 2008 (or 2011) – it was never clear. And Mr. Lundeen could never persuasively explain when the change was made. It was said by Mr. Minemyer’s counsel, again derisively, that it must have been the work of the “mold fairy.” (Perhaps it was Mr. Calvacca, who made the changes – which is what the Lundeen group argued – but he never testified and has disappeared and cannot be found, and who, in the quaint language of R-BOC’s counsel, may “be on the lam.”)

Over the course of both of these cases, the R-BOC defendants have characterized the changes they claimed to have made to their infringing couplers in varied ways. Initially, during the first case, in February 2012, the R-BOC defendants had this to say about their changes to which they alluded in a motion *in limine* they filed on November 29, 2010:

In addition to having “circumferential bands,” the Redesign also has a different “internal” construction than the old B&C coupler. Specifically, as shown in the comparison on the next page below, unlike the accused old design that Plaintiff identified as Exhibit C of his Infringement Contentions, the B&C Redesign does not have the alleged “sealing surface” element Plaintiff and his expert witness, Mr. Kaiser, have identified as being part of “each” accused B&C coupler.

(07-cv-1763, Dkt. #338, at 10).

There were no other changes asserted. Not a word about interior thread angles! Indeed, Mr. Lundeen, who knew more than anyone and attended every one of the countless pretrial proceedings in this case faithfully and took the proceedings “very seriously,” (Tr. 403, 404),²⁶ testified at the first

²⁶ So faithful in his attendance was Mr. Lundeen that he even came to court on February 9, 2017 at 9:00 a.m. apparently on a motion made by his lawyers to cite additional authority in the form of one Northern District of Illinois case. [Dkt. #212, 213]. The motion had been granted on February 6, 2017 [Dkt. #214]. but Mr. Lundeen, apparently unaware of that order, appeared anyway. Mr. Lundeen’s preoccupation with this case is at odds, to say the least, with his devil-may-care attitude towards the “redesign” that the evidence continue...

trial in February 2012 that there were no changes made to the angles of the interior threads (and this *after* he had the Nelson report which purported to show changes in thread angles. (Tr. 20-21;1520)). He would only claim that the interior thread angle was changed after the first trial and then only on one model. (Tr. 414). At the first trial he told the jury a very different story. Indeed, as we have said, in the instant trial he acknowledged having told the jury in the first trial that there were no changes to the thread angles as part of the 2008 redesign. And no one was more knowledgeable than he. And he would have been the one to have approved and known about the changes in the 2008 redesign.

The two changes – the circumferential bands that created a waffle pattern on the surface of the coupler (which is now conceded to be inconsequential and irrelevant) and the removal of the interior sealing surface were the only reasons given by the R-BOC defendants that “the Redesign ha[d] a different construction from the coupler design accused” That was according to the November 2010 motion in limine of the R-BOC defendants’ “To Bar Plaintiff From Introducing Evidence of Alleged Infringement by R-BOC’s 2008 Redesigned Coupler.” (07-cv-1763, Dkt. #338, at 12).

The purported changes the R-BOC defendants made to their infringing couplers in 2008 came up again about two years later. On November 25, 2011, they filed their declaratory judgment action asking for a ruling that their 2008 couplers do not infringe Mr. Minemyer’s ‘726 patent. Again, the only two reasons the R-BOC defendants posited for non-infringement were the waffle pattern and the removal of the sealing land. (11-cv-8433, Dkt. #1, ¶¶ 15, 16). And they added a count claiming the patent was invalid, but, inexplicably and erroneously were not specific as to why. (11-cv-8433,

²⁶...continue showed in this case.

Dkt. #1, ¶¶ 30-33). Indeed, the Complaint, while extensive in its discussion of the meaningless change in the exterior pattern of the coupler, said nothing about a supposed change in the interior thread angles.

Right after that, in December 2011 – a few months before the first trial in February 2012 – the R-BOC defendants would insist – but not tell anyone – that they had the angles on their couplers measured and rather than being close to 80 degrees as they had been, after the removal of the sealing surface and the addition of one or two threads to occupy that area, all but four models measured in the 74 to 76 degree range. But for some unknown reason, they kept this all to themselves – for nearly three more years until 2014.²⁷

Failure to mention something under circumstances when a reasonable person would do so is a factor that courts have long approved as an organon for measuring credibility. It appears in various ways. *See Georgia v. South Carolina*, 497 U.S. 376, 389 (1990); *Doyle v. Ohio*, 426 U.S. 610, 621 (1976); 3A Wigmore, *Evidence in Trials at Common Law* § 1042 at 1058 (James H. Chadbourn Rev. 1970); *Jenkins v. Anderson*, 447 U.S. 231, 239 (1980); *AZ v. Shinseki*, 731 F.3d 1303, 1320-1321 (Fed.Cir. 2013). The concept often appears under the rubric impeachment by omission. *United States v. Useni*, 516 F.3d 634, 652 (7th Cir.2008); *United States v. Fonville*, 422 Fed.Appx. 473, 482-483 (6th Cir. 2011). The name counts for little. The principle is the same.

It is certainly a far-fetched tale, and those are not only difficult for the witnesses to keep straight, but factfinders, be they judges or juries, are seldom persuaded by them and are free to reject them as contrivances. Indeed, that which makes no sense to common understanding is often rejected

²⁷ It bears repeating that the December 2011 Complaint against Mr. Minemyer by the R-BOC defendants did not mention or spell out the supposed changes to the thread angles which are now claimed to be part of the 2008 redesign.

– and rightly so. *See, e.g., Anderson v. Bessemer City*, 470 U.S. 564, 575 (1985) ("the story itself may be so internally inconsistent or implausible on its face that a reasonable factfinders would not credit it."); *Edwards v. Snyder*, 478 F.3d 827 (7th Cir. 2007); *United States v. Hajda*, 135 F.3d 439, 444-445 (7th Cir. 1998). Mr. Lundeen's story was severely impeached by his inconsistency and silence to say nothing of his admissions in the first trial which played so significant a role here.

Mr. Lundeen's credibility was further eroded by his demeanor. Demeanor counts, *Anderson v. Bessemer City*, 470 U.S. 564, 575 (1985) ("When findings are based on determinations regarding the credibility of witnesses, Rule 52(a) demands even greater deference to the trial court's findings; for only the trial judge can be aware of the variations in demeanor and tone of voice that bear so heavily on the listener's understanding of and belief in what is said."); *United States v. Schiro*, 679 F.3d 521, 532 (7th Cir. 2012); *Indiana Metal Products v. NLRB*, 442 F.2d 46 (7th Cir. 1971); *United States v. Smith*, 668 F.3d 427, 430 (7th Cir. 2012).

Mr. Lundeen's demeanor in this case was evasive and unconvincing. He was clearly uncomfortable as he told the tale of how the alleged changes in the angle of the interior threads was part of the 2008 redesign. But, as we have said, credibility, involves more than demeanor, *Thompson v. Keohane*, 516 U.S. 99, 111 (1995), and disbelief of a witness is not a substitute for proof. *Moore v. Chesapeake & O. Ry. Co.*, 340 U.S. 573, 576 (1951); *United States v. Zeigler*, 994 F.2d 845 (D.C.Cir. 1993). Here Lundeen's testimony about the angle changes was implausible. *Tijani v. Holder*, 628 F.3d 1071, 1089 (9th Cir. 2010). The implausibility of testimony, the shifting and vacillating explanations for conduct, the inconsistencies between testimony and objective evidence, and the internal inconsistencies within testimony can be so great that no reasonable fact-finder would credit the testimony. *See United States v. Bradford*, 499 F.3d 910, 920-21 (8th

Cir.2007); *Pinpoint, Inc. v. Amazon.Com, Inc.*, 347 F.Supp.2d 579, 583 (N.D.Ill.2004) (Posner, J.)(sitting by designation). Cf. *Miller-El v. Dretke*, 545 U.S. 231, 237 (2005); *NLRB v. Dorothy Shamrock Coal Co.*, 833 F.2d 1263, 1268 (7th Cir.1987). That is the situation with Mr. Lundeen's attempts to explain how the interior threads of the couplers were different and how they came to be changed.

While instant case was getting under way, Mr. Lundeen testified at the trial in the first case on February 10, 2012, that the internal angles of the threads, *were not* changed, not from 2008 through the date he testified. (*Minemyer Chapter I*, Trial Tr. 996 (Dkt. #489)).²⁸ Things were even more troublesome by the time of the second trial. Mr. Lundeen claimed that modifications to the threads were done *after* the trial, which would have been sometime in 2012. (*Minemyer Chapter II*, Trial Tr. 377). But shortly thereafter, he said that "when the redesign was done in '08, all the threads were changed from 80 degrees to 75 degrees on some of them." (*Minemyer Chapter II*, Trial Tr. 379). Obviously, this directly contradicted what he swore to in the first trial, and what he had said a few moments earlier. And it contradicted the testimony of his fellow defendant, Ed Krajecki, who testified that no threads were changed in any 2008 redesign, and he was never told to change the angles of any threads by Lundeen or anyone else. (*Minemyer Chapter II*, Trial Tr. 721-22, 737; 1523).

But it got even farther fetched, because, as it turns out, the changes in 2008 were, apparently, the result of magic, as Mr. Lundeen testified a few minutes later:

Q. You did *not* request in 2008 that the angle of any of the threads be changed,

²⁸ While Minemyer's counsel refers to this significant piece of testimony, he cites to a completely different portion of the transcript – and from a different day of the trial – where Mr. Minemyer is testifying. (11-cv-8433, Dkt. #180, ¶ 48, citing at 245-48, 268-69).

correct?

A. Correct.

Q. Now, your testimony that you said a minute ago is that somehow, some way, *which you are not aware of*, the angles on some of those threads changed?

A. That's correct.

Q. Correct?

A. Correct.

(*Minemyer Chapter II*, Trial Tr. 384-85)(emphasis supplied).

Indeed, Mr. Minemyer shortly thereafter again claimed that he never asked that the thread angle be changed. (Tr. 392). It just happened, and Mr. Lundeen said that he found out when those aforementioned measurements were taken in December 2011. But again, mum was the word on that. And not surprisingly. And, it is more than a fair inference that no one changes thread angles on a coupler (or any other device) without being told to do so. Apart from the question of authority, there is the question of cost and who is to foot the bill. Not surprisingly, there was no documentation reflecting a request for a change in the angle of the interior threads, what the changed angle was to be, or the cost that would be involved.

Those December 2011 measurements pose additional problems for the R-BOC defendants. Before the first trial, Mr. Lundeen engaged Mr. David Nelson of Nel Pretech to perform measurements of the angles of the threads they had added on their couplers at that time – *i.e.* the thread closest to the center on both ends. Mr. Nelson was given 10 couplers by Mr. Lundeen. Using a CT scanner, he measured them. (Tr. 962)(Mr. Lundeen would falsely claim during his testimony in the instant case that he did not know about any angle changes until after the first trial in 2012

when Mr. Nelson measured the cores with his CT scanner, all but four of which measured close to 75 degrees, requiring change therefore to the 80 degree cores. (Tr. 20;423; 962; 1189).²⁹ Nelson had in fact measured the couplers before the first trial and Mr. Lundeen had the report! It was not turned over to the defense until much later after the trial ended. (Tr. 252).

