

3-11-2018

# The Substantial Identity Requirement of Patent Infringement

Samuel F. Ernst

Golden Gate University - San Francisco, sernst@ggu.edu

Follow this and additional works at: <https://digitalcommons.law.ggu.edu/pubs>

 Part of the [Intellectual Property Law Commons](#)

---

## Recommended Citation

Ernst, Samuel F., "The Substantial Identity Requirement of Patent Infringement" (2018). *Publications*. 812.  
<https://digitalcommons.law.ggu.edu/pubs/812>

This Blog Post is brought to you for free and open access by the Faculty Scholarship at GGU Law Digital Commons. It has been accepted for inclusion in Publications by an authorized administrator of GGU Law Digital Commons. For more information, please contact [jfischer@ggu.edu](mailto:jfischer@ggu.edu).

America's leading patent law source

# Guest Post: The Substantial Identity Requirement of Patent Infringement

🕒 March 11, 2018    👤 Dennis Crouch

Guest Post by *Professor Samuel F. Ernst, Golden Gate University School of Law*

Every patent litigator knows that if a product or process accused of patent infringement contains every limitation of the asserted patent claim, there is infringement. “It is fundamental that one cannot avoid infringement merely by adding elements if each element recited in the claims is found in the accused device.”<sup>[1]</sup> In fact, this is not the law. In 1898 the Supreme Court held in *Westinghouse v. Boyden Power Brake Co.* that two steps are required for a patent holder to prove infringement.<sup>[2]</sup> Yes, the patent holder must prove that the accused product falls within the literal language of the patent claims, but this does not end the infringement analysis. The patent holder must further prove that there is “substantial identity” between the claimed invention and the accused device, “whether that identity be described by the terms, same principle, same modus operandi, or any other.”<sup>[3]</sup> Hence, in *Westinghouse*, the Court held that although George Boyden’s accused air pressure train brake fell within the semantic scope of George Westinghouse’s patent claims, there was no infringement because the accused device “is a novel one and a manifest departure from the principle of the Westinghouse patent . . . because it solved at once in the simplest manner the problem of quick action, whereas the Westinghouse patent did not prove to be a success until certain additional members had been incorporated into it.”<sup>[4]</sup> Hence the Court stated the correct rule for patent infringement as follows:

*But even if it be conceded that the Boyden device corresponds with the letter of the Westinghouse claims, that does not settle conclusively the question of infringement. We have repeatedly held that a charge of infringement is sometimes made out, though the letter of the claims be avoided [i.e., the doctrine of equivalents]. The converse is equally true. The patentee may bring the defendant within the letter of his claims, but if the latter has so far changed the principle of the device that the claims of the patent, literally construed, have ceased to represent his actual invention, he is as little subject to be adjudged an infringer as one who has violated the letter of a statute has to be convicted, when he has done nothing in conflict with its spirit and intent.*<sup>[5]</sup>

The *Westinghouse* case has never been overruled by the Supreme Court. In fact, the principle of *Westinghouse* was reaffirmed by the Supreme Court in dictum in the 1950 *Graver Tank* case.<sup>[6]</sup> The *Graver Tank* opinion held that infringement may be proven by equivalents, even if there is no literal infringement. But the Court also noted that infringement may be avoided despite literal infringement, under what has subsequently come to be known as the reverse doctrine of equivalents:

*The wholesale realism of this doctrine [of equivalents] is not always applied in favor of a patentee but is sometimes used against him. Thus, where a device is so far changed in principle from a patented article that it performs the same or a similar function in a substantially different way, but nevertheless falls within the literal words of the claim, the doctrine of equivalents may be used to restrict the claim and defeat the patentee's action for infringement.*<sup>[7]</sup>

In 1997, the Court declined to “speak the death” of the affirmative doctrine of equivalents, rejecting the petitioner’s argument that the doctrine was overruled by the 1952 Patent Act’s requirement that a patent applicant claim her invention in definite terms.<sup>[8]</sup> The Court held that “[i]n the context of infringement, we have already held that pre-1952 precedent survived the passage of the 1952 Act.”<sup>[9]</sup> This reasoning applies with equal force to the reverse doctrine of equivalents. It also survived the passage of the 1952 Act.

