

“AKAMAI II”: DIRECT INFRINGEMENT DÉJÀ VU*

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I. OVERVIEW

“*Akamai II*” that will be argued before the Federal Circuit on September 11, 2014, is more formally *Akamai Techs. Co. v. Limelight Networks, Inc.*, on remand from the Supreme Court decision in *Limelight Networks, Inc. v. Akamai Techs. Co.*, 134 S. Ct. 2111 (2014), *rev’g, Akamai Techs. Co. v. Limelight Networks, Inc.*, 692 F.3d 1301, 1305 (Fed. Cir. 2012) (en banc)), *rev’g panel opinion*, 629 F.3d 1311 (Fed. Cir. 2010)(Linn, J.), herein “*Akamai I*”.

The starting point for this paper is a review of the earlier proceedings in this case particularly with respect to the issue of direct infringement under 35 USC § 271(a). *See* § II, “*Akamai II*”, *Rethinking Direct Infringement*. The issue of divided infringement is considered in the context of the larger issue of the origins of the “all elements” rule. *See* § III, *Origins of the “All Elements” Rule*.

Limitations to the scope of infringement in *Limelight* and other cases involving multi-step internet network process claims represent a fraction of the case law under the “all elements” rule. *See* § IV, *The “All Elements” Rule under Limelight*. In *Pennwalt*, the first controversial *en banc* patent opinion of the Federal Circuit, the harsh reality of the “all elements” rule was exposed. *See* § IV-A, *The Harsh Reality of the Pennwalt Rule*. With the exception of one member of the *Pennwalt* court (who as a *de facto* matter continues her refusal to fully accept the “all elements” rule), there has been general acceptance of *Pennwalt* by the Federal Circuit. *See* § IV-B, *Judicial Acceptance of the Pennwalt Rule*. While relatively new to internet technology, the “all elements” rule has a rich case law history. *See* § IV -C, *The “All Elements” Rule in All Technologies*.

To be sure, internet network claiming to meet the “all elements” rule requires more careful craftsmanship than in other technologies. *See* § V, *Internet Claiming, the Need for Language Precision*.

The debate will continue whether the “all elements” rule should survive particularly as long as the senior-most member of the Court continues to express her independent voice. In any debate, the competing policy interests will need to be considered. *See* § VI, *Public Policy Concerns*.

Perhaps the most important message of *Limelight* is that the mistake was simply a “common patent drafting error”. As admitted by petitioner in its original Federal Circuit petition for *en banc* review in *Akamai*, the problem is one of “wordsmithing”, here, a “common patent drafting error[].”

Limelight emphasizes the fact that claim drafting is a most difficult craft that had traditionally required manifestation of a certain level of proficiency to be licensed as a patent practitioner. The mistake of the Office in eliminating this critical aspect of the licensure requirements needs to be carefully rethought. *See* § VII, *Reform of the Patent Licensure System*.

The immediate question is considered at the end of the paper: What will the Federal Circuit now choose to do in “*Akamai II*”? *See* § VIII, *Options Open to the Panel in “Akamai II”*

II. “AKAMAI II”, RETHINKING DIRECT INFRINGEMENT

A. The *Limelight* “All Elements” Predicate

The recent Supreme Court decision in *Limelight* throws out the *en banc* Federal Circuit majority’s “Hail Mary” attempt to circumvent the “all elements” rule of 35 USC § 271(a) by invoking a unique theory of “induced” infringement under 35 USC § 271(b).

Under the “all elements” rule direct infringement under 35 USC § 271(a) requires a single actor (alone or with certain related parties) to perform each and every element of a claimed multi-step process. Denying this “Hail Mary” theory of “induced infringement”, the Supreme Court has returned *Limelight* back to the Federal Circuit for whatever consideration the Court chooses to give to the theory of direct infringement under 35 USC § 271(a)

Limelight stripped away the unique idea that the “all elements” rule can be circumvented through a theory of active inducement. This leaves the cold reality that a combination invention is infringed only when a single party carries out all steps of the combination under the “all elements” rule that dates back nearly two hundred years to *Barrett v. Hall*, 2 F.Cas. 914 (No. 1047) (D. Mass. 1818)(Story, J.). The rule was restated by the Federal Circuit in *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed.Cir.1987) (*en banc*)(Bissell, J.), which was the first major *en banc* patent infringement case of this appellate court. It was also the first major *en banc* patent infringement case to demonstrate the independent thinking of its then junior-most member, today the senior member of the Court, who has served on the Federal Circuit throughout its history, save for the first sixteen months of the Court’s existence.

In characteristically dramatic fashion she categorized the *en banc* majority opinion as having “adopted a view of the ‘doctrine [of equivalents]’ that facially contradicts the leading decisions of this court and of the Supreme Court. The court has also ordered a dramatic retrenchment in its equitable authority. Yet the majority declines to distinguish or discuss its departure from binding precedent, indeed declines even to cite this court's closest decisions. The majority can not be oblivious to the *in banc* weight of its opinion, or to the muddle of uncertainty that it will cause.” *Pennwalt*, 833 F.2d at 954 (Newman J., additional views).

B. The “Wordsmithing” Problem of *Limelight*

Limelight involves a problem the problem of *language* under *Pennwalt* or, in the context of internet technology, where the original *Akamai* petition for *en banc* review described the problem as one of “wordsmithing”. Donald R. Dunner *et al.*, *Combined Petition for Panel Rehearing and Rehearing En Banc of Plaintiff-Appellant Akamai Technologies, Inc.* This “wordsmithing” problem is indeed a “common patent drafting error[]” under the “all elements” rule which Thomas Irving passionately spoke of more than a decade ago. 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” with a focus on the failure to write method claims that can be infringed by a single entity and the consequent inability to enforce a property right in the patented invention. This drafting error results in multi-actor method claims where the explicit language of the claim identifies different actors performing various steps.)

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).

III. ORIGINS OF THE “ALL ELEMENTS” RULE

A. Joseph Story, Father of the “All Element” Rule

The “all elements” rule may be traced back nearly two full centuries to legendary jurist and scholar Joseph Story in *Barrett v. Hall*, 2 F.Cas. 914 (No. 1047)(D. Mass. 1818)(Story, J.). Story’s contributions continued in further cases including *Moody v. Fiske*, 17 Fed. Cas. 655 (D. Mass. 1820)(Story, J.); and *Prouty v. Draper*, 20 F.Cas. 11 (No. 11,446) (D. Mass. 1841)(Story, J.), *aff’d*, 41 U.S. (16 Pet.) 336 (1842)(Taney, C.J.). Story in turn credits the basis for his thinking to the opinion of fellow Supreme Court jurist Bushrod Washington, riding circuit in *Evans v. Eaton*, 8 F.Cas. 846 (No. 4559)(D. Pa. 1816), *aff’d*, 3 U.S. (16 Wheat.) 454, 476, 506 (1818). *Barrett v. Hall*, 2 F.Cas. at 924.

Justice Story explained that a patent to a combination of machines is not infringed when a third party does not use the entire combination:

“[A] patent may be for a new combination of machines to produce certain effects; and this, whether the machines, constituting the combination, be new or old. But in such case, *the patent being for the combination only, it is no infringement of the patent to use any of the machines separately, if the whole combination be not used*; for in such a case the thing patented is not the separate machines, but the combination; and the statute gives no remedy, except for a violation of the thing patented.” *Barrett v. Hall*, 2 F.Cas. at 924 (emphasis added)

Two years later in *Moody v. Fiske* Justice Story explained that:

“Where a patent is for a new combination of existing machinery, or machines, and does not specify or claim any improvements or invention, except the combination, unless that combination is substantially violated, the patentee is not entitled to any remedy, although parts of the machinery are used by another, because the patent, by its terms, stands upon the combination only.” *Moody v. Fiske*, 17 Fed. Cas. at 657.

Nearly twenty-five years after the earlier decision, Justice Story explained the doctrine in simpler terms, riding circuit in *Prouty v. Draper*:

“[The patent] is a patent for a combination and for a combination only. ...’ Unless... it is proved, that the whole combination is substantially used in the [accused infringing devices], it is not an infringement of the plaintiffs' patent, although one or more of the parts ... may be used in combination by the defendants. The plaintiffs' patent is for an entire combination of all the three things, and not for a combination of any two of them. A patent for a combination of A, B and C, cannot be technically or legally deemed at once a combination of A, B and C, and of A and B alone.” *Prouty v. Draper*, 20 F.Cas. at 12.

B. Chief Justice Roger Taney did not Create the Doctrine

Chief Justice Roger Taney has often been credited with creation of the “all elements” rule in *Prouty v. Draper*, but his opinion was nothing more than an affirmance of the opinion by Justice Story, riding circuit. This was acknowledged by the Supreme Court less ten years later in *Stimpson v. Baltimore and Susquehanna Railroad Co.*, 51 U.S. (10 How.) 329 (1850)(Daniel, J.). In that case, the Court reached a conclusion keyed to the “all elements” rule, noting that “[t]his conclusion is in strictest accordance with the ruling of the late Justice Story at circuit in the case of *Prouty v. [Draper]*, afterwards confirmed by this court, as will be seen in [41 U.S. (16 Pet.) 336 (1842)].” *Stimpson*, 51 U.S. (10 How.) at 345.

C. Judge Nies Review of Supreme Court Case Law

The rich history of Supreme Court case law supporting the "all elements" rule is chronicled by the late Helen Wilson Nies in *Pennwalt*, 833 F.2d at 949-50 (Nies, J., additional views):

The purpose of a claim has not changed since it was stated in *White v. Dunbar*, 119 U.S. 47, 52 (1886), as follows:

"The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms."

* * * If an accused device does not contain at least an equivalent for each limitation of the claim, there is no infringement because a required part of the claimed invention is missing. Indeed, this hoary principle has long been known as the "All Elements" rule. As stated in 4 D. Chisum, PATENTS § 18.03[4] (1986):

"The 'All Elements' Rule

"Claims in patents are typically drafted in the form of a preamble, transition and one or more elements. Each element constitutes a limitation or narrowing of the scope of the claim. It follows that a claim will not cover or read on" any device or process unless that device or process contains all the elements of the claim (or an equivalent thereof within the meaning of the doctrine of equivalents). This rule is frequently applied by the courts to so-called "combination" claims. However, the rule in fact is a universal one of claim drafting and construction. [Footnotes omitted.]"

Thus, when an element is entirely missing, that is, when the accused device does not contain either the exact element of the claim or its equivalent, there is no infringement. Conversely, an element is not "missing" if an equivalent has been substituted.

Every Supreme Court decision which has addressed the issue of infringement of a patent claim, beginning with *Prouty v. Draper*, 41 U.S. (16 Pet.) 335 (1842) –and the precedent is voluminous – has held that where a part of the claimed invention, that is, a limitation of the claim, is lacking in the accused device exactly or equivalently, there is no infringement.

In *Prouty* the Supreme Court explained:

The patent is for a combination [of multiple parts which] is the thing patented. The use of any two of these parts only, or of two combined with a third, which is substantially different, in form, or in the manner of its arrangement and connection with the others, is, therefore, not the thing patented.

41 U.S. at 341. To the same effect are:

Brooks v. Fiske, 56 U.S. (15 How.) 211, 219 (1853): "To infringe, Norcross must use all the parts of Woodworth's combination."

Vance v. Campbell, 66 U.S. (1 Black) 427, 429 (1861): "Unless the combination is maintained, the whole of the invention fails. The combination is an entirety; if one of the elements is given up, the thing claimed disappears."

Eames v. Godfrey, 68 U.S. (1 Wall.) 78, 79, 17 L. Ed. 547 (1864):

The law is well settled by repeated adjudications in this court and the Circuit Courts of the United States, that there is no infringement of a patent which claims mechanical powers in combination unless all the parts have been substantially used. The use of a part less than the whole is no infringement.

Gould v. Rees, 82 U.S. (15 Wall.) 187, 194, 21 L. Ed. 39 (1872):

Where the defendant in constructing his machine omits entirely one of the ingredients of the plaintiff's combination without substituting any other, he does not infringe, and if he substitutes another in the place of the one omitted, which is new or which performs a substantially different function, or if it is old, but was not

known at the date of the plaintiff's invention as a proper substitute for the omitted ingredient, then he does not infringe.

Dunbar v. Myers, 94 U.S. (4 Otto) 187, 202, 24 L. Ed. 34 (1876): "It is settled law, that, where the respondent in constructing his machine omits one of the ingredients of the complainant's combination, he does not infringe the complainant's patent."

Water-Meter Co. v. Desper, 101 U.S. (11 Otto) 332, 335-37(1879):

It is a well-known doctrine of patent law, that the claim of a combination is not infringed if any of the material parts of the combination are omitted. ***

Accord Case v. Brown, 69 U.S. (2 Wall.) 320, 327-28 (1864); *Gill v. Wells*, 89 U.S. (22 Wall.) 1, 26-30 (1874); *Fuller v. Yentzer*, 94 U.S. (4 Otto) 288, 297 (1876); *Gage v. Herring*, 107 U.S. (17 Otto) 640, 648 (1882); *Fay v. Cordesman*, 109 U.S. 408, 420-21 (1883); *Rowell v. Lindsay*, 113 U.S. 97, 102 (1885); *Sargent v. Hall Safe & Lock Co.*, 114 U.S. 63, 86 (1885); *Brown v. Davis*, 116 U.S. 237, 252 (1886); *Yale Lock Mfg. Co. v. Sargent*, 117 U.S. 373, 378 (1886); *McClain v. Ortmyer*, 141 U.S. 419, 425 (1891); *Wright v. Yuengling*, 155 U.S. 47, 52 (1894); *Black Diamond Coal Mining Co. v. Excelsior Coal Co.*, 156 U.S. 611, 617-18 (1895); *Cimiotti Unhairing Co. v. American Fur Ref. Co.*, 198 U.S. 399, 410 (1905).

D. Rediscovery of the Case Law of Joseph Story

Most contemporary practitioners, scholars and jurists refer to the Taney opinion as the origin of the "all elements" rule. Indeed, the Federal Circuit has never cited any of the three Story opinions, yet has cited the opinion of Chief Justice Taney in several of its opinions. *Pennwalt Corp. v. Durand Wayland, Inc.*, 833 F.2d 931, 949-50, 951 (Fed. Cir. 1987)(en banc)(Bennett, J., joined by Cowen, E. Smith, P. Newman, JJ.); *Pennwalt.*, 833 F.2d at 965-66 (Newman, dissenting *sub nom* "Commentary"); *Hilton Davis Chemical Co. v. Warner-Jenkinson Co., Inc.*, 62 F.3d 1512, 1564 (Fed. Cir. 1995)(en banc)(Lourie,

J., dissenting, joined by Rich, Plager, JJ.), *subsequent proceedings*, *Warner Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997); *Hilton Davis*, 62 F.3d at 1571 n.*, 1572 n.25 (Nies, J., dissenting in part, joined by Archer, C.J.); *see also In re Wright*, 848 F.2d 1216, 1220 (Fed. Cir. 1988)(Newman, J.)(citing *Prouty* for other issues), *overruled, In re Dillon*, 919 F.2d 688 (Fed. Cir. 1990)(en banc).

For the most part, neither academics nor practitioners have deviated from the Federal Circuit understanding of the “all elements” rule, while Professor Moy has correctly traced the origins of the doctrine to Justice Story. *See* R. Carl Moy, *Moy's Walker on Patents*, § 13:47 n. 2 (2012)(quoting *Moody v. Fiske*).

E. Recent Federal Circuit Law and *Limelight*

Limelight leaves the law of direct infringement under 35 USC § 271(a) untouched: The opinion concludes with the statement that “the question on which we granted certiorari did not involve §271(a)...[o]ur decision on the §271(b) question necessitates a remand to the Federal Circuit [which] will have the opportunity to revisit the §271(a) question *if it so chooses.*” (emphasis added).

The law of direct infringement as stated in the *en banc* opinion below thus remains unchanged: “When a single actor commits all the elements of infringement, that actor is liable for direct infringement under 35 U.S.C. § 271(a).” *Akamai*, 692 F.3d at 1305.*

* *Akamai*, 692 F.3d at 1306 (“Much of the briefing in these cases has been directed to the question whether direct infringement can be found when no single entity

The *Aristocrat Technologies* panel explained that “[i]n the recent en banc decision of this court in *Akamai*, we addressed the requirements for infringement under 35 U.S.C. § 271(b) but found that ‘we have no occasion at this time to revisit any of those principles regarding the law of divided infringement as it applies to liability for direct infringement under 35 U.S.C. § 271(a).’” *Aristocrat Techs. Austl. PTY Ltd. v. Int’l Game Tech.*, 709 F.3d 1348, 1362 (Fed. Cir. 2013)(O’Malley, J.) (quoting *Akamai*, 692 F.3d at 1307).

In the interval between the *en banc* opinion below and the Supreme Court decision, the law of direct infringement was explained in *Aristocrat Technologies* and *Move v. Real Estate Alliance*. *Aristocrat Techs.*, *supra*; *Move, Inc. v. Real Estate Alliance Ltd.*, 709 F.3d 1117 (Fed. Cir. 2013)(Lourie, J.). As stated in *Aristocrat Technologies*, “[t]o establish liability for direct infringement of a claimed method or process under 35 U.S.C. § 271(a), a patentee must prove that each and every step of the method or process was performed.” *Aristocrat Technologies*, 709 F.3d at 1362 (citing *BMC Resources*, 498 F.3d at 1378; *Cheese*

performs all of the claimed steps of the patent. *It is not necessary for us to resolve that issue today* because we find that these cases and cases like them can be resolved through an application of the doctrine of induced infringement. In doing so, we reconsider and overrule the 2007 decision of this court in which we held that in order for a party to be liable for induced infringement, some other single entity must be liable for direct infringement. *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373 (Fed. Cir. 2007). To be clear, we hold that all the steps of a claimed method must be performed in order to find induced infringement, but that it is not necessary to prove that all the steps were committed by a single entity.”(emphasis added).

Systems, Inc. v. Tetra Pak Cheese & Powder Systems, Inc. 725 F.3d 1341, 1348 (Fed. Cir. 2013)(Rader, C.J.)(citing *BMC Resources*, 498 F.3d at 1381).

Thus, *Akamai* maintains the *status quo* that “[t]o establish liability for direct infringement of a claimed method or process under 35 U.S.C. § 271(a), a patentee must prove that each and every step of the method or process was performed.” *Move v. Real Estate Alliance*, 709 F.3d at 1122 (citing *Akamai*, 692 F.3d at 1307).

IV. THE “ALL ELEMENTS” RULE UNDER *LIMELIGHT*

The *en banc* decision in *Pennwalt* is the seminal Federal Circuit case for the “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 *claimed* invention there is infringement *only* where each and every element of the claimed invention is practiced by the accused infringer. The only exception is that an *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.

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. 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

There were deep divisions within the *en banc* court in *Pennwalt* led by Circuit Judge Newman – the same jurist who now, years later, once again repudiated the “all elements” rule in the *On Demand* deviation from precedent that led ultimately to *Limelight*. *On Demand Machine Corp. v. Ingram Industries, Inc.*, 442 F.3d 1331 (Fed. Cir. 2006)(Newman, J.), *repudiated, BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1380-81 (Fed. Cir. 2007)(Rader, J.).

While the *en banc* panel in *Pennwalt* was divided, with the exception of the differing voice in *Pennwalt* that continues to the present day, the majority view in *Pennwalt* has received overwhelming support by panels of the Federal Circuit in the nearly thirty years since that case was decided:

“Under the ‘all elements’ rule, the accused device must contain each limitation of the claim, either literally or by an equivalent, to be infringing.” *TecSec, Inc. v. IBM Corp.*, 731 F.3d 1336, 1351 n.2 (Fed. Cir. 2013)(Linn, J.)(citing *TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1379 (Fed. Cir. 2008), quoting *Freedman Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1358 (Fed. Cir. 2005)).

“[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 the *en banc* decision in *Akamai*, “[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 *Mercoind [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).

To be sure, “[m]ost often, the ‘all elements’ rule serves to prevent vitiation of a claim limitation when the infringement theory is based on the doctrine of equivalents, but that is not the case here. *Trading Techs. Int’l, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1355 (Fed. Cir. 2010) (quoting in *Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 39 n.8 (1997)); *see also TIP*, 529 F.3d at 1379; *Freedman*, 420 F.3d at 1358; *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 949-50 (Fed. Cir. 1987)(*en banc*)(Nies, J., additional views).” *TecSec v. IBM*, 731 F.3d at 1351 n.2. Phrased differently, “[u]nder the ‘all-elements rule,’ a patentee may not assert ