INTERNET METHOD CLAIMS AFTER AKAMAI:
EDUCATIONAL CHALLENGE FOR THE
PATENT LICENSURE PROCEDURE*

Harold C. Wegner**

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** The author is an independent patent expert; contact information is found on the last page, About the Author. This paper is written without sponsorship from any person or organization.

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I. OVERVIEW

The Federal Circuit in its 2015 panel opinion in *Akamai Techs. Co. v. Limelight Networks, Inc.*, __ F.3d __ (Fed. Cir. 2015)(Linn, J.) (“Akamai on Remand”), maintains the historic principle that direct infringement of a multi-step process claim requires that there be a single direct infringer performing or directing all steps of the claimed process, putting into internet clothing the principle dating back to nineteenth century case law and embodied in the leading Federal Circuit *en banc* opinion in a more traditional technological setting in the “fruit sorter” case, *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed.Cir.1987) (*en banc*) (Bissell, J.).

It has been well known for some time that where there are several steps in a process claim, to reach a conclusion of infringer there should be a single, direct infringer of each step of the process claim.

In the wake of *Akamai on Remand* it is now more than ever essential to draft claims to multistep internet processes with an eye to direct infringement by a single party. *See § II, Quest for a Single Direct Infringer.*

Where two or more parties perform actions in the overall process, the issue is one of “wordsmithing”: The claim should be drafted so that the actions are all phrased in terms of a single party. (Thus, a claim to “ ‘A’ sends a signal to ‘B’ and then ‘B’ sends a reply to ‘A’” has no single actor, whereas with proper wordsmithing a single actor is involved where the claim reads “ ‘A’ sends a signal to ‘B’ and then ‘A’ receives a reply from ‘A’”). *See § III, Educating Practitioners on Draftsmanship.*

Because there is a strongly worded dissent in *Akamai on Remand* coupled with the fact that the technology is at the cutting edge of science, the fact that there
is a strongly worded dissent in *Akamai on Remand* opens the door for yet another round of *en banc* reconsideration, a petition to the Supreme Court, or both. It is therefore necessary to carefully review the legal principles involved in this case. *See § IV, New Facts for a Classic Legal Proposition.*

It is without question the case that the “all elements” rule is harsh. But, the rule has been a staple of patent law and practice since the nineteenth century. *See § V, The Unforgiving Pennwalt “All Elements” Rule.*

While the “all elements” rule is harsh in every technology, there are special challenges in the internet areas. *See § VI, Internet Claiming, Need for Language Precision.* Major public policy issues are at stake. *See § VII, Public Policy Concerns.*

Above all, if a finger of blame has to be pointed in any direction, the Patent Office absence of leadership in teaching patent drafting is a primary culprit. While the current Administration continues a course charted by the Patent Office in the 1990’s, the genesis goes back to the Clinton presidency. In essence, the licensure of patent practitioners carries the imprimatur that the successful licensure candidate has a knowledge of patent drafting. By testing candidates for drafting skills, the bar review courses formerly taught patent drafting, while those who did not take a bar review course needed to somehow gain patent drafting skills to pass the examination. *See § VIII, Failure of the Licensure Examination.*
II. QUEST FOR A SINGLE DIRECT INFRINGER

While the holding of the majority opinion is clear, the Federal Circuit in Akamai on Remand continues to fracture over the issue as to whether there is direct infringement of a multistep process claim where no single party performs (or otherwise controls) all steps of that process. The case has now generated three sets of Federal Circuit opinions, Akamai Techs. Co. v. Limelight Networks, Inc., 629 F.3d 1311 (Fed. Cir. 2011)(Linn, J.) (“Akamai Panel”); Akamai Techs. Co. v. Limelight Networks, Inc., 692 F.3d 1301 (Fed. Cir. 2012)(en banc)(per curiam) (“Akamai En Banc”); and the previously cited Akamai on Remand; with a Supreme Court Limelight opinion between latter two Akamai opinions, Limelight Networks, Inc. v. Akamai Techs., Inc., 133 S.Ct. 2879 (2013).

In Akamai Panel, the Court denied infringement where no party performed all steps of the process. Akamai Panel, 629 F.3d at 1314 (“Because Limelight did not perform all of the steps of the asserted method claims, and the record contains no basis on which to attribute to Limelight the actions of its customers who carried out the other steps.”). The Court granted en banc review to consider a negative holding by a panel on the issue of direct infringement but then sua sponte recast the issue as one of active inducement to infringe to reach a positive conclusion, all the while without touching the issue of direct infringement which spawned the en banc decision in Akamai En Banc:
This case ducked the issue of direct infringement in the traditional sense and created a solution involving inducement which spawned a first dissent by the senior member of the court (Newman, J.) while several members of the en banc Court dissented in an opinion authored by the same jurist who wrote the opinion in Akamai Panel (Linn, J., joined by Dyk, Prost, O’Malley, JJ., dissenting). Thereafter the Supreme Court reversed the ruling keyed to active inducement and remanded the case back to the Federal Circuit which only then returned in Akamai on Remand to repeat once again the denial of direct infringement liability in a panel majority opinion by the author of Akamai Panel. Akamai on Remand was argued before a panel of Rader, C.J., Linn, Prost, JJ., but after argument the Chief Judge resigned his commission and was replaced by a new third member who now dissented. Akamai on Remand, ___ F.3d at ___ (Moore, J., dissenting).

III. EDUCATING PRACTITIONERS ON DRAFTSMANSHIP

Internet claiming was born in the 1990’s where the patent drafting process, given the newness of the technology, had a disproportionate number of newly minted patent attorneys and agents. Many gained their licensure to draft patent applications under the then-new testing regime focused on a battery of repeating, multiple choice questions without any portion of the test requiring drafting anything and particularly without the classic claim drafting question that had been a feature of the registration examination until the move to the all multiple choice examination of the 1990’s.
It is thus not surprising, given the lack of patent drafting training that so many patents ended up with claims without a single direct infringer – a problem that petitioner’s counsel Donald Dunner referred to as “wordsmithing”, which his partner Tom Irving a decade earlier spoke of as a common drafting error. Donald R. Dunner et al., Combined Petition for Panel Rehearing and Rehearing En Banc of Plaintiff-Appellant Akamai Technologies, Inc. (“wordsmithing”); Ken Hobday, The Incredibly Ever-Shrinking Theory of Joint Infringement: Multi-Actor Method Claims, 38 Cap. U.L. Rev. 137 (2009)(citing Thomas Irving in 2003 as speaking “passionately about common patent drafting errors” in situations such as later occurred in Limelight). Even before Irving spoke of this common patent drafting error an international conference of patent experts was convened in Tokyo featuring David Kappos and then Circuit Judge Rader where the internet claiming issue was a principal topic. The conference recognized the issue that later surfaced in the Limelight case and, more importantly, the problem was identified by what Dunner refers to as “wordsmithing”: The practitioner, understanding the issue, can easily draft claims to provide for a single party as the infringer. See Harold C. Wegner, E-Business Patent Infringement: Quest for a Direct Infringement Claim Model 14 (SOFTIC 2001 Symposium) (noting the need to draft claims to have “a single, direct infringer for every claim”), available at http://www.softic.or.jp). Professors Donald S. Chisum and Janice M. Mueller conclude that the “problem” in the Limelight is one that can be avoided through “clear and thoughtful drafting of both method and system claims …. ” Takeaways from Seattle Summer 2014 Seminars, Chisum Patent Academy (blast email August 23, 2014).
IV. NEW FACTS FOR A CLASSIC LEGAL PROPOSITION

A. “Direct Infringement” Law is unchanged by the 1952 Patent Act

It is unquestioned that "§ 271(a) of the [1952 Patent Act], which defines 'infringement,' left intact the entire body of case law on direct infringement." Akamai on Remand, __ F.3d at __ (Moore, J., dissenting)(Aro Manufacturing Co. v. Convertible Top Replacement Co., 365 U.S. 336, 342 (1961). Indeed, the starting point for a discussion of the 1952 Patent Act is to understand that in the context of the definition of infringement the new law did not change the scope of liability. This is correctly appreciated by the dissent which states that “[i]t has been generally understood that with regard to infringement, the 1952 Patent Act was not meant to make sweeping changes to the scope of liability.

Indeed, the “all elements” rule has deep nineteenth century roots:

“The patent is for a combination… [T]his combination[ ] composed of all the parts mentioned in the specification…is the thing patented. The use of any two of these parts only …is, therefore, not the thing patented.” Prouty v. Draper, 41 U.S. (16 Pet.) 335 (1842)(quoted, Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 966 (Fed.Cir.1987) (en banc)(Nies, J., additional views).

"To infringe, [the accused infringer] must use all the parts of Woodworth's [patented] combination." Brooks v. Fiske, 56 U.S. (15 How.) 211, 219 (1853) (quoted, Pennwalt, supra, 833 F.2d at 966)

As stated in Eames v. Godfrey, 68 U.S. (1 Wall.) 78 (1863):

[A combination of old elements] differs essentially in its principles from one where the subject-matter is new. * * *
“[Accused infringer] Eames had a right to use any of the parts in Godfrey's patented combination, if he did not use the whole; and if he used all the parts but one, and for that substituted another mechanical structure substantially different in its construction and operation, but serving the same purpose, he was not guilty of an infringement.”

See also Brooks v. Fiske, 56 U.S. (15 How.) 212, 219 (1853) ("The combination and arrangement ... was the only novelty in the invention"); Gould v. Rees, 82 U.S. (15 Wall.) 187, 194 (1872) (the patented combination is avoided "if the ingredient substituted was a new one, or performs a substantially different function, or was not known"); Gill v. Wells, 89 U.S. (22 Wall.) 1, 26-30 (1874) ("the combination is an entirety, and that if one of the ingredients be given up the thing claimed disappears, which is an obvious truth, as the invention in such a case consists simply in the combination"); Brown v. Davis, 116 U.S. 237, 249, (1886) (the lever is an essential element of the combination, and replacing it with the human hand avoids infringement); McClain v. Ortmayer, 141 U.S. 419, 425 (1891)("the patentee is [not] at liberty to say that the spring encircling the after wale is immaterial and useless").


B. “Joint Infringement” Liability is Predicated on a Single Direct Infringer

The dissent in Akamai on Remand makes much about “joint infringement” case law. But, the predicate for joint liability is that there is a single direct infringer. As explained in Dawson Chemical Co. v. Rohm & Haas Co., 448 U.S. 176 (1980)(Blackmun, J.), the issue of “joint infringement” is one where two different parties may be jointly liable for infringement with the predicate that one of the parties is a direct infringer. Thus, a party who is not a direct infringer may be liable as a joint infringer through contributory infringement:
[T]he doctrine of contributory infringement had its genesis in an era of simpler and less subtle technology. Its basic elements are perhaps best explained with a classic example drawn from that era. In Wallace v. Holmes, 29 F.Cas. 74 (No. 17,100) (CC Conn.1871), the patentee had invented a new burner for an oil lamp. In compliance with the technical rules of patent claiming, this invention was patented in a combination that also included the standard fuel reservoir, wick tube, and chimney necessary for a properly functioning lamp. After the patent issued, a competitor began to market a rival product including the novel burner but not the chimney. Id., at 79. Under the sometimes scholastic law of patents, this conduct did not amount to direct infringement, because the competitor had not replicated every single element of the patentee's claimed combination. Cf., e. g., Prouty v. Ruggles, 41 U.S. (16 Pet.) 336, 341 (1842). Yet the court held that there had been "palpable interference" with the patentee's legal rights, because purchasers would be certain to complete the combination, and hence the infringement, by adding the glass chimney. 29 F.Cas. at 80. The court permitted the patentee to enforce his rights against the competitor who brought about the infringement, rather than requiring the patentee to undertake the almost insuperable task of finding and suing all the innocent purchasers who technically were responsible for completing the infringement. Ibid. See also Bowker v. Dows, 3 F.Cas. 1070 (No. 1,734) (CC Mass. 1878).

The Wallace case demonstrates, in a readily comprehensible setting, the reason for the contributory infringement doctrine. [The contributory infringement doctrine] exists to protect patent rights from subversion by those who, without directly infringing the patent themselves, engage in acts designed to facilitate infringement by others. This protection is of particular importance in situations, like the oil lamp case itself, where enforcement against direct infringers would be difficult, and where the technicalities of patent law make it relatively easy to profit from another's invention without risking a charge of direct infringement. See Thomson-Houston Electric Co. v. Ohio Brass Co., 80 F. 712, 721 (6th Cir. 1897) (Taft, Circuit Judge); Miller, Some Views on the Law of Patent Infringement by Inducement, 53 J.Pat.Off.Soc. 86, 87-94 (1971).

Dawson v. Rohm & Haas, 448 U.S. at 187-89 (emphasis added). This predicate is underscored by the statement of the Ninth Circuit that:
The validity of [the infringement] assertion depends upon whether [the conduct] is a direct infringement. "In a word, if there is no infringement of a patent, there can be no contributory infringer." (Mercoid Corp. v. Mid-Continent Co., 320 U.S. 661, 677 (1944) (concurring opinion), quoted and followed in Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 341 (1961) The Aro decision holds that § 271(c) does not change this rule, becoming operative, by its own terms, only where the article involved is for use in an infringement of the patent. Is there direct infringement? We think not.

Fromberg, Inc. v. Gross Manufacturing Co., 328 F.2d 803, 806 (9th Cir. 1964).

It is unquestioned that "§ 271(a) of the [1952 Patent Act], which defines 'infringement,' left intact the entire body of case law on direct infringement."

Akamai on Remand, __ F.3d at __ (Moore, J., dissenting)( quoting Aro Manufacturing Co. v. Convertible Top Replacement Co., 365 U.S. 336, 342 (1961)). Indeed, the starting point for a discussion of the 1952 Patent Act is to understand that in the context of the definition of infringement the new law did not change the scope of liability. This is correctly appreciated by the dissent which states that “[i]t has been generally understood that with regard to infringement, the 1952 Patent Act was not meant to make sweeping changes to the scope of liability, but rather to codify existing infringement liability and restore notions of infringement which had been curtailed by the Supreme Court's decisions in Mercoid Corp. v. Mid-Continent Investment Co., 320 U.S. 661 (1944), and Mercoid Corp. v. Minneapolis-Honeywell Regulator Co., 320 U.S. 680 (1944)." Akamai on Remand, __ F.3d at __ (Moore, J., dissenting).
C. Supreme Court Cases Cited in Dissent in Akamai on Remand

To be sure, the dissent in Akamai on Remand cites several Supreme Court cases in support of its position, but for the most part the Supreme Court cases cited have already been dealt with in detail in the SOFTIC 2001 paper. That paper above all demonstrated precisely how actions of multiple actors in an internet process can be framed in terms of a single actor, a matter of “wordsmithing”. Supreme Court cases cited in the dissent are not common to the SOFTIC 2001 paper are The Emily & the Caroline, 22 U.S. (9 Wheat.) 381 (1824); York & Maryland Line Railroad Co. v. Winans, 58 U.S. 30 (1854); and Bauer & Cie v. O'Donnell, 229 U.S. 1 (1913).

The premise of the dissent in Akamai on Remand is that without infringement liability this "would be rendering the law in a great measure nugatory, and enable offenders to elude its provisions in the most easy manner." Akamai on Remand, __ F.3d at __ (Moore, J., dissenting)(quoting The Emily & the Caroline, 22 U.S. (9 Wheat.) at 389 (emphasis added).

Unlike the patent case at hand where there is an easy solution to draft claims in terms of the action of a single party, The Emily & the Caroline case dealt with a situation having nothing to do with patents where there was no easy solution; The Emily & the Caroline dealt with a law to prevent the act of outfitting vessels for the slave trade in American ports, where violation of the law permits seizure of the vessels. The Emily & the Caroline, 22 U.S. (9 Wheat.) at 388-91. Unlike the situation in The Emily & the Caroline where there was no easy solution, once it is understood that a single actor is needed for direct infringement, then it is a simple issue of wordsmithing to create a claim with such a single actor.
Examples of how this can be accomplished were provided already in 2001 in the SOFTIC 2001 paper.

_York & Maryland Line Railroad_ is quoted by the dissent in _Akamai on Remand_ for the proposition that "a principal, cooperating with another corporation, in the infliction of a wrong, and is directly responsible for the resulting damage." _Akamai on Remand_, __ F.3d at __ (Moore, J., dissenting). But, _York & Maryland Line Railroad_ involved a direct infringement by one of the parties. _York & Maryland Line Railroad_, 58 U.S. at 33 ("Conceding [ ] argumenti grati a, that the relation of principal and agent, or of partners, existed between the two [parties], it cannot be denied that the infringements complained of were not committed by the plaintiff in error, but by the Baltimore and Susquehanna Railroad Company.").

The dissent in _Akamai on Remand_ quotes from _Bauer & Cie v. O'Donnell_ for the proposition that "[t]he right to use is a comprehensive term and embraces within its meaning the right to put into service any given invention." _Akamai on Remand_, __ F.3d at __ (Moore, J., dissenting)(quoting _Bauer & Cie v. O'Donnell_, 229 U.S. at 10-11. Yet, the quotation refers to the various types of activities that are embraced within the patent right and does not apply to the situation at hand. Missing from the dissent is the more complete statement that "the patent law] was passed for the purpose of encouraging useful invention and promoting new and useful improvements by the protection and stimulation thereby given to inventive genius, and was intended to secure to the public, after the lapse of the exclusive privileges granted, the benefit of such inventions and improvements."
With these beneficent purposes in view the act of Congress should be fairly or even liberally construed; yet, while this principle is generally recognized, care should be taken not to extend by judicial construction the rights and privileges which it was the purpose of Congress to bestow.” Bauer & Cie, 229 U.S. at 10 (emphasis added).

D. Circumvention of the Single Direct Infringer Requirement

The single entity rule does not mean that a party can avoid infringement by directing a third party to perform one of the steps of the claimed process. As explained in BMC Resources, Inc. v. Paymentechn, L.P., 498 F.3d 1373 (Fed. Cir. 2007), and Muniauction[, Inc. v. Thomson Corp., 532 F.3d 1318 (Fed. Cir. 2008), the rule that infringement of a multistep claim occurs only when one party performs all steps is modified by cases where a party controls or directs performance of the steps it does not itself perform.

The majority in Akamai on Remand explains this in the context of internet claiming: “In circumstances in which one party, acting as ‘mastermind’ exercises sufficient ‘direction or control’ over the actions of another, such that those actions may be attributed to the mastermind, the combined performance of the steps of a method claim will directly infringe under § 271(a). BMC, 498 F.3d at 1382. ‘Under BMC Resources, the control or direction standard is satisfied in situations where the law would traditionally hold the accused direct infringer vicariously liable for the acts committed by another party that are required to complete performance of a claimed method.’ Muniauction, 532 F.3d at 1330.
This may occur in a principal-agent relationship, a contractual relationship or in circumstances in which parties work together in a joint enterprise functioning as a form of mutual agency.”

V. THE UNFORGIVING PENNWALT “ALL ELEMENTS” RULE

A. The Harsh Reality of the Pennwalt Rule

The law of direct infringement for a process claim that a single actor must perform “all elements” of the claim is part of the broader “all elements” rule of patent infringement.

In the case of process inventions – whether in an older technology or a modern internet network method – many such inventions have a sequence of several steps. In any multi-step \textit{claimed} invention there is infringement \textit{only} where each and every element of the claimed invention is practiced by the accused infringer. The only exception is that an \textit{equivalent} of one or more of the elements may be substituted for a stated element which can result in a finding of infringement under the doctrine of equivalents: But, total elimination of any element without replacement by an equivalent leads to a conclusion of noninfringement.
In *Limelight* the “all elements” rule is explained in the context of method patents:

“A method patent claims a number of steps; under this Court’s case law, the patent is not infringed unless all the steps are carried out. See, *e.g.*, *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 344 (1961) [a “patent covers only the totality of the elements in the claim and . . . no element, separately viewed, is within the grant”]. This principle follows ineluctably from what a patent is: the conferral of rights in a particular claimed set of elements. “Each element contained in a patent claim is deemed material to defining the scope of the patented invention,” *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U. S. 17, 29 (1997), and a patentee’s rights extend only to the claimed combination of elements, and no further.”

*Limelight*, __ U.S. at __.

The classic application of the “all elements” rule to a conventional process is the *Pennwalt* “fruit sorter” case. *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed.Cir.1987) (en banc)(Bissell, J.). Patentee Pennwalt claimed an automated assembly line fruit sorter: Fruit was processed through a claimed multistep process; each step constituted a separate element of the claimed invention. Two of the elements in the claim were unnecessary for successful operation of the Pennwalt fruit sorter system. The accused infringer quite naturally eliminated the two unnecessary steps for his process and achieved equivalent results to the patented claimed invention.

In terms of the *result* achieved by the accused infringer, the *identical* goal was as if all of the steps of the claimed invention had been used. But, because not all of the *claimed elements* were practiced by the accused infringer, there could be no infringement under the “all elements” rule.
B. Judicial Acceptance of the Pennwalt Rule

“Under the ‘all elements’ rule, the accused device must contain each limitation of the claim, either literally or by an equivalent, to be infringing.”


“[L]iteral infringement ‘occurs when every limitation recited in the claim appears in the accused device, i.e., when ‘the properly construed claim reads on the accused device exactly.’” _TecSec v. IBM_, 731 F.3d at 1351 n.2 (quoting _Demarini Sports v. Worth_, 239 F.3d 1314, 1331 (Fed. Cir. 2001), quoting _Amhil Enters., Ltd. v. Wawa, Inc._, 81 F.3d 1554, 1562 (Fed. Cir. 1996)).

As explained in the Linn dissent in _Akamai Panel_ case, “[p]racticing less than all elements of a claim is not patent infringement under § 271(a). _Warner-Jenkinson Co. v Hilton Davis Corp._, 520 U.S. 17, 40 (1997); _Aro [Mfg. Co. v. Convertible Top Replacement Co._, 365 U.S. 336, 340 (1961)] (‘The patent is for a combination only. Since none of the separate elements of the combination is claimed as the invention, none of them when dealt with separately is protected by the patent monopoly.’ (quoting _Mercoid [Corp. v. Mid-Continent Investment Co._, 320 U.S. 661, 667 (1944)])”). _Akamai Techs., Inc. v. Limelight Networks, Inc._, 692 F.3d 1301, 1345 (Fed. Cir. 2012)(en banc)(Linn, J., joined by Dyk, Prost, O’Malley, JJ.), _rev’d and remanded, Limelight Networks, supra_ (original emphasis).

C. The “All Elements” Rule in All Technologies

The example of internet network claim shortcomings is but a small microcosm of the frequent failure of patentees to provide claims of any value. There is case after case of a truly meritorious invention that is patentable, yet the claim draftsman has either made a serious grammatical mistake such as failing to provide claim wording to capture a literally described embodiment in the specification as in Malta v. Schulmerich Carillons, Inc., 952 F.2d 1320 (Fed. Cir. 1991)(Rich, J.), or where there is a grammatical mistake such as where the preposition “to” was used instead of “at” as in Chef America Inc. v. Lamb Weston, Inc., 358 F.3d 1371, 1373 (Fed.Cir.2004).
For example, sometimes, even a preferred embodiment is copied by the accused infringer, one that is fully disclosed in the specification; but, the claim wording comes up short as in *Malta v. Schulmerich Carillons*. Even here, the debate continued; the same jurist who was critical of the decision in *Pennwalt* for not reaching equivalence based on the invention as a whole reprised that opinion in her dissent in *Malta*; she again argued that the Court should be “[l]ooking … at the invention as a whole….” *Malta v. Schulmerich Carillons*, 952 F.2d at 1340 (Newman, J., dissenting).

That every patentable invention should somehow have an enforceable right is difficult to square with the numerous precedents that have found valuable inventions to lack any scope of protection due to oversights or mistakes made by the patent attorney. For example, in *Chef America*, the patentee claimed heating bakery dough “to” near-incineration temperatures (instead of flash-heating “at” such temperatures). Instead of providing a bakery product with “‘a light, flaky, crispy texture,” … which the patented process is intended to provide, the resultant product of such heating will be something that… resembles a charcoal briquet.” *Chef America*, 358 F.3d at 1373. But, “[e]ven ‘a nonsensical result does not require the court to redraft the claims…. patent. Rather, where… claims are susceptible to only one reasonable interpretation and that interpretation results in a nonsensical construction of the claim as a whole, the claim must be invalidated.”’ *Chef America*, 358 F.23d at 1374 (quoting *Process Control Corp. v. Hydreclaim Corp.*, 190 F.3d 1350, 1357 (Fed.Cir.1999)).
VI. INTERNET CLAIMING, NEED FOR LANGUAGE PRECISION

The “all elements” rule is undeniably harsh and unforgiving. The patent applicant who starts the drafting process with the specification and enumerates the various elements that make up his new technology and then merely recites all the features in his claim may end up a victim of the “all elements” rule.

The multiple steps of an internet network (or any other) process must be stated in terms of the actions of one actor who is then the direct infringer under 35 USC § 271(a).

Sophisticated practitioners have long practiced in compliance with the “all elements” rule: “As commentators have recognized, it has been established practice for many years for patent attorneys to draft method claims from the perspective of a single actor. See Robert C. Faber, *Faber on Mechanics of Patent Claim Drafting* § 7:3, at 7-7 (6th ed. 2012) (‘Advice by this author for drafting a method claim remains as previously. Draft at least some of the method claims to focus on steps to be performed by a single entity.’); Harold C. Wegner, *E-Business Patent Infringement: Quest for a Direct Infringement Claim Model* 14 (SOFTIC 2001 Symposium) (noting the need to draft claims to have ‘a single, direct infringer for every claim’), available at http://www.softic.or.jp/symposium/open_materials/10th/en/wegner-en.pdf. Such drafting adds precision, making clear not just what must be done but what each potential infringer must do to infringe.

The challenge of crafting claims to create direct infringement by a single actor is one of language:

Consider the following sequence of steps and the two ways of claiming the steps where a straightforward narrative involves the actions of two parties (thus precluding direct infringement) whereas the same steps are restructured to focus on a single actor in the second sequence (thus meeting the goal of direct infringement):
**VII. PUBLIC POLICY CONCERNS**

**A. Clear Boundaries to Encourage Innovation**

To understand why seemingly harsh doctrines such as the “all elements” rule exist requires an understanding of the Constitutional object of the Patent Clause “to Promote the Progress of *** the Useful Arts”. Encouragement of new innovation on the shoulders of pioneer patentees is facilitated by a system mandating clear claim boundaries to guide downstream innovators to areas open to patent-free innovation.
In parallel with the decision in *Limelight* the Court emphasized the need for claiming clarity in the contemporaneously decided *Nautilus*: “[W]e hold that a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus*, ___ U.S. at ___. Thus “a patent must be precise enough to afford clear notice of what is claimed, thereby ‘appris[ing] the public of what is still open to them.’” *Markman* [v. *Westview Instruments, Inc.*], 517 U. S. 370, 373 (1996)](quoting *McClain v. Ortmayer*, 141 U. S. 419, 424 (1891)). Otherwise there would be “[a] zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims.” *United Carbon Co. v. Binney & Smith Co.*, 317 U. S. 228, 236 (1942).” *Nautilus*, ___ U.S. at ___.

That every patentable invention should somehow have an enforceable right is difficult to square with the numerous precedents that have found valuable inventions to lack any scope of protection due to oversights or mistakes made by the patent attorney. For example, in *Chef America*, the patentee claimed heating bakery dough “to” near-incineration temperatures (instead of flash-heating “at” such temperatures). Instead of providing a bakery product with “‘a light, flaky, crispy texture,’” … which the patented process is intended to provide, the resultant product of such heating will be something that… resembles a charcoal briquet.” *Chef America*, 358 F.3d at 1373. But, “[even ‘a nonsensical result does not require the court to redraft the claims…. patent. Rather, where… claims are susceptible to only one reasonable interpretation and that interpretation results in a nonsensical construction of the claim as a whole, the claim must be invalidated.”’ *Chef America*, 358 F.23d at 1374 (quoting *Process Control Corp. v. Hydreclaim Corp.*, 190 F.3d 1350, 1357 (Fed.Cir.1999)).
B. “Cold Comfort” that Better Claims Can be Drafted

A surprisingly large segment of the patent community has run afoul of the “all elements” rule. Intellectual Property Owners has taken up the cause for the patentees who have been left with worthless claims: “[T]he advice on better claiming is cold comfort for owners of the many thousands of already-issued patents.” Unsuccessful brief amicus curiae of the Intellectual Property Owners Association supporting petition for rehearing en banc in Muniauction, Inc. v. Thomson Corp., 532 F.3d 1318, 1327 (Fed.Cir.2008)(discussing the statement by the Court in BMC Resources, 498 F.3d at 1381, that proper claim drafting avoids the single infringer issue).

C. Reissue to Fix Bad Claims

There are undoubtedly a significant number of patents that disclose but do not properly claim important subject matter thanks to violation of the “all elements” rule. Particularly for patents granted within the past two years, it may not be too late to redraw the claims in a reissue application to fit the single actor “all elements” rule. (Claims that broaden the scope of protection in any way are barred in a reissue filed more than two years after grant.)
VIII. FAILURE OF THE LICENSURE EXAMINATION

A. Practical Drafting Knowledge is not Necessary for the Examination

The licensure examination simply requires a specific knowledge of various deadlines and other formalities during the filing and procurement phase of the application process. There is absolutely no requirement that the registration candidate have any knowledge of precisely how to draft a claim – or any other part of the application:

The patent licensure examination is a completely multiple choice exercise, whereas even a generation ago included an “afternoon session” that was an essay test that included a hypothetical invention where the candidate was required to draft actual patent claims.

B. Bar Review Courses Teach Nothing about Draftsmanship

The patent bar examination today is focused upon the Manual of Patent Examining Procedure. “[A]ll of the material tested is publicly available in the MPEP or in related documents available on the USPTO website.” Holly Chamberlain and Ethan Rubin, The Patent Bar: What it is and What it Means For You, How do you study for the exam? Intellectual Property and Technology Forum at Boston College Law School (November 10, 2013), http://bciptf.org/ (last visited May 13, 2015). The most widely known patent bar review course of today taught by the prestigious Practicing Law Institute touts that its course is completely focused on passing the multiple choice examination:
Wegner, *Internet Method Claims after Akamai*

“The Nation's #1 Registration Exam Course is geared to one thing and one thing only – ensuring you pass the PTO Exam! All course materials are 100% Exam-Focused.” *PLI’s Patent Office Registration Exam Course (a.k.a “Patent Bar Review”), supra.*

One bar review course focuses on *Manual:* “The Manual of Patent Examining Procedure (called the MPEP) is the source for all the questions on the Patent Bar exam.” 2015 PES System Patent Bar Review, [http://www.patenteducationseries.com/overview?gclid=CjwKEAjw7MuqBRC2nNacqJmIpT0SJABQXAOt0I0Xbkkeo93qsqWMZKmXfn4vLQfgCS0YOiFZUTsM7BoCsfbw_wcB](http://www.patenteducationseries.com/overview?gclid=CjwKEAjw7MuqBRC2nNacqJmIpT0SJABQXAOt0I0Xbkkeo93qsqWMZKmXfn4vLQfgCS0YOiFZUTsM7BoCsfbw_wcB) (last visited May 13, 2015).

“You will be tested on the contents of the Manual of Patent Examining Procedures, which is a book roughly the size of a telephone book for a major metropolitan area. Furthermore, some of the chapters of the MPEP are not up to date and if you use them to answer a question on exam day you will get the wrong answer.” Eugene Quinn, *Patent Bar Review Courses,* IPWatchdog.com (December 27, 2013).

Given that the test focuses on the *Manual of Patent Examining Procedure* and repeats the issues in many questions over and over again, it is not surprising that, armed with this information, the patent bar review courses are able to – accurately, without puffing – claim that “everyone” passes who takes the bar review course. Thus, for example, one of the two principal lecturers at the PLI course explains that “eventually everyone who takes [ ]his course passes.” Quinn, *supra.* More fully, he states that:
I have taught for years for the PLI Patent Bar Review Course, the premiere patent bar review course available today, and this course typically teaches close to one-half of all those who take the exam on a yearly basis. The pass rate for those who take the live version of this course is generally around 89% and the pass rate for those who take the home study version is roughly 87%, with both percentages reflecting first time takers. I have personally never spoken to anyone who has taken the course and did not ultimately pass the exam, so eventually everyone who takes this course passes. *** [PLI has] roughly *** a first time pass rate of about 88%. ***

While the focus of this book is upon patent drafting, where the Manual provides little if any help, the Manual also has shortcomings even for the procurement areas it covers. Attempting to decipher the Manual without guidance is next to impossible: “The exam tests small slices of the entire 2000-page MPEP, and it’s all too easy to waste massive amounts of time studying material that will never be tested.” PatBar, http://patbar.com/ (last visited May 13, 2015). “The exam is very difficult. In 2013, the pass rate fell to 46.8%, the lowest level in 10 years. However, PRG conducted a survey of its 2013 Patent Bar Review Course purchasers, and we are proud to report an 89% pass rate!” Patent Resources Group, http://www.patentresources.com/patent-bar-review/ (last visited May 13, 2015)
As candidly explained by Chamberlain and Rubin:

Some candidates choose to self-study for the exam as all of the material tested is publicly available in the MPEP or in related documents available on the USPTO website. *** However, the MPEP is several thousand pages long, and thus impractical to read and outline. Additionally, some of the chapters of the MPEP have not been revised to reflect changes to the law. Therefore, simply studying the MPEP and working through online practice questions can cause you to get questions wrong because the online answers rely on the unrevised MPEP while the actual exam will expect answers in accord with current patent prosecution practice (though not listed in the MPEP). Because of having to outline and determine the most important parts of the tested materials and figure out which questions in online databases have wrong answers due to test updates on your own, this study method tends to only have a first-attempt pass rate of approximately 15 %.

Chamberlain and Rubin, supra.

A bar review course explains:

The MPEP is Not an Appropriate Learning Tool for Preparing for the Patent Bar Exam.

Here are a few facts about studying from the MPEP ...

- It's not an easy read. It includes long, drawn-out laws and rules, citations to the long drawn-out laws and rules, and endlessly lengthy paragraphs.
- It's well over 2,000 pages in length spread out over 28 major Chapters.
- Not everything in the MPEP is on the exam, but without help, you won't know what's tested and what's not covered on the exam.
- It's full of legal jargon. The authors of the MPEP do not include a glossary. None of the legal terms are explained.

Many Patent Bar candidates wind up drowning themselves in thousands of pages of legalese, becoming completely lost. As a result, they fail the exam (if they ever even attempt it at all). And they never pursue their dream of a highly lucrative career in patent law.

A Patent Bar review course will only help you prepare for this difficult exam.

A principal lecturer for the PLI course explains that “[t]he patent bar exam is a tremendously difficult exam. You will be tested on the contents of the Manual of Patent Examining Procedures, which is a book roughly the size of a telephone book for a major metropolitan area. Complicating matters is the reality that there are presently about 10 additional PDF documents in the form of Federal Register Notices that are also testable, but not included in the MPEP. Furthermore, some of the chapters of the MPEP are not up to date and if you use them to answer a question on exam day you will get the wrong answer. ***” Eugene Quinn, supra.

C. Examination without Focus on Practitioner Skills

“The Nation's #1 Registration Exam Course is geared to one thing and one thing only – ensuring you pass the PTO Exam! ** All course materials are 100% Exam-Focused **.” PLI’s Patent Office Registration Exam Course (a.k.a “Patent Bar Review”), supra.


“You will be tested on the contents of the Manual of Patent Examining Procedures, which is a book roughly the size of a telephone book for a major metropolitan area. ** Furthermore, some of the chapters of the MPEP are not up to date and if you use them to answer a question on exam day you will get the wrong answer.

Given that the test focuses on the *Manual of Patent Examining Procedure* and repeats the issues in many questions over and over again, it is not surprising that, armed with this information, the patent bar review courses are able to – accurately, without puffing – claim that “everyone” passes who takes the bar review course. Thus, for example, one of the two principal lecturers at the PLI course explains that “eventually everyone who takes [ ]his course passes.” Quinn, *supra*. More fully, he states that:

I have taught for years for the PLI Patent Bar Review Course, the premiere patent bar review course available today, and this course typically teaches close to one-half of all those who take the exam on a yearly basis. The pass rate for those who take the live version of this course is generally around 89% and the pass rate for those who take the home study version is roughly 87%, with both percentages reflecting first time takers. I have personally never spoken to anyone who has taken the course and did not ultimately pass the exam, so eventually everyone who takes this course passes. ***[PLI has] roughly *** a first time pass rate of about 88%. ***

A lesser known patent bar review has emphasized the repeat nature of the questions and answers that account for the high pass rate for bar review courses that focus on the old examination questions. It has published testimonials which emphasize this fact:
"I finished the first half of the exam in 2 hours and the second half in one and a half hours thanks to the fact that I had seen virtually all of the questions before. Needless to say I passed thanks to your course."

"I memorized all of the questions in your question bank in two weeks and passed the exam with no problem. Now I'll go back and study your material on the MPEP so that I know what I'm doing when I start my job as a patent attorney."

"You made passing the exam a stress free process, since I already knew what questions to expect on my exam."

"*** I got a preliminary pass. I saw about 75 questions from your course on the exam. I only had to look up about 15 questions, the rest I felt I knew. ***."

"You guys rock!!! I'm a first year law student and I passed on my first try thanks to your course. Your online exams and searchable MPEP were perfect preparation for the real test, and after going thru all those old exams the actual test was a lot easier that I thought it would be."

"[Your course] covered everything that was on the exam and nothing that wasn't, and I came across quite a few questions that were exactly like the ones in your online exams ...Thank you for helping me reach my goal of becoming a Patent Agent."

D. An Examination Worthless to Teach Drafting Skill Sets

The examination could be worthwhile if passing the examination meant that the candidate would have to master or at least reach a certain level of proficiency in drafting skills. Indeed, until the mid-1990’s the “afternoon” essay portion of the examination did test for drafting skills. Particularly, a high point value claim drafting exercise guaranteed that the candidates would reach a certain drafting skills level, while the major patent bar review courses did teach how to draft applications as a predicate to the candidates having a chance to pass the examination.

For the past generation, the registration examination is requires nothing more than a detailed study of certain sections of the Manual of Patent Examining Procedure. Even worse, the questions are anticipated by the bar review courses so that the majority of the questions will be familiar to the candidate. For the rest of the questions, the test is based on the Manual of Patent Examining Procedure and the test is “open book” as to this document.

(Precisely what practical drafting skills knowledge does the candidate gain about in preparation for such a test?)

The leading patent bar review course focuses its entire effort on getting its students ready to parrot back answers to questions already understood to be on the test: Its course “is geared to one thing and one thing only – ensuring you pass the PTO Exam! * * * All course materials are 100% Exam-Focused * * *.” § 8[b][2]. Bar Review Courses Teach Nothing about Draftsmanship.
A lesser known bar review quoted earlier touts that “[t]he Manual of Patent Examining Procedure [ ] is the source for all the questions on the Patent Bar exam.” *Id.* A lead lecturer for the leading patent bar review emphasizes that “[y]ou will be tested on the contents of the Manual of Patent Examining Procedures[.]” *Id.* He claims that “everyone” who takes this course will eventually pass, *id.*, and on a recent examination including first time test takers his pass rate was 89 %, *id.*

**IX. CONCLUSION**

The *Akamai on Remand* case on the one hand provides a short term solution that provides clear boundaries to the scope of protection and encourages practitioners to learn the “best practices” techniques of claim drafting. Yet, all is not quiet of the patent front as there surely will be further actions taken in *Akamai on Remand*, whether this involves a petition for further *en banc* review, a petition to the Supreme Court for grant of *certiorari* – or both.
About the Author

HAROLD C. WEGNER is an Expert Patent Consultant, an independent practice which follows his retirement from Foley & Lardner LLP in early 2015.

Prof. Wegner cooperates with colleagues on matters involving patent drafting and procurement strategies, appellate matters, opinions and expert testimony.

Prof. Wegner also continues to provide continuing education services at conferences or tailored to individual organizational needs.

Prof. Wegner is a former Patent Examiner. He also recently concluded a more than twenty year relationship with the George Washington University Law School where he had been Professor of Law, Director of the Intellectual Property Law Program and founding Director of the Dean Dinwoodey Center for Intellectual Property Studies.

Harold C. Wegner
Expert Patent Consultant
8805 Tamiami Trail North-PMB-150
Naples, Florida 34108

hwegner@gmail.com