**Despite this history, since its creation in 1982 the Federal Circuit has all but overruled the reverse doctrine of equivalents.** The Federal Circuit has (accurately) warned litigants and the lower courts that “[n]ot once has this court affirmed a decision finding noninfringement based on the reverse doctrine of equivalents.”<sup>[10]</sup> The Federal Circuit refers to the reverse doctrine of equivalents as “one anachronistic exception, long mentioned but rarely applied.”<sup>[11]</sup> In the process of vacating findings of infringement under the reverse doctrine of equivalents, the Court has also cabined the doctrine in various ways, making it exceedingly difficult to prove. Specifically, the court has: (1) held that the plaintiff no longer has the burden of proving substantial identity as part of the affirmative infringement case; rather, reverse equivalency is an affirmative defense with the burden on the accused infringer;<sup>[12]</sup> (2) overruled a previous case to hold that reverse equivalency is a question of fact, not an equitable determination or a question of law,<sup>[13]</sup> meaning that an accused infringer cannot readily use the doctrine as a tool to obtain summary judgment; and (3) held that the defense is only available when there is literal infringement, not when any of the claim limitations are infringed merely by equivalents.<sup>[14]</sup>

In a pair of recent law review articles, I argue that the Federal Circuit is wrong that the reverse doctrine of equivalents was an anachronistic exception, long mentioned but rarely applied. In *The Supreme Court Case that the Federal Circuit Overruled*,<sup>[15]</sup> I dig deeply into the facts and reasoning of the *Westinghouse* case and several regional circuit court cases relying on the doctrine to argue that the reverse doctrine of equivalents is an essential safety valve in the patent infringement analysis to ensure that substantial innovations are not unduly enjoined or taxed by the patent thicket. And in *The Lost Precedent of the Reverse Doctrine of Equivalents*, I review every published case finding or affirming non-infringement under the reverse doctrine of equivalents between 1898 and 1988, to conclude that the doctrine was regularly (even if not routinely) applied to find non-infringement in every decade from the 1900s through the 1980s, when the Federal Circuit effectively killed the doctrine.<sup>[16]</sup> Of particular importance, opinions in the Second, Fifth, Sixth, Seventh, and Ninth Circuit courts of appeals hold that both literal and substantial infringement must be proven as part of the plaintiff’s *prima facie* case.<sup>[17]</sup> The Second Circuit stated this fundamental, black letter law of patent infringement poetically: “There is no magic in a name, nor in a claim; that the words preferred by a patentee to define his invention apply literally to another’s device suggests, but does not prove, infringement.”<sup>[18]</sup> In 1983, the Sixth Circuit bemoaned the fact that some courts “continue to pay lip service to the doctrine of literal infringement as though it were the rule.... Perhaps we are embarrassed to

expose the ‘wholesale realism’ which controls many infringement cases, and we choose instead to present the facade of precision and certainty which attends the doctrine of literal infringement.”<sup>[19]</sup>

It is now time for the *en banc* Federal Circuit or the Supreme Court to overrule the erroneous doctrine of literal infringement and revive the reverse doctrine of equivalents. As properly applied, the reverse doctrine of equivalents allows for accused innovations to escape infringement when they are substantially superior, practically and commercially, to the invention claimed by an asserted patent. <sup>[20]</sup> Opponents of legislative patent litigation reform often argue that prospective legislation could have unforeseen adverse consequences on the incentive to invent. An invigorated doctrine of equivalents would therefore be a more sensible, cautious, patent law reform than prospective legislation because it is applied by the courts on a case-by-case basis, with the court weighing the value of the patented invention against the value of the allegedly superior accused innovation and only granting relief in unusual cases. Because the doctrine is not applied prospectively, it does not raise the concerns with unknown consequences that prospective litigation does. Finally, the doctrine is a proven commodity because it was the law in this country from at least the 1900s through most of the 1980s, a period that saw substantial innovative advances, from the airplane to the rocket ship to the internet. If a proper litigation vehicle is identified, a petition for certiorari arguing for the revival of the reverse doctrine of equivalents may well attract the attention of the Supreme Court. The Supreme Court has been inclined to review the work of the Federal Circuit in recent years in cases where the Federal Circuit has applied a rigid rule (like the doctrine of literal infringement), given insufficient deference to district court determinations (as occurs when the district court is not permitted to weigh the principle of the asserted patent against the accused substantial innovation), and disregards or cabins Supreme Court precedent (as has been done with *Westinghouse v. Boyden*).<sup>[21]</sup>

== == ==

<sup>[1]</sup> *Stiftung v. Renishaw PLC*, 945 F.2d 1173, 1178 (Fed. Cir. 1991).