Mr. Nelson said his December 2011 measurements of the cores – he did not measure the actual couplers – varied from 73.96 degrees to almost 80 degrees, with one measuring 92.05 degrees (which he insisted was an accurate measurement, despite his being forced by Mr. Lundeen to change that measurement). In fact, many of the measurements were almost 80 degrees with the remaining measurements reflecting angles in excess of 75 degrees.³⁰ (It depended, as the evidence showed, on where on the thread and on which threads the measurement was taken). As we discuss in greater detail, Mr. Lundeen prevailed upon Mr. Nelson to change one of the measurements in his report prepared for the first trial. (Of course only Mr. Nelson and Mr. Lundeen know with certainty the

²⁹ This contrasted rather sharply with Mr. Lundeen's (and everyone else on the R-BOC side) extended silence on the matter of thread angle changes. It contrasted rather sharply with the R-BOC lawyers' attempt to say that significant thread angle changes intentionally resulted from the redesign in 2008 which involved the removal of the sealing land and the extension of one or two threads to fill up the now empty space. (Tr. 41-42). In other words, it was the lawyer's contention that the changes, despite Mr. Lundeen's contrary admissions, actually trace their lineage to 2008.

But statements of lawyers are not evidence and do not count. *United States v. Babul*, 476 F.3d.498 (7th Cir. 2007); *Alioto v. Marshall Field's & Co.*, 77 F.3d 934, 935 (7th Cir. 1996). Nothing is simpler than to make an unsubstantiated allegation. *Parko v. Shell Oil*, 739 F.3d 1083, 1086 (7th Cir. 2014). And so, Mr. Lundeen would try to match his testimony to his lawyer's theory by inconsistently claiming – despite his admissions that he had no idea about any angle changes in 2008 – that when the cores were measured by Mr. Nelson at the time of the first trial, all but four measured close to 75 degrees and therefore, the only changes had to be to the handful of 80 degree cores. (Tr. 1185-89). Of course, he could never account for his multi-year silence on the matter of alleged changes to the thread angles. Equally inexplicable was the silence of him and his lawyers regarding thread angles in documents file din this court.

³⁰ The claimed results for the couplers were: 73.96 & 75.97; 74.76 & 75.52; 78.59 & 79.11; 76.19 & 77.45; 75.64 & 75.15; 75.82 & 76.10; 76.08 & 79.89; 74.01 & 73.7; 79.92 & 80.06; 78.12 & 92.05 (DX 711)).

extent of the changes, but for present purposes we accept this portion of Mr. Nelson's testimony). The report, which was required to be turned over in discovery in its unadulterated form in the first case, was not, according to Mr. Minemyer's counsel. (Tr. 1550-51). *See infra* at 47; *Minemyer Chapter II*, Trial Tr. 258 *et. seq.*; 418-19. Mr. Lundeen claimed not to know if the doctored report was turned over in discovery to Mr. Minemyer's lawyers before the first trial. (Tr. 260). He admitted that he did not say at the first trial anything about the angles of the threads being a part of the redesign or claim that the angles had been changed. (Tr. 262). Yet, his admitted silence (both in and out of court) on a matter so critical to the future of him, his wife, and their company, was hopelessly inconsistent with his story that he was greatly anguished by Mr. Minemyer's initial lawsuit and how disturbed he was by it and his desire to do all that was necessary to avoid further litigation. *See supra* at 23.

Mr. Lundeen said he convinced Mr. Nelson to edit the report because he was "concerned" with a 92 degree measurement. (*Minemyer Chapter II*, Trial Tr. 259, 981-84). Mr. Nelson insisted that the measurement was accurate, (Tr. 415), but admitted he had measured a different angle, farther from the center, thereby allowing him to change the measurement to 79.88 degrees. (*Minemyer Chapter II*, Trial Tr. 983-85; DX-712; DX-713). This pleased Mr. Lundeen, and ended up being in the report the R-BOC defendants produced in this case.³¹ The R-BOC defendants kept the initial unedited report – and the fact that they had ordered it edited – from Mr. Minemyer and his counsel in the first case.

³¹ Mr. Minemyer's lawyer, in argument in this case, denied that Mr. Minemyer and his counsel had the undoctored report in the first case. (Tr. 1549-51).

On cross-examination, Mr. Nelson admitted that his measurement of thread one was accurate at 78.12 degrees, but that he had changed his (accurate) measurement of 92.05 degrees for thread two to 79.88, at Mr. Lundeen's instruction. He acknowledged that his report did not inform the reader that there had been a remeasurement or of Mr. Lundeen's demand that the report be changed. (Tr. 1028 *et. seq.*). He tried to say that his multiple measurements of the same angle – actually he had measured the angle twice and even taken pictures – were accurate (Tr. 1062, 1070) but not acceptable to Mr. Lundeen. He admitted that this was his first job for Mr. Lundeen (Tr. 1062). He conceded that he could have erroneous measurements even though he had initially checked them. (Tr. 1071).

More than a year after the first trial in February 2012 and two years after the December 2011 measurements were taken by Mr. Nelson, the R-BOC defendants filed their amended complaint in this case on October 2, 2013. The Amended Complaint discussed in detail the changes that supposedly had been made to the coupler and again it was asserted that *only two changes* had been made to their infringing couplers: addition of a waffle pattern and removal of the sealing land, both of which are described and discussed at length in the Amended Complaint. (11-cv-8433, Dkt. #80, ¶¶ 20-22). Again, no mention was made of a change to the angles of the interior threads. It should be noted that this document, like the original Complaint filed in this case in December 2011, had been authored and filed by the same experienced and knowledgeable patent lawyers who had represented the Lundeen in the first trial and in the instant case.³²

³² They also wrote and filed the initial Complaint in this case in late December 2011, which also made no mention of a change in the angles of the interior threads.

So, in the four years after the R-BOC defendants supposedly redesigned their couplers, whenever it came time for them to describe what changes they made, they were consistent that their redesign involved no more than two changes, the addition of a (meaningless) waffle pattern on the outside and the removal of the sealing land on the inside. They stuck to these two changes as being the only ones they made even though, in each instance and at any point in the proceedings, it would have behooved them to assert as many legitimate changes as possible. That is, it would have behooved them to do so unless they hadn't made any such changes beyond those mentioned!

Then, like a bolt from the blue, in July of 2014, the R-BOC defendants had an epiphany. In addition to adding a waffle pattern and dispensing with a sealing land, they "realized" they also changed the angle of the interior threads. (11-cv-8433, Dkt. #129, at 3). Or so they said. They announced this for the first time in over four and a half years when they filed their motion for summary judgment. It was an odd thing to have "slipped their minds" for so long. The angle of the threads had been a hotly disputed issue for the entirety of the first case! Indeed, as we have noted, Mr. Lundeen told the jury at the first trial in early 2012 that the alleged thread angle change had not been part of the 2008 redesign. (Tr. 268).

The R-BOC defendants had filed at least three motions for summary judgment about it (sometimes disguising these as motions *in limine*). But, finally, as of July 2014, the R-BOC defendants numbered the changes they made as four: waffle pattern, removal of sealing land, replacement of sealing land with continued threads, and change to the angle of the threads. In short, six years would pass without a word from the R-BOC defendants and their lawyers informing the court and Mr. Minemyer that there had been a "redesign" that included the angle of the interior

threads.³³

The R-BOC group seem to want to brush all this off as no more than circumstantial evidence regarding whether changes were actually made. The argument rather badly misapprehends the nature of evidence in general and the force of circumstantial evidence in particular. Indeed, the Supreme Court has said that circumstantial evidence can be far more certain, satisfying, and persuasive than direct evidence. *Michalic v. Cleveland Tankers, Inc.*, 364 U.S. 325, 330 (1960); *Frolow v. Wilson Sporting Goods Co.*, 710 F.3d 1303, 1310 (Fed. Cir. 2013). See also *Desert Palace, Inc. v. Costa*, 539 U.S. 90, 100 (2003). One is reminded of the Seventh Circuit’s comment in *Branson v. Gramly*, 855 F.2d 1256, 1258 (7th Cir. 1988): “The evidence was circumstantial, but what circumstances!”³⁴

In short, Mr. Lundein’s failure to mention the angle changes for years when it would have counted and would have been natural for him to have done so, especially in pleadings in this case, his failure ever to tell Verizon and others about those claimed changes despite contractual obligations that he do so, his admissions, and his glaring inconsistencies, are telling and lethal to his present exculpatory story. And that’s not all there is. At the very least, the failure to mention angle changes in pleadings are evidentiary admissions that none were made beyond the changes enumerated. *Flannery v. Recording Industry Ass’n of America*, 354 F.3d 632, 640 (7th Cir. 2004). Here, the pleadings were not withdrawn or superseded by amended pleadings. And certainly, the failure to mention so critical a matter as thread angle changes carries its own evidentiary weight and

³³ Actually, it would have been helpful had Mr. Lundein been informed.

³⁴ Commenting on the dismissal of evidence in a certain famous murder trial as circumstantial, Vonnegut quipped, “[t]hey claimed the evidence was circumstantial, but that’s because he didn’t bring the heads home [after he killed them].” The Best Jokes are Dangerous: An Interview With Kurt Vonnegut, McSweeney’s, Sept. 17, 2002 (<http://www.mcsweeney.net/articles/the-best-jokes-are-dangerous-an-interview-with-kurt-vonnegut-part-two>).

bodes poorly for the R-BOC defendants.

The R-BOC defendants' most current attempt at self-exoneration came as a surprise in a motion for summary judgment.³⁵ These failures are (or at least can be viewed as) judicial admissions that no changes were made to the threads. *Robinson v. McNeil Consumer Healthcare*, 615 F.3d 861, 872 (7th Cir. 2010) ("A judicial admission is a statement, normally in a pleading, that negates a factual claim that the party making the statement might have made or considered making."). Given the issues in their declaratory judgment, the R-BOC defendants' consistent failure to advance so much as a suggestion that any changes were made to the angles of the threads was any lack of any claim case was "deliberate, clear and unambiguous." *Id.*

But, the R-BOC defendants are sunk in either event. They failed to respond to this obvious problem, which was raised by Mr. Minemyer (11-cv-8433, Dkt. # 188, at 19), in their responsive post-trial briefs. (11-cv-8433, Dkt. # 190, 191). That, it could be argued, constitutes a waiver of any argument they could have made on this point. Failure to respond to an argument generally results in waiver. *United States v. Zuniga-Galeana*, 799 F.3d 801, 803 (7th Cir. 2015); *Bonte v. U.S. Bank, N.A.*, 624 F.3d 461, 466 (7th Cir. 2010); *United States v. Vrdolyak*, 593 F.3d 676, 691 (7th Cir. 2010). So it goes.

But, we need not rely on the concept of waiver as there is more dirt to shovel on the coffin of the alleged changes to the thread angles. There is testimony, principally from Mr. Lundeen, that no changes were made to the angles from at least 2008 through February 2012. (*Minemyer Chapter II*, Trial Tr. 245-49). If Mr. Lundeen's testimony does not constitute the admission of a party

³⁵ In at least some instances, pleadings are superseded by motions for summary judgment, as where a litigant abandons a claim made in pleadings in a summary judgment proceeding. See *Pactiv Corp. v. Rupert*, 724 F.3d 999, 1001-02 (7th Cir. 2013). That's not what occurred here, of course.

opponent, it is nonetheless cogent evidence that nothing was done to the thread angles. As with their failure to mention any changes, the R-BOC defendants also forego any response to any of this testimony that no changes were made to the angles from at least 2008 through February 2012. (11-cv-8433, Dkt. # 190, 191). As before, that is a waiver of any argument they might have made on this point.

Moving on to the extension of the threads into the sealing land, we find that the evidence is nearly as odd as the evidence pertaining to the angles of the threads. The R-BOC defendants are certainly vague, or circumspect, about how this purported redesign came about. They filed a 499-paragraph statement of proposed findings of fact. Of those paragraphs, only a few – perhaps seven or eight – even arguably touched on any “redesign” process that might have occurred in 2008, and they certainly don’t recount it. (11-cv-8843, Dkt. # 190, ¶¶ 93, 94, 96, 102, 108-110). An actual redesign – as opposed to some after-the-fact, illegitimate claim of redesign used to mask continued infringement, *Tivo*, 646 F.3d at 883 – would have been a pointed and considered event that left a distinct trail and explanation from the redesigners and those who ordered it. Otherwise, it really does seem we are talking about something more akin to shearing a four-inch piece of metal off of a coil in anger.

But, significantly, there’s no trail here – no emails, memos, nothing to demonstrate that there was some thought followed by a resolve to act and to implement a thoughtful and purposeful plan that included changes to the thread angles. Certainly there was none in 2008 that included changes to the thread angles as Mr. Lundein admitted to the jury in the first case, although he would later

change his story. (Tr. 247, 261-62).³⁶ The evidence here was more than sufficient to demonstrate that there was no “redesign” in 2008 (in the sense the Federal Circuit uses the term and people acting in good faith purposefully conduct themselves) that included changes to the thread angles. The first mention the R-BOC defendants make of anything remotely connected to a redesign in their proposed findings of fact in this case comes at paragraph 93 (of a several hundred paragraph submission), where the R-BOC defendants tell us that the modifications to the core inserts used to manufacture the redesigns began in September 2008, and that one Jerry Calvacca and his company, Freedom Tool, performed the initial modifications of “including the cutting of additional threads in place of the ‘sealing space.’” (11-cv-8843, Dkt. # 190, ¶ 93). Counsel for the R-BOC defendants tells us that Mr. Calvacca “was the Christmas miracle, mold fairy guy.” (*Minemyer Chapter II*, Trial Tr. 102). And since he never testified and was supposedly unavailable, the R-BOC defendants could attribute anything to him that they believed helped their case. And that is what happened.

The R-BOC defendants have no admissible proof of any involvement in this matter by Calvacca or his company, Freedom Tool. (*Minemyer Chapter II*, Trial Tr. 104, 1419, 1421, 1523). The lawyers tell us, conveniently for them, that Freedom Tool went out of business and Mr. Calvacca has disappeared. (*Minemyer Chapter II*, Trial Tr. 1418-19, *et seq.*). In counsel’s words, he “went on the lam or something.” (*Minemyer Chapter II*, Trial Tr. 138). But statements of lawyers are not

³⁶ In this case, Mr. Lundein’s lawyer admitted that by June of 2012, Mr. Lundein had not requested anybody to change the angularity of the threads of some 38 cores. (Tr. 1411, 1414). He contended, however, that unbeknownst to Mr. Lundein, thread angles were changed on certain cores in November 2008 by Mr. Calvacca even though Lundein “did not purposefully ask that the angles of any of the core inserts be changed.” (Tr. 1410). *See, e.g.*, DXN686. He claimed that in 2011, Lundein “consciously made the decision to change” thread angles. (Tr. 1410). But Lundein’s silence over the course of many years on the supposed changes to thread angles was never satisfactorily explained. Throughout the case, the court struggled to get the R-BOC lawyer to explain what happened in clear and succinct terms. That proved to be a vain effort. *See, e.g.*, Tr. 1404, *et. seq.*

admissible evidence.

The R-BOC defendants provided an invoice from October 4, 2008, not from Mr. Calvacca or Freedom Tool – there were no documents from that entity (Tr. 1523)), but from fellow defendant, Precision Custom Molders to R-BOC d/b/a “B&C Distribution.” It mentions *extension* of the existing threads and shut off on four molds (2.375 cores) and *extension* of the threads on another four molds. (2.348 cores). (11-cv-8843, Dkt. # 190, ¶ 93; PX 350-009). They do not mention a recutting of the existing threads or changes to the angle of the threads. There is no mention of reworking or changing the interior thread angles, and there is an obvious difference between extending a thread and changing the angles of the interior threads. Moreover, the revisions were limited to the “2 INCH COUPLER MOLD.” (11-cv-8843, Dkt. # 190, ¶ 93; PX 350-009). This says nothing about where any redesign came from or how it came about or when. It certainly does not indicate a wholesale redesign of the angle of the interior threads.³⁷

There are additional invoices from succeeding dates going into early 2009 covering extensions made to the threads on other sizes of couplers. (11-cv-8843, Dkt. # 190, ¶¶ 94, 96 & n.

³⁷ The October 4, 2008 invoice from Precision Custom Molders reflects that the threads were to be extended on some models. PX350. It was not until April 2012 that an invoice from Precision Custom Molders to B&C Distribution reflects that threads on some models were to be ground off and new threads recut on those models. DXN729. In June 2012, a WZ Tool Company invoice reflects that it was told on two items to make a bushing and recut threads. DXN727. The toolmaker was given no thread angle for the reworked part.

It is at least a reasonable inference that the toolmaker at WZ Tool would have used the same thread angle that was on the original he received. There would have been no reason for him to have done otherwise. He would not have changed the thread angle unless he was so instructed. As Mr. Storace testified for the R-BOC group, “[n]o one would accept a part at 75 degrees if it was designed to be 80.” (*Minemyer Chapter II*, Trial Tr. 1091). *See infra* at 54. A toolmaker would have no reason – and would not – decide to change a thread angle which had been chosen by the owner of the part for one he arbitrarily chose. In sum, a toolmaker would not know whether his chosen thread angle would cause the product to function differently than the angle already on the part. And so he wouldn’t have changed the thread angle when he recut the threads.

15 & 16). None of them mention the phantom, Jerry Calvacca. These represent 36 of a total of 50 molds. Modification of the remaining molds was not completed, piece by piece, until March 2012. (11-cv-8843, Dkt. # 190, ¶¶ 96-103). So, the R-BOC defendants continued to make and sell infringing couplers throughout the period between 2008 – when they claim the “redesign” supposedly happened – and March 2012. (*Minemyer Chapter II*, Trial Tr. 785). At that time, the modification was “complete.”

Exit Keyser Soze or Jerry Calvacca or whoever, and enter Walter Zdaniewicz and his company, WZ Tool. In November of 2014, Mr. Zdaniewicz testified that he “thought” he did the modification work for Ed Krajecki “a couple years ago.” (*Minemyer Chapter II*, Trial Tr. 913). He confirmed that he didn’t do any work until 2012. (*Minemyer Chapter II*, Trial Tr. 952). Indeed, the first work he did appears to have been March 30, 2012 (*Minemyer Chapter II*, Trial Tr. 952; DXN 726-02) – after the jury trial in 2012. Mr. Zdaniewicz further testified that Mr. Krajecki “came in and said he wanted to change the angle of the threads.” (*Minemyer Chapter II*, Trial Tr. 920). According to Mr. Krajecki, however, that didn’t happen. He testified that he “did not ask the tool maker to change any angles of the threads on the rework.” (*Minemyer Chapter II*, Trial Tr. 739-40). He indicated that the angles of the threads was of no interest to him. (*Minemyer Chapter II*, Trial Tr. 753). Not only was he believable, but common sense dictates that absent instructions from a responsible individual no one would undertake on his own to change the interior thread angles. How would he know what the new angles should be or whether the amount that would be entailed would be acceptable to the person on whose behalf changes were to be made. The answer is obvious, and the R-BOC group offered no believable evidence to support the argument.

There certainly wasn't much of a plan, according to Mr. Zdaniewicz, because Mr. Krajecki "didn't have any drawings" so they had to take all their dimensions off the existing molds. (*Minemyer Chapter II*, Trial Tr. 913). He said they would put a sleeve over the existing threads, fasten it by heating it and welding, then recut the threads on that blank. (*Minemyer Chapter II*, Trial Tr. 920-21). But to what degree? Neither he nor anyone else would know what the appropriate angle should be unless they were provided with the new angle. As one of the R-BOC experts testified, one does not arbitrarily change thread angles without specific input from the owner. *See supra* at n. 37.

In other words, no one would, on their own, simply pick a measurement at random that varied from the thread angle on the original. And, there was no proof that was contrary to this rather elemental and obvious fact. At one point, Mr. Zdaniewicz testified that the original threads were under the sleeve. (*Minemyer Chapter II*, Trial Tr. 921). At another, he said they were gone – they were cut off before the sleeve was put on. (*Minemyer Chapter II*, Trial Tr. 922-23). But through page after page of testimony in the trial transcript – in fact nearly 40 pages – Mr. Zdaniewicz was never specific about what exactly Mr. Krajecki ordered. (*Minemyer Chapter II*, Trial Tr. 908-46). Finally, he stated that Mr. Krajecki told him he "wanted them around 15 degrees [75 degrees]." (*Minemyer Chapter II*, Trial Tr. 946). Of course, we already know Mr. Krajecki denied having ordered any such changes. (*Minemyer Chapter II*, Trial Tr. 739-40). But, in any event, Mr. Zdaniewicz's testimony has nothing to do with the changes the R-BOC defendants claim were made from 2008 to 2012 – a claim I reject. We still don't know what was going on in those four years, other than no changes were made to the thread angles.

In April of 2012, just after the completion of the first trial, Mr. Nelson measured the two threads closest to the center stop on 10 different sized couplers, 5 couplers of each size. He said

those threads measured in the range of 72.49 to 76.46, with most in the 74 to 76 degree range. (DX-715). Of course, the fact that his measurements were dated April 30, 2012, and Mr. Zdaniewicz shipped his first set of modified core inserts on March 30, 2012, calls into question whether couplers had already been produced by those molds in time to be shipped to Mr. Nelson, measured and returned by April 30th. And even if every single angle he measured was exactly 75 degrees, that would still be only an extremely small sampling of all the angles on each coupler.³⁸

Mold modifications were purportedly complete by March 2012. Or were they? In January 2014, the R-BOC defendants informed the court and their opponent that they discovered no changes were made to two sets of molds. (07-cv-1763, Dkt. # 594, PX 325). All this, despite the fact that, on November 25, 2011, the R-BOC defendants had filed a sworn complaint in Federal Court that they had changed all the molds, extended the threads on all their couplers and that, therefore, none of their “redesigned” couplers infringed. No claim was made that the angle of the interior threads was redesigned. That silence was as curious as it was unhelpful.

As these types of revelations mounted at trial, and as they are recounted here, it is quite obvious that there is a global credibility problem with the R-BOC defendant’s case. As a result, it is difficult if not impossible to conclude that there was any “redesign” or “design-around” because, certainly, modifications done with an eye toward getting around the claims of a patent – and that included Claim 12 of the Minemyer patent – would have been carefully done, and would have taken place on all the sizes of the accused devices within a brief time and not in dribs and drabs over the course of several months. And certainly, the people coming up with the idea for those modifications

³⁸ Mr. Lundein said that prior to the measurement he did not know anything about any angle changes. (Tr. 423).

and ordering would have been aware of them and knowledgeable – and frank – about when they were implemented. So it goes.

The R-BOC defendants invited the court to consider cross sections of their infringing couplers and of their 2008 “redesigns” of those couplers. (*See, e.g.*, 11-cv-8843, Dkt. # 190, ¶¶254-261). They claim that such inspection will make clear the “significant” differences between the infringing models and the “redesign” models. But it does not. Viewing the extension of the threads on the exhibits the R-BOC defendants deposited with the court doesn’t do much to change one’s mind about this case. We have 16 cut away, pre- and post-2008 models. In 10 of those 16, the change amounts to nothing more than the addition of *one, or at most two*, threads moving toward the center “dead stop” of the coupler. (*Compare* DXN 500b & 500a³⁹; 501b & 517; 507b & 523; 508b & 524; 509b & 525; 510b & 526; 511b & 527, 512b & 528; 513b & 528; and 515b & 530). That is not, as the R-BOC defendants maintain, “significantly more threads” or a “significantly longer” longitudinal thread. Depending on the observer, comparison of these examples might not reveal any change at all.

There are 6 models in which the changes are noticeable – in other words, where more than a couple of threads are added. (*Compare* 502b & 518; 503b & 519; 504b & 520; 505b & 521; 506b & 522; and 514b & 529). In these instances, the work appears almost haphazard. These examples all end up being lopsided with noticeably more threads on one end of the coupler than the other, and the center “dead stop” (which was never removed) being offset toward one end by about 5/16 of an inch. At trial, counsel for the R-BOC defendants focused on one of these examples – 506b and 522

³⁹ The “mate” for DXN 500b is missing from the set deposited with the court, but the comparison can be accomplish with measurement of the complete, original model, 500a.

– as representative of the changes the R-BOC defendants made to the couplers. (*Minemyer Chapter II*, Trial Tr. 49). Of course, we now know that wasn’t exactly accurate, because the changes made varied from coupler to coupler.

Counsel also claimed the fact that the addition of the one or two additional threads – he was careful not to emphasize the number of threads involved – increased “pull-out strength.” (*Minemyer Chapter II*, Trial Tr. 48). That suggests that the change was made purposefully and pursuant to design with that end in mind. But if additional “pull-out strength” was really the goal, why would multiple additional threads be added on just one side of the coupler? In fact, as counsel for the R-BOC defendants explained, since conduit in the field is inserted at both ends, and the coupler is turned, once the conduit on the shorter end hits the off-center stop, the conduit on the longer end stops as well, and stops short of the off-center stop. (*Minemyer Chapter II*, Trial Tr. 50-51). So, the conduit on the longer end doesn’t even “use” the additional threads so there is no increased pull-out strength on that end either. Counsel seemed to suggest that, with these off-set couplers, workers would have to change their routine and insert the conduits one at a time, starting the conduit at the longer end first. (*Minemyer Chapter II*, Trial Tr. 51).

Not only was there no evidence to support the claim, the evidence was to the contrary. As noted at trial, no one would know that in the field, and no one was told that the method of operation or installation should be changed at all, and Mr. Lundein acknowledged that he was still selling the couplers today. Counsel for R-BOC first agreed that “no one would pick th[at] up . . . [or] could would know . . .” (*Minemyer Chapter II*, Trial Tr. 51, 310-16). Perhaps realizing what this meant, counsel then contradicted himself, saying, “no, in the field they would know because they’re instructed you’ve got a disparate length . . .” (*Minemyer Chapter II*, Trial Tr. 51-52). But the

evidence was clear that no notice or instructions were ever given to customers or workers who installed cable in the field that required any changes in the method of installation, and the R-BOC group never offered a shred of evidence to the contrary. *See* discussion *infra* at 44.

The R-BOC defendants assert that 10 of the 16 models have offset dead stops and disparate lengths and number of teeth on each side. (11-cv-8433, Dkt. # 190). In the case of these four models (DXN 508b & 524; 509b & 525; 510b & 526; and 511b & 527), the offset is either not, or only barely, observable to the naked eye. Measurement of these examples indicates that the offsets are no more than 1/16 inch, with the exception of 510b which is about 1/8 inch. Again, this is not “significant” contrary to the R-BOC defendants’ characterization. In terms of counting the added threads in these examples – which, because the threading, of course, spirals toward the center, is imprecise – there still appear to be no more than two added threads in almost all instances when “redesigned” cross sections are compared with original infringing models. And the difference in numbers of threads on one end of a “redesigned” coupler and the other is only one. Again – not significant. Moreover, when we return to the field, what is the effect? Are workers actually given instructions on these variances in offset centers from coupler to coupler so they know how many revolutions to give the conduit on the long side before starting the conduit on the short side? Again, that seems rather impractical and, again, suggests changes that were random rather than part of any deliberate redesign. And, according to the R-BOC expert, wouldn’t happen.

Additionally, the variances among these four models – 508b & 524; 509b & 525; 510b & 526; and 511b & 527 – further add to the impression that the nature of the manufacture was random. The factors the R-BOC defendants point to, in fact, do nothing to dissuade one from concluding that the “redesign” wasn’t by design at all. Significantly, and conversely, the cross section of the

original, infringing models are clearly uniform in design and production. Across the spectrum of the infringing couplers, the dead stops are in the very center of the interior, 2 to 2-1/16 inches from each end. And there are invariably 13 “spins” of thread on each end. These are clearly the product of a design, even if that design were just an exactingly made copy of Mr. Minemyer’s couplers as was shown at the first trial. (Indeed, the evidence showed that Mr. Minemyer’s parts were “copied well.”)(Tr. 430). The “redesign” products do not appear to be the result of any design – not a uniform one anyway – and there’s nothing from the R-BOC defendants to explain the reason for those variances among those “redesign” couplers.

It must also be noted that the R-BOC defendants never mentioned to their customers that they made any changes at all, colorable or otherwise, to their couplers or the angle or number of interior threads. This is significant for two critical reasons: first, because they were contractually obligated to do so. (Citation PX 316 – about 60 pages of contract language). Indeed, when the R-BOC defendants crossed over from selling their infringing couplers to selling their “redesigned” couplers, they not only didn’t let their customers know, they continued to use the same product identification numbers. (*Minemyer Chapter II*, Trial Tr. 646-49). Second, it bears repeating that the evidence was indisputable that the instructions to the workmen in the field who actually installed the couplers never changed despite the addition of one or two interior threads or the angle of those threads. Indeed the defense expert conceded that “everything regarding the installation would be exactly the same.” (Tr. 1169). The expert said he knew of no increased performance in the field resulting from the additional threads. (Tr. 137; 1170).

Thus, Mr. Lundein’s lawyer’s argument that additional threads and a “different thread angle” – which he acknowledged he had not talked much about – were “significant changes that changed

the structure and that command a different way to achieve a valuable end result in the marketplace” were unpersuasive. (Tr. 1464). In the end, the evidence – not the statements of counsel, which don’t count, *Phillips v. Allen*, 668 F.3d 912, 916 (7th Cir. 2012) – shows that the R-BOC defendants added one or two revolutions of the threads toward the centers of some molds, one or two molds at a time, at a glacial pace over the course of four years. It is well to recall that Mr. Lundeen admitted that he did not instruct Mr. Krajacki as part of the 2008 “redesign” to change the angle of any of the interior threads and that from 2008 to at least February 2012 they were not changed. (Tr. 245-250). And, he admitted telling the jury in the first case that the redesign did not include a change to the angle of the interior threads. That failure by the R-BOC defendants speaks volumes about the lack of importance the thread angle played in the defendants’ thinking and their concern that Mr. Minemyer’s patent be respected.

On a few occasions, without any apparent rhyme or reason, the added revolutions came from just one end of the coupler. On other occasions, the Lundeens and their group didn’t do anything. If there was any plan or any instruction, it appears to have been, “take it another couple spins around the die-cutter, Wally – or Jerry.” At some point in the process of cutting those couple of extra spins, those extra threads may have been cut to a 75 degree angle. As for the remaining vast majority of the threads, who knows. The only thing we do know is Mr. Lundeen, under oath, admitted at the first trial that the thread angles had not changed and they were not part of the 2008 redesign. Significantly, the R-BOC defendants certainly didn’t even mention for many years that any such change was made for years, even in sworn filings and even when it would have been the natural things for them to have done and would have inured to their benefit to have done so.

What did these minimal changes accomplish? Nothing. Mr. Lundeen testified that, without the sealing land, the “redesign” couplers functioned the same way as the original, infringing couplers. They were still water-tight. (*Minemyer Chapter II*, Trial Tr. 363). There were absolutely no complaints. (Tr. 422). The “redesign” couplers might have a 4% greater, theoretical “pull-out strength” than the original infringing couplers – on just one end – but that would have no benefit in the field or even be noticeable. (*Minemyer Chapter II*, Trial Tr. 1116, 363). *Merial Ltd. v. Cipla Ltd.*, 681 F.3d 1283, 1300-01 (Fed.Cir. 2012)(replacing one element for another where they would function interchangeably did not amount to a more than a colorable difference). It is important to again emphasize that no customers were ever notified of the changes, and no instructions to workmen were ever thought necessary so that they could perform their function as they always had. In short, neither the customers nor their workers were affected in the slightest by the extension of a thread or two on some models at intermittent times.

Significantly, the sealing land was replaced with, not some new modification, but the extension of what proves to be an infringing element – the “approximately perpendicular” threads. *Cf. Ncube Corp. v. SeaChange Intern. Inc.*, 732 F.3d 1346, 1350 (Fed.Cir. 2013)(change was significant where function was the same but accomplished in a way that parties admitted put the new product outside the claim). The R-Boc defendants saw no reason to tout any purported changes to their customers. (*Minemyer Chapter II*, Trial Tr. 357-58, 363-64). Original and “redesign” couplers were sold interchangeably. (*Minemyer Chapter II*, Trial Tr. 360-64).

If, under *Tivo*, the primary question on contempt “is whether the newly accused product is so different from the product previously found to infringe that it raises a fair ground of doubt as to the wrongfulness of the defendant's conduct,” *Energy Recovery, Inc. v. Hauge*, 745 F.3d 1353, 1358

(Fed. Cir. 2014), the answer here, given all the evidence, must be no. Both the concept of designing around a patent and *Tivo*’s colorable differences have to actually mean *something*. Nothing that seems anything like a design around or changes amounting to a colorable difference happened here. This finding carries with it a preclusive effect on the R-BOC defendants’ attempt to resuscitate their failed invalidity contentions, as they readily concede. (11-cv-8433, Dkt. # 190, ¶¶ 338-339); *Roche Palo Alto LLC v. Apotex, Inc.*, 571 F.3d 1372, 1379-80 (Fed.Cir. 2008); *Nasalok Coating Corp. v. Nylok Corp.*, 522 F.3d 1320, 1328-29 (Fed. Cir. 2008). So it goes.

IV.

A SECOND BRIEF INTERLUDE FROM LITIGATION

(wherein one determines how to proceed through the second step of *Tivo*)

This brings us to the next step in the *Tivo* analysis. Under *Tivo*, if the court does find (as I do) that there are “no more than colorable differences between the adjudged infringing product and modified product, a finding that the newly accused product continues to infringe the relevant claims *is additionally essential* for a violation of an injunction against infringement.” *Tivo*, 646 F.3d at 882 (emphasis supplied) (citing *KSM*, 776 F.2d at 1528). As such, at the second step, *Tivo* instructs district courts to:

evaluate the modified elements of the newly accused product against the asserted claim, on a limitation by limitation basis, to ensure that each limitation continues to be met. In making this infringement evaluation, out of fairness, the district court is bound by any prior claim construction that it had performed in the case.

646 F.3d at 882. The burden is on the patentee to prove the injunction was violated by clear and convincing evidence. 646 F.3d at 883; *Ncube Corp. v. SeaChange Intern. Inc.*, 732 F.3d 1346, 1349 (Fed.Cir. 2013)(“On a contempt motion, the party seeking to enforce the injunction bears the burden

of proving by clear and convincing evidence both that the newly accused product is not more than colorably different from the product found to infringe and that the newly accused product actually infringes.”). The burden is on the patentee to prove infringement, even in the declaratory judgment context. *Medtronic, Inc. v. Mirowski Family Ventures, LLC*, – U.S. –, –, 134 S.Ct. 843, 849 (2014)(“In our view, the burden of persuasion is with the patentee, just as it would be had the patentee brought an infringement suit.”).

All this starts to become unwieldy when one considers that a party redesigning a product previously found to infringe will generally be the target of a permanent injunction as a result of that previous finding and will often want to get a declaration that its redesign does not infringe. Under Federal Circuit precedent, the standard of proof differs as to proving infringement in the contempt context and in the infringement context. Infringement must be shown by clear and convincing evidence in the contempt case, *Tivo*, 646 F.3d at 883; *Ncube*, 732 F.3d at 1349, but need only be shown by a preponderance of evidence in the declaratory judgment case. *High Point Design LLC v. Buyer's Direct, Inc.*, 631 Fed.appx. 632, 640 (Fed.Cir. 2015); *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 780 F.3d 1357, 1363 (Fed.Cir. 2015). As a result, it appears that district courts and parties are left with the very real possibility that there will be a finding of infringement in one case and a finding of no infringement in the other.

Setting that aside, there is another issue. Having found that the R-BOC defendants’ “redesign” couplers are not more than colorably different from the infringing couplers, *Tivo* tells us that we must take a second step and perform an infringement analysis on the “redesign” couplers. Therein lies the rub because, in case after case, the Federal Circuit also tells us that when differences between devices are merely colorable, that means they are essentially the same which, in turn, means

that collateral estoppel applies and a finding of infringement is appropriate. *Yingbin-Nature (Guangdong) Wood Industry Co., Ltd. v. International Trade Com'n*, 535 F.3d 1322, 1333 (Fed.Cir. 2008)(proof of infringement by collateral estoppel appropriate where a close identity exists between the relevant features of the accused device and the device previously determined to be infringing); *Roche Palo Alto LLC v. Apotex, Inc.*, 531 F.3d 1372, 1379 (Fed.Cir. 2008)(accused products are essentially the same where the differences between them are merely colorable); *Acumed LLC v. Stryker Corp.*, 525 F.3d 1319, 1324 (Fed.Cir. 2008). So, if this line of cases tells us that a device that is no more than colorably different from a device also found to infringe, why then does *Tivo* require a second step of analysis after the “no more than colorably different” finding?⁴⁰ The answer is, we don’t know, and while we suspect the issue of infringement has been settled, we nevertheless take the second step and perform an infringement analysis. (If we have misapprehended *Tivo*, the fault is ours, but no harm will be done).

V.

RETURN TO THE LITIGATION-CHAPTER II

(wherein it is determined whether the “redesign” couplers infringe Patent 726)

Obviously, the R-BOC defendants did very little, if anything, in terms of modifying their infringing couplers to avoid at least Claim 12 of the Minemyer patent. They went right back and used the same molds that had produced their infringing couplers. The evidence tends to show that if changes were made to the angles of the threads, they seemed for the most part unintentional – produced, like Chrono’s good-luck piece, by happenstance – or at least not added to avoid Mr.

⁴⁰ The *Tivo* court cryptically alluded to this conundrum in a footnote, but provided no guidance. 646 F.3d at 884 n.4.

Minemyer's patent, as Mr. Lundeen's counsel repeatedly argued.

The record of the R-BOC defendants' filings and testimony in the instant action show they did not even know any such changes were made. As for sealing lands, some were removed, others were removed at various times over a nearly four-year period, and some were never removed, at least not as of 2014. The removal of the sealing lands was accomplished by nothing more than a couple of more revolutions of the thread. Although counsel for the R-BOC defendants makes much out of center stops being off-center, some center stops were off-center, some were ever so slightly off center, and some weren't off center at all. Hardly emblematic of a redesign in the sense the Federal Circuit uses the term.

Given the overwhelming evidence regarding the rather lackadaisical, for lack of a better adjective, nature of any changes the R-BOC defendants may have made to their infringing couplers, the testimony of Mr. Minemyer's expert, Mr. Kaiser, on infringement, is compelling. Mr. Kaiser testified that, for the first trial, he measured impressions of the cores used to produce what proved to be the R-BOC defendants' infringing couplers, and the angles measured "roughly . . . 79, 80 degrees." (*Minemyer Chapter II*, Trial Tr. 120-21). He again measured impressions of the cores – now used to produce the "redesign" couplers – the second time around and, again, got results of 79, 80 degrees. (*Minemyer Chapter II*, Trial Tr. 121). There were slight variations of one or two degrees: 79 to 82 degrees, down to 77 degrees. (*Minemyer Chapter II*, Trial Tr. 130-31). The fact that the couplers produced by these molds contained interior thread angles of about 75 degrees, Mr. Kaiser explained, was a result of the niceties and inevitabilities of producing plastic parts and the tolerance levels. But that "difference" was neither exceptional nor surprising:

Q. Now, again, we were talking about 75 versus 80. Is there a difference between

those angles, in your view?

A. *Oh, that is still an angle that is -- performs as a cutting thread, and the angle is slightly -- let's say, 5 degrees difference would be within the realm of any type of molding tolerance.*

Q. So what is the tolerance that you're referring to?

A. Well, when we have a plastic part, a five- to ten-thousandths tolerance on most plastic parts is acceptable.

Q. And how big in the real world is five-thousandths?

A. Well, on the -- at this particular part with that type of height of the thread and stuff, this is equating to roughly four- to six-thousandths variation.

Q. Between a 5-degree variance in the angle, you're saying?

A. Right, it could be approximately a four-thousandths change in distance on the top of the thread.

Q. Is that four-thousandths -- four-one-thousandths of an inch, is that approximately the width of a hair?

A. That's correct.

Q. So in terms of tolerance, are you telling us that 75 and 80 are equivalent?

A. They're -- it would fall within the tolerance, manufacturing tolerance of creating that part.

Q. How about when you get to the smaller threads in the outside?

A. Well, as the threads become shorter and less hard to create a full sharp thread, you're going to have more variance.

Q. So the angle could be even more off of the mold?

A. It could be, yes.

Q. Well, you know the couplers. You know the Lozon coupler and you examined the redesign. *In your view, with the 75-degree threads, is it still the same product?*

A. It is.

(*Minemyer Chapter II*, Trial Tr. 134-36; DX 687)(emphasis supplied).

Clearly, the Nelson measurements fall within these acceptable ranges. Moreover, Mr. Kaiser's testimony is not to be considered in a vacuum, but in the context of all the evidence, regarding the R-BOC defendants' purported redesign; all the evidence pertaining to the rather haphazard nature of it, including the lack of any identifiable plan; the seeming failure to realize that any angles were even being changed; the seeming indifference to what was being done; and its underinclusiveness; the failure to remove sealing lands intended to have been removed; the alteration and nonproduction of Mr. Nelson's initial report in the first trial (the evidence of which was received in this trial), etc.

Indeed, Mr. Krajecki, a defendant, along with the Lundeens, testified that "approximately perpendicular" "could be 15 [he clearly meant 75 degrees as is evident from context] . . . Whatever, yeah." (*Minemyer Chapter II*, Trial Tr. 744). He didn't care about angles. Mr. Lundeen didn't know or care much about them. In the end, it must be concluded that the angles on the "redesign" couplers are "approximately perpendicular," which is the patent specification in this case and in the first trial. And, as a result, it must be concluded that the couplers infringe claim 12 of Patent No. 6,851,726. So it goes.

Did the R-BOC defendants offer testimony to counter what Mr. Kaiser said? Of course, and it would have been more surprising than the change in thread angles was to Mr. Lundeen if they hadn't. There is scarcely a trial of any consequence today in the federal courts which does not include expert testimony. The difficulty, of course, is with the believability of so-call experts and how a jury (or a judge) can pick or choose among competing experts. The problem is one that hs

received substantial judicial and scholarly attention. *See Olympia Equipment Leasing Co. v. Western Union Telegraph Co.*, 797 F.2d 370, 382 (7th Cir.1986)(“experts are ‘the mere paid advocates or partisans of those who employ and pay them as much so as the attorneys who conduct the suit. There is hardly anything, not palpably absurd on its face that cannot now be proved by some so-called experts.’”). Indeed, their fidelity to truth or lack thereof, is the subject of a good deal of judicial and scholarly concerns about the roll of experts at trial.⁴¹

But overall, context is key to any testimony. Anthony Storace testified for the R-BOC defendants that one of ordinary skill in the art would not consider a 75-degree angle to be “approximately perpendicular.”⁴² (*Minemyer Chapter II*, Trial Tr. 1121). But for Mr. Storace, one skilled in the art was one skilled in thread design (*Minemyer Chapter II*, Trial Tr. 1123), but thread design wasn’t the issue here. It was mold making and plastics. As testimony from Mr. Lundein and Mr. Krajecki have shown, there was no “redesign” going on – at least not in the sense the Federal Circuit and common sense have used the term.

⁴¹ The problem with so-called experts and their willingness to be compromised and say what is expected of them has been the subject of judicial and scholarly discussion. See e.g., *Olympia Equipment Leasing Co. v. Western Union Telegraph Co.*, 797 F.2d 370, 382 (7th Cir.1986)(experts are often “the mere paid advocates or partisans of those who employ and pay them, as much so as the attorneys who conduct the suit ...”); Jack Weinstein, *Improving Expert Testimony*, 20 U.Rich.L.Rev. 473, 482 (1986) (“an expert can be found to testify to the truth to almost any factual theory, no matter how frivolous.”); Michael H. Graham, *Expert Witness Testimony and the Federal Rules of Evidence: Insuring Assurance of Trustworthiness* (1986) Ill.L.Rev. 43, 45; 29 (“Today practicing lawyers can locate quickly and easily an expert witness to advocate nearly anything the lawyers desire.”); 29 Wright and Gold, *Federal Practice and Procedure*, 6262 at 183 (1997); Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 Colum.L.Rev. 277, 333 (1985) (“A Ph.D. can be found to swear to almost any expert proposition no matter how false or foolish.”). *See also Minasian v. Standard Chartered Bank, PLC*, 109 F.3d 1212, 1216 (7th Cir.1997); *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 319 (7th Cir.1996).

⁴² Oddly, the R-BOC defendants argued that the fact that the angles on the couplers measured about 75 degrees was support for a finding that one of ordinary skill in the art would not consider that approximately perpendicular. (11-cv-8433, Dkt. #190, ¶273). The position, of course, is untenable.

Mr. Storace explained that the idea for a thread designer in this instance was to “use a sharp point” to cut into the conduit and retain it, and that would be achieved with an “approximately perpendicular” face. (*Minemyer Chapter II*, Trial Tr. 1123). While an “approximately perpendicular” face will cut into a conduit, that capacity does not define what the term means. It’s really question-begging at its worst. Indeed, the evidence in this case (which includes some of the evidence from the first case) absolutely disproves Mr. Storace’s subtle attempt to help the defense. “Even a layman,” he said, “would understand a sharp point is a good thing.” (*Minemyer Chapter II*, Trial Tr. 1123). But a sharp point isn’t always a good thing, and achievement of a cut in a conduit does not tell you what “approximately perpendicular” means in a patent. But Mr. Storace didn’t testify that a 75 degree angle wasn’t a sharp point or that it wouldn’t cut sufficiently into conduit. It clearly would as the evidence showed. And, a good many of the measurements were only slightly under 80 degrees, as Mr. Nelson said. *See n. 30.*

Mr. Storace’s claim that “[n]o one would accept a part at 75 degrees if it was designed to be 80,” (*Minemyer Chapter II*, Trial Tr. 1091), is plainly not accurate. It all depends on what the part is being used for. 75 degrees may be a specific tolerance or a general tolerance, where 80 degrees will perform just as well as a 70-degree component. In other words, tolerances are clearly a function of what the part is being used for. There may be a significant difference between 75 and 80 degrees if the part is being used in something where a 5-degree variation matters. But here the evidence showed overwhelmingly that the functionality of a coupler did not vary whether one or more of the interior threads was 75 degrees rather than 80 degrees. The customers didn’t care; there were no complaints. Similarly, the workmen couldn’t have cared less as they voiced no complaints. And Mr. Lundeen couldn’t care less. Indeed, he didn’t even know what the angles were at varying points or

when they came into use.

Recall that Mr. Lundeen admitted that he wasn't aware any thread angles changed and couldn't tell the difference between 80 and 75 degree-angled threads. Mr. Krajecki didn't even care about the angles of the threads. 75 or 80 degrees was the same to him. Moreover, there was not a hint of dissatisfaction or of increased satisfaction expressed by any customers (including Verizon) about any difference in performance or installation resulting from the claimed change in angles or the addition of a few threads. And the thread angles on the "redesign" couplers – the ones made using Mr. Zdaniewicz's molds – varied wildly.

On the one-inch brown coupler (BC02-117R) for example, Mr. Nelson, who was brought in by Mr. Lundeen in late 2011 to take some measurements for the first trial measured angles ranging from 50.9 degrees up to 80.5. (PX 341D; Tr. 251)). Similar deviations were found in every size of the supposedly "redesigned" coupler. (PX 341D; *See also* closing argument of defendant at Tr. 1548-49). Mr. Lundeen claimed he had turned over the (doctored) report to his counsel, and its non-production was their fault. True or not, the non-turnover of the report is significant and is binding on the defendants even if their lawyer was responsible. *See Link v. Wabash Railroad Co.*, 370 U.S. 626, 633-34 (1962); *Sahyers v. Prugh, Holliday & Karatinos*, P.L. 560 F.3d 1241, 1245 (11th Cir. 2009). *Cf. Ridge Chrysler Jeep, LLC v. DaimlerChrysler Financial Services Americas LLC*, 516 F.3d 623, 626 -627 (7th Cir. 2008).

Deviations were found in every size of redesigned coupler. (PX341D). Mr. Storace's testimony cannot be considered in the abstract. Properly considered, it does not resolve this case in the R-BOC defendants' favor. It is clear, given all the evidence in the case, (of which any expert's testimony is only a part) that Mr. Storace's ideas were more in the realm of the ideal than what

actually went on in real life and as applied here given all the evidence of what actually occurred. Mr. Kaiser's testimony was far more pertinent, credible, and useful than was Mr. Storace's. So it goes.

VI. REMEDIES

**(wherein we close the book on these proceedings . . . at least until
the R-BOC defendants accidentally change the angles on their couplers again by 2 or 5 or, as
Mr. Krajecki would say, “whatever” degrees and the whole thing starts over again
. . . so it goes . . .)**

The evidence is clear and convincing that the R-BOC defendants willfully violated the injunction issued after the first trial [Dkt. # 526] by producing couplers that were no more than colorably different from the couplers found by the jury in the first trial to be infringing. They also violated the injunction by failing to turn over the molds that had been used to produce the infringing couplers. The evidence was clear and essentially unchallenged that the “molds” consisted of all of the parts that were utilized in the manufacture of the infringing couplers. Thus, they consisted not only of the cores – which could not function independently – but of the large bases and the tubing and associated equipment, all of which operated in unison to enable the couplers of varying sizes to be made. Phrased differently, the cores alone could not produce the couplers that the jury in the first case found to be infringing and which, as produced by the defendants after the first trial continued to violate Claim 12 of the Minemyer Patent No. 6,851,726.

While they may have tweaked their “redesigned” couplers – either intentionally or, as appears more likely, given the evidence, by happenstance with no real desire to avoid Mr. Minemyer’s patent – those couplers continue to infringe Claim 12 of Patent No. 6,851,726. Indeed, any changes made

to the couplers, however insignificant, were made sporadically over a several-year period, meaning that original, infringing couplers were made and distributed all along. As discussed above, a truly diligent infringer desirous of not infringing another's patent would have undertaken a redesign all at once.⁴³

Mr. Minemyer is, of course, entitled to lost profits damages as a result of the R-BOC defendants' continued infringement of his patent. *AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1330 (Fed.Cir. 2015); *Warsaw Orthopedic, Inc. v. NuVasive, Inc.*, 778 F.3d 1365, 1374 (Fed.Cir. 2015). It remains to be seen exactly how much, as we only have figures through October 2014. But the figure over the documented period is, based on expert testimony, \$1,117,187.

Mr. Minemyer is also entitled to pre-judgment interest on his damages. An appropriate rate in this instance, given the risk, is the prime rate plus two percent, running from the start of the damages period, February 21, 2009. 35 U.S.C. §284; *see Hockerson-Halberstadt, Inc. v. Propet USA, Inc.*, 62 Fed.Appx. 322, 334 (Fed.Cir. 2003)(interest runs from date infringement began); *Gorenstein Enterprises, Inc. v. Quality Care-USA, Inc.*, 847 F.2d 431, 436 (7th Cir. 1989)(prime rate presumptive rate for pre-judgment interest); *Matter of Mahurkar Double Lumen Hemodialysis Catheter Patent Litigation*, 831 F.Supp. 1354, 1394 (N.D.Ill. 1993)(Easterbrook, J., sitting by designation in patent case)(prime rate assumes a risk-free loan; judgment creditor has made a high-risk, involuntary loan).

⁴³ In his closing argument, Mr. Minemyer's lawyer argued that there was essentially no change in the angles of the interior threads and that it came as a great surprise to Mr. Lundeen who had never asked anybody to change the angles of the threads when they did the "redesign" in 2008. All that was done was that the waffle pattern had been removed and the center stop shrunk or removed. (Tr. 1548-49). And in his opening statement, Mr. Minemyer's lawyer argued strenuously and persuasively that properly viewed, the angle of the interior threads had not changed from the time of the redesign to the present. *See* Tr. 23, *et seq.*

To this point, the R-BOC defendants do not dispute this figure or the expert testimony. (11-cv-8433, Dkt. # 192).⁴⁴ The issue here is only whether Mr. Minemyer is entitled to enhancement of those damages and attorney’s fees. He clearly is, and the Supreme Court has recently spoken on both issues.

A.

We begin with attorneys’ fees. Under 35 U.S.C. § 285, “[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party.” Previously – and that includes *Minemyer Chapter I* – finding that a case was “exceptional” required a showing by clear and convincing evidence both that (1) the litigation is brought in subjective bad faith, and (2) the litigation is objectively baseless. *Brooks Furniture Manufacturing, Inc. v. Dutailier International, Inc.*, 393 F.3d 1378 (Fed. Cir. 2005). But in *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, – U.S. –, 134 S.Ct. 1749 (2014), the Supreme Court lowered the bar significantly:

an “exceptional” case is simply one that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated. District courts may determine whether a case is “exceptional” in the case-by-case exercise of their discretion, considering the totality of the circumstances. As in the comparable context of the Copyright Act, “ ‘[t]here is no precise rule or formula for making these determinations,’ but instead equitable discretion should be exercised ‘in light of the considerations we have identified.’ ”

* * *

⁴⁴ The R-BOC defendants offer no counter to Mr. Minemyer’s position on and discussion of the appropriate measure of damages and amount of lost profits in either of their post trial submissions. (11-cv-8433, Dkt. # 191, # 192). In addition, they do not dispute Mr. Minemyer’s entitlement to pre-judgment interest. They address only entitlement to enhanced damages and attorneys’ fees. Any arguments that they might have raised as to lost profits/damages are therefore waived. *Gambino v. Koonce*, 757 F.3d 604, 610 (7th Cir. 2014); *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1319 (Fed.Cir.2006).

Section 285 demands a simple discretionary inquiry; it imposes no specific evidentiary burden, much less such a high one. Indeed, patent-infringement litigation has always been governed by a preponderance of the evidence standard, and that is the “standard generally applicable in civil actions,” because it “allows both parties to ‘share the risk of error in roughly equal fashion,’”

134 S.Ct. at 1758.

In *Minemyer Chapter I*, we noted the obligation to follow Federal Circuit precedent in our analysis of whether this was an exceptional case. Now that the Supreme Court has spoken the analysis is quite different. We now have no difficulty concluding, under the totality of the circumstances, that this is, indeed, an exceptional case, and Mr. Minemyer is entitled to attorney’s fees.

Over the course of this litigation, the evidence has demonstrated that the R-BOC defendants deliberately and slavishly copied Mr. Minemyer’s coupler and then engaged in a classic bait-and-switch, passing off their copied couplers as Mr. Minemyer’s to their customers. The R-BOC defendants claim that, around the end of 2008, they undertook a “redesign” of their couplers. But there is no evidence of any such “redesign,” in the sense that, as Mr. Lundein’s counsel frequently argued it the changes were carefully redesigned to build a fence around the product to avoid infringement and improve quality and performance. (Tr. 68-71; 1453, 1464). Mr. Lundein certainly did no such thing, and the evidence shows he and his colleagues were largely indifferent to and unconcerned about meaningful changes to the supposedly “redesigned” coupler. Indeed, they never even told a single customer about the changes or boasted outside the trial of increased performance.

The individual allegedly responsible for implementing thread angle changes over an approximately four-year period has not been found, did not testify, and no documents from his or his alleged company were introduced by the R-BOC group. As the R-BOC’s counsel colloquially

put it, Mr. Calvacca is “on the lam.” Indeed, the R-BOC defendants concede they “don’t know what he did” (*Minemyer Chapter II*, Trial Tr. 104, 1419, 1421) – an odd refrain after all these years and all that has happened.

The fellow they could find, Mr. Zdaniewicz, claimed he was told to change the thread angles. But Mr. Krajecki said that wasn’t true, and Mr. Lundeen couldn’t provide meaningful information about any angle changes either. In fact, the R-BOC defendants never even mentioned any angle changes until July 2014, years into their declaratory judgment action in this case in which they claimed their “redesigned” couplers did not infringe Mr. Minemyer’s patent.

If they ever actually did set about changing the angles as they belatedly and unconvincingly claim, keeping that information to themselves throughout their declaratory judgment case would be inconceivable – like keeping an alibi secret even when the switch on the electric chair is about to be thrown. Thread angles have been front and center in this case from day one when, in March 2007, the Complaint in the first case was filed. There has been so much talk about angles and their measurement that even Euclid’s attention would drift. If there were a redesign involving thread angles, common sense and human experience would have propelled the defendants to bring it to the court’s attention immediately.” Silence like obliquity can be eloquent. *United States v. Curescu*, 674 F.3d 735, 740 (7th Cir. 2012). They would not have been able to make that a part of their case fast enough! The fact is, R-BOC didn’t mention it until July 2014 even though it occurred, according to their story at the second trial, at the time of the “redesign” in December 2008. Little wonder Mr. Minemyer’s counsel mockingly referred to the claimed change in thread angle as the “Christmas miracle.”

Then there are the molds, and the metaphysical defense that they don't exist anymore, or as we have said, exist only in that chronosyclastic infindibulum. But if this stance were more than a feeble response, the R-BOC defendants would have mentioned that the molds didn't exist in their massive response to Mr. Minemyer's motion for a permanent injunction. Of course they didn't. It apparently had not occurred to them yet. Not only do their positions ignore the text of the injunction and the unchallenged evidence that the molds were far more than the cores. As the R-BOC group and others knew, they included as integral parts the bases, the housing, the wiring, the tubing, etc. These were never changed from the date they were installed and used in the creation of the couplers the jury found to be infringing. Their usage continued thereafter and through the present day. The metaphysical argument which the R-BOC defendants find so congenial – *i.e.*, the molds don't exist anymore because they have been changed – is not only wrong, but has absolutely nothing to do with the requirement that the “molds” without which no coupler can be fabricated be turned over for destruction.

That's the totality of the circumstances in this case, and if that doesn't make it exceptional, we aren't sure what would qualify. There can be no doubt that Mr. Minemyer is entitled to a discretionary award of attorneys' fees under 35 U.S.C. § 285 and *Octane Fitness*.⁴⁵ That brings us to the question of enhanced damages.

B.

Under 35 U.S.C. § 284. “[t]he court may increase the damages up to three times the amount

⁴⁵ An abuse of discretion occurs where the court's decision is clearly unreasonable, arbitrary, or fanciful, is based on an erroneous conclusion of the law, the court's findings are clearly erroneous, or the record contains no evidence upon which the court rationally could have based its decision. *Zafer Taahhut Insaat v. Ticaret A.S.*, 833 F.3d 1356, 1365 (Fed. Cir. 2016).

found or assessed.” The text of the statute envisions an exercise of discretion. During *Minemyer Chapter I*, this trial, and the briefing of this matter, the Federal Circuit’s guidance on this determination came from *In re Seagate Tech., LLC*, 497 F.3d 1360 (Fed. Cir. 2007)(*en banc*). *Seagate* set out a two-part test for proving willfulness where the patentee must show that: (1) “the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent,” and (2) the “objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer.” *Id.* at 1371 (parenthesis in original).

That approach is analogous to the *Brooks Furniture* objective-subjective approach to determining whether a case was exceptional for the purposes of awarding attorney’s fees. As such, it seemed likely that it perhaps didn’t have much of a shelf-life, but the Federal Circuit has not made any changes. *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 780 F.3d 1357, 1358 (Fed. Cir. 2015). Thus, throughout the trial and briefing, we tried to follow the two-pronged test and the heightened standard of proof of clear and convincing evidence.

In our determination of willful infringement and enhanced damages in *Minemyer Chapter I*, we said that the result was dictated by *Seagate*. *Minemyer v. R-Boc Representatives, Inc.*, 2012 WL 2155240 (N.D.Ill. 2012); *Minemyer v. R-Boc Representatives, Inc.* 2012 WL 2423102 (N.D.Ill. 2012). *Seagate*, as we read it, did not allow a court to take into account factors like blatant, deliberate copying if the accused’s defense to infringement was susceptible to a reasonable conclusion of no infringement. 2012 WL 2155240, *12-14. It does not matter, under *Seagate*, if that defense never crossed the accused’s mind until well after they acted. 2012 WL 2155240, *12.

In her dissent to the Federal Circuit’s decision not to rehear *Halo Electronics en banc*, Judge

O'Malley, joined by Judge Hughes, said:

We have gone so far, moreover, to require that an evidentiary wall be erected between the objective and subjective portions of the inquiry. We preclude considerations of subjective bad faith—no matter how egregious—from informing our inquiry of the objective baselessness of a claim and preclude the weakness a claim or defense from being indicative of a parties' subjective bad faith.

Halo Electronics, 780 F.3d at 1362 (O'Malley, J., dissenting).

In short, in *Minemyer Chapter I*, we felt constrained to consider the R-BOC defendants' actions under that first objective prong of *Seagate* and determine, in the first instance, whether there was clear and convincing evidence that the R-BOC defendants acted despite an objectively high likelihood that their actions constituted infringement of a valid patent. *Seagate*, 497 F.3d at 1371. In *Minemyer Chapter I*, we said that “with a term of approximation, reasonable minds can differ, to an extent, where the cut-off is. The determination can be difficult. . . . That’s not the stuff of a defense that is not susceptible to a reasonable conclusion of no infringement.” And so, despite all the evidence regarding the R-BOC defendants’ willfulness, like deliberate copying, *see Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed.Cir. 2010); *Beery v. Gemstar Development Corp.*, 70 F.3d 129 (Fed. Cir. 1995), we felt constrained not to find willfulness and award enhanced damages.

The R-BOC defendants wagered all on this conclusion ruling the day in *Minemyer Chapter II* in their initial briefing (11-cv-8433, Dkt. # 192, at 12), and continue to focus on it even in the wake of *Halo*. (11-cv-8433, Dkt. #211, at 7-8). But when we considered and issued the decision in *Minemyer Chapter I*, *Halo Elecs., Inc.* was not yet the law, and the Supreme Court had not yet overruled what it called *Seagate*’s “unduly rigid” test. 136 S.Ct. at 1932. In *Halo*, the Supreme Court eliminated the “objective” prong of the test, voicing a concern expressed in *Minemyer Chapter I*:

The *Seagate* test aggravates the problem by making dispositive the ability of the infringer to muster a reasonable (even though unsuccessful) defense at the infringement trial. The existence of such a defense insulates the infringer from enhanced damages, even if he did not act on the basis of the defense or was even aware of it. Under that standard, someone who plunders a patent—侵犯 it without any reason to suppose his conduct is arguably defensible—can nevertheless escape any comeuppance under § 284 solely on the strength of his attorney's ingenuity.

136 S. Ct. at 1933.

As the Federal Circuit put it more recently, an infringer “cannot insulate itself from liability for enhanced damages by creating an (ultimately unsuccessful) invalidity defense for trial after engaging in the culpable conduct of copying, or ‘plundering.’” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1340 (Fed. Cir. 2016); *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 831 F.3d 1369, 1381 (Fed. Cir. 2016)(stating that the only defenses relevant to willfulness analysis are those the infringer was aware of at the time of its conduct). *Compare Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010); *Beery v. Gemstar Development Corp.*, 70 F.3d 129 (Fed. Cir. 1995).

What the R-BOC defendants successfully argued in *Minemyer I* was counterintuitive, and the law and the Rules of Evidence are more often than not aligned with common sense. *See United States v. Reyburn*, 31 U.S. 352, 366 (1832); *Shepard v. United States*, 290 U.S. 96, 104 (1930); *Donnelly v. United States*, 228 U.S. 243, 277-78 (1913)(Holmes, J., dissenting).⁴⁶ In *Halo*, the Supreme Court also did away with the requirement that a party establish its entitlement to enhanced damages under § 284 by clear and convincing evidence. 136 S.Ct. at 1934. The Patent Act supplies

⁴⁶ Despite *Halo* and cases like *WBIP*, R-BOC continues to argue that after-the-fact defenses remain relevant to a willfulness analysis. (11-cv-8433, Dkt. #211, at 4). If the law cannot take note of what the defendants were intentionally doing over a long period and what they intentionally tried to do at trial, then the law deserves the appellation Dickens gave it.

no basis for imposing such a heightened standard of proof. *Id.* Patent infringement litigation has always been governed by a preponderance of evidence standard, the Supreme Court said, and enhanced damages should be no exception. *Id.*

So, this time around, we look at the R-BOC defendants' conduct – the deliberate and slavish copying, *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010); *Beery v. Gemstar Development Corp.*, 70 F.3d 129 (Fed. Cir. 1995), the intentional passing off, the mold metaphysics, the indifference to thread angles, the admissions of the most knowledgeable people on the defense side, the phantom and missing “mold fairy,” and all the rest – through a different lens. And we are concerned, not with what defenses or stories were devised, but what the infringer knew or thought. *Halo*, 136 S. Ct. at 1933 (“. . . culpability is generally measured against the knowledge of the actor at the time of the challenged conduct.”). The jury in *Minemyer Chapter I* established a ballpark angle for “approximately perpendicular” where none had existed. That has to be considered when looking at what the R-BOC defendants did in *Minemyer Chapter II*. The “approximately perpendicular” field wasn’t what it was before. But it was not closed or defined at 80 degrees either. It couldn’t be given the language of Claim 12 of the patent or what the device was intended to do.

If you have lost at trial and an appeal and are left with a ruling that 80 degrees is “approximately perpendicular,” objectively and reasonably, you are going to have to be very careful and concerned when you make couplers using the same molds you used to make infringing couplers or if you use molds with insignificant changes. Or at least one would think so. *See K-TEC, Inc. v. Vita-Mix Corp.*, 696 F.3d 1364, 1378 (Fed. Cir. 2012)(willful infringement where defendant started with direct copy and made only trivial changes). You’re going to have to take some clear steps with regard to the angles of your threads now that you know there is a range which is considered

“approximately perpendicular” and it’s more than a few degrees. Yet, in the supplemental brief regarding the effects of the Supreme Court’s decision in *Halo*, the R-BOC defendants claimed that it is beyond debate that they undertook “legitimate design-around efforts” or “significant ‘design-around’ efforts” or “substantial ‘design-around’ work” in 2008. (11-cv-8433, Dkt. #211, at 2). But they never explained the R-BOC groups’ silence on so significant a matter over the years despite the jury’s verdict in the first case and the pendency of the second case. The preponderance of the evidence cuts against the argument now being made. It is certainly not supported by credible and persuasive evidence. Quite the contrary.

There is no credible and believable evidence the R-BOC defendants thought to change the angles of the threads or that they consciously sought to build a “fence” around what they were doing. Quite the contrary. They don’t know what Mr. Calvacca did, and they offered no evidence from his company. And, of course, they claim an inability to call him for trial since they don’t know where he is. They didn’t tell Mr. Zdaniewicz to do anything to the angles of the threads. If cores were changed at all, the change was done piecemeal over the course of years and without regard of the jury’s verdict in the first case and Mr. Minemyer’s patent. Again, the angles of the interior threads are the key issue in this case and have been for nine years. If those angles were “legitimately,” “significantly” or “substantially” “redesigned” in 2008 (or thereafter), Mr. Lundein and the R-BOC defendants would not have kept it a secret in all their filings in these cases until six years after the “redesign” supposedly started.

That they did so is contrary to human experience, “of all teachers the most dependable,” *Funk v. United States*, 290 U.S. 371, 381 (1933). See also *Sinclair Refining Co. v. Jenkins Petroleum Proc. Co.*, 289 U.S. 689, 698 (1933); Cardozo, Paradoxes of Legal Science, 125 (1928); *United*

States v. Lutwak, 195 F.2d 748, 757 (7th Cir. 1952), and on which judges and juries routinely and legitimately rely. *Cf. Saxton By & Through Saxton v. Sec'y of Dep't of Health & Human Servs.*, 3 F.3d 1517, 1522 (Fed. Cir. 1993). There is easily a preponderance of evidence that there was no “redesign,” in the sense that the term is commonly used in patent cases, and certainly not a “legitimate”, “significant” or “substantial” one, at least as those terms connote a purposeful undertaking. *See i4i Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831, 860 (Fed.Cir. 2010)(willful infringement where no attempt to design around).

Given the overwhelming evidence in this case, (including what the R-BOC defendants did or did not bother to do), there is a preponderance of evidence – actually, there is clear and convincing evidence – that the likelihood of infringement was *objectively* high and was known to them. Indeed, the evidence tends to show that they didn’t seem to care one way or the other, despite losing an infringement case and subsequent appeals. Thus, even the first prong of the now discarded *Seagate* test would be satisfied.

C.

Moreover, there is at the very least a preponderance of evidence, if not clear and convincing evidence, that this risk was either known or so obvious that it should have been known to the accused infringer. Even under *Seagate*’s discarded test, with the objective prong satisfied, all the evidence of bad faith that we have discussed throughout this opinion and have reiterated in this section, comes into play. There is the assertion of an angle redesign years after the declaratory judgment case was filed and in the wake of testimony from Mr. Lundein that there had been no such redesign. There is the testimony of the owner of the mold company that no one was told to change the angles and the angles didn’t matter. There is the phantom mold-maker “on the lam.” There is

the assertion of a metaphysical molds defense weeks after responding to the motion for a permanent injunction. There is contempt. So it goes. Continued infringement has been willful and enhanced damages are clearly appropriate in a case like this, even if *Seagate* were still good law. Enhanced damages are all the more appropriate under *Halo*.

The R-BOC defendants make much of the fact that it produced samples of the couplers it was manufacturing at the time at Mr. Lundeen's December 2008 deposition. (11-cv-8433, Dkt. #211, at 8-10). But, so what. The R-BOC defendants don't claim that, at that deposition, Mr. Lundeen explained that R-BOC had undertaken a redesign of the molds in order to change the angles of the threads. (11-cv-8433, Dkt. #211, at 8-10; Dkt. #190, at 37)(Yet, that is exactly what any reasonable person would have done if not under "direct" than on "redirect." And if not at the deposition, the information would have been promptly communicated to Minemyer and his counsel. Of course it wasn't.).

In fact, as we have seen, Mr. Lundeen testified under oath at the first trial in February 2012 that the R-BOC defendants made no changes to the angles of the threads of the couplers. (07-cv-1763, Dkt. #489, at 996). At the second trial, he claimed that the threads were modified after the first trial, but also claimed that the threads were changed in 2008. (*Minemyer Chapter II*, Trial Tr., at 377, 379). Overall, Mr. Lundeen's testimony points toward no change being made, or intended to be made, in the angles. And the testimony of Mr. Krajecki, who was in charge of the mold-making, underscores that. So, when the R-BOC defendants produced the samples at the deposition, they didn't know whether the angles had been changed and didn't care. If the R-BOC defendants' point in raising the argument about producing the samples is that Mr. Lundeen is not a credible witness and lied under oath, the point is well-taken. But if the point is that enhanced damages aren't

appropriate here, it misses the mark by a wide margin.

The district court has to decide whether a case is sufficiently egregious to warrant enhancing damages and to exercise discretion in deciding the amount of enhancement that is warranted (up to the statutory limit of treble damages). And *Halo* explained, “none of this is to say that enhanced damages must follow a finding of egregious misconduct.” 136 S.Ct. at 1933. Enhanced damages are appropriate in cases where misconduct goes beyond typical infringement. 136 S. Ct. at 1935. The Federal Circuit tells us that “[t]he principal considerations in enhancement of damages are the same as those of the willfulness determination, but in greater nuance as may affect the degree of enhancement. Thus, egregiousness of the infringer's conduct may receive greater emphasis, as may any mitigating factors.” *SRI Intern., Inc. v. Advanced Technology Laboratories, Inc.*, 127 F.3d 1462, 1469 (Fed.Cir. 1997). We also look at this case with an eye toward the factors cited in *Read Corp. v. Portec*, 970 F.2d 816, 826 (Fed. Cir. 1992), although they are not all-inclusive. Overall, the circumstances of this case, which have been recounted at length, render the R-BOC defendants’ conduct far more culpable and egregious than the ordinary case.

Accordingly, an appropriate exercise of discretion both warrants and justifies an award to Mr. Minemyer of treble damages to be paid by the plaintiffs in case number 11 C 8433.

Quite frankly, we are unaware of any mitigating factors favorable to the R-BOC group and they do not show why Mr. Minemyer’s presentation should not be accepted. (11-cv-8433, Dkt. # 192, at 10-12). The R-BOC group repeat the phrase “design around activities” repeatedly, but, as discussed, especially in the context of the thread angles, that factor cuts against them. They have shown a shameless propensity to infringe, and to be very cavalier about it, despite a jury verdict and a Federal Circuit ruling. Treble damages are the ceiling, While perhaps one can find more

troublesome cases – although that is certainly debatable – the test is not whether the case under consideration is the worst possible that can be imagined. The instant case is a good deal more distressing than most by any measurement. There is also the way in which defendants have responded to and conducted themselves in reference to the injunction issued after the R-BOCs had lost the last trial.⁴⁷ Not only did the R-BOCs not follow the injunction, they silently avoided it and made no arguments that they were uncertain as to what to do under it. Carefully avoided was any attempt to bring their current metaphysical argument to anyone's attention. They simply and unilaterally decided that they would do nothing in response to the injunction.

The permanent injunction, previously issued, will remain in effect, but will be expanded to cover the so-called redesigned couplers. Mr. Minemyer will provide a draft of the new order within seven days and the order, like its predecessor, must be compliant with Rule 65(d)(1), Federal Rules of Civil Procedure. In the interim, the R-BOC defendants shall comply with the previously entered injunction notwithstanding their argument at trial that the molds ceased to exist before the injunction was entered. The turnover shall be immediate and must be reflected appropriately in the new draft order Mr. Minemyer is to provide. The turnover will be to the same person and place previously ordered and shall continue to include those components without which the couplers could not be produced.

⁴⁷ Parties must obey injunctions or orders, even invalid ones, while they are outstanding. *Celotex Corp. v. Edwards*, 514 U.S. 300, 302 (1995); *Firefighters Local Union No. 1784 v. Stotts*, 467 U.S. 561, 601 (1984); *Pasadena Board of Education v. Spangler*, 427 U.S. 424, 439-40 (1976).

EPILOGUE

With this, having repaired no spacecraft, having accomplished nothing so terribly important, we end Chapter II of our own little good-luck piece saga. “Life is not over, but the story is.” Vonnegut, *Deadeye Dick*, (1982). Still, the fear is that, like Kilgore Trout in *Breakfast of Champions*, we are trapped in the middle of some work of fiction but, unlike Kilgore, we are not “close to the end, actually.” So it goes.

ENTERED: 

UNITED STATES MAGISTRATE JUDGE

DATE: 2/10/17