<sup>[2]</sup> *Westinghouse v. Boyden Power Brake Co.*, 170 U.S. 537, 568 (1898).

<sup>[3]</sup> *Id.* at 568 (internal citations omitted).

<sup>[4]</sup> *Id.* at 572.

<sup>[5]</sup> *Id.* at 568 (emphasis added) (internal citations omitted).

<sup>[6]</sup> *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608-611 (1950).

<sup>[7]</sup> *Id.* at 608-09. It appears that this fundamental principle of infringement analysis came to be known as “the reverse doctrine of equivalents” due to a 1966 article by Charles F. Pigott, Jr. See Charles F. Piggott, Jr., *Equivalents in Reverse*, 48 J. Pat. Off. Soc’y 291 (1966).

<sup>[8]</sup> *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21, 26 (1997).

[9] *Id.* at 26-27 ((citing *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 342 (1961) (new section defining infringement “left intact the entire \*27 body of case law on direct infringement”).

[10] *Tate Access Floors v. Interface Architectural Res., Inc.*, 279 F.3d 1357, 1368 (Fed. Cir. 2002).

[11] *Id.*

[12] *SRI Int’l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1123-24 (Fed. Cir. 1985) (en banc).

[13] *Id.* at 1126 (overruling *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760 (Fed. Cir. 1983)).

[14] *Texas Instruments, Inc. v. United States Int’l Trade Comm’n*, 846 F.2d 1369, 1372 (Fed. Cir. 1988). It should be noted that the Federal Circuit once mercifully vacated a sanctions award of over \$10 million and attorney’s fees of over \$400,000 that the district court had imposed on a defendant for the offense of merely raising the reverse doctrine of equivalents. *See DePuy Spine, Inc. v. Medtronic Sofamar Danek, Inc.*, 567 F.3d 1314, 1337-39 (Fed. Cir. 2009). The Court acknowledged (incorrectly, in this author’s opinion) that “The Supreme Court has recognized it to be a viable defense, even if it is rarely asserted.” *Id.* at 1339. As set forth above, lack of substantial identity is not a defense; proving substantial identity is part of the affirmative infringement case.

[15] Samuel F. Ernst, *The Supreme Court Case that the Federal Circuit Overruled: Westinghouse v. Boyden Power Brake Co.*, 68 Syracuse L. Rev. 53 (2018).

[16] Samuel F. Ernst, *The Lost Precedent of the Reverse Doctrine of Equivalents*, 18 Vand. J. Ent. & Tech. Law 467 (2016).

[17] *See The Supreme Court Case that the Federal Circuit Overruled*, 68 Syracuse L. Rev. at 62-66.

[18] *Linde Air Prods. Co. v. Morse Dry Dock & Repair Co.*, 246 F. 834, 838 (2d Cir. 1917).

[19] *Mead Digital Sys., Inc. v. A.B. Dick Co.*, 723 F.2d 455, 462 (6<sup>th</sup> Cir. 1983) (quoting *Graver Tank*, 339 U.S. at 608).

[20] By “innovation” I am referring to a practically and commercially functional product or process that has overcome the hurdles of financing, market-testing, regulatory approval, production, and other obstacles to become available for the benefit of the public. This is distinguished from an “invention,” which is the articulation of an inventor’s idea, but not necessarily a fully realized innovation. *See Robert P. Merges, Commercial Success and Patent Standards: Economic Perspectives on Innovation*, 76 Cal. L. Rev. 803, 807 (1988).

[21] *See also* John F. Duffy, *Counterproductive Notice in Literalistic Versus Peripheral Claiming*, 96 B.U. L. Rev. 1197, 1221 (2016) (opining that the Supreme Court may review the Federal Circuit’s “literalistic claiming approach” in the next five to ten years).

## *About Dennis Crouch*

Law Professor at the University of Missouri School of Law. [View all posts by Dennis Crouch](#) →

[Show comments](#)

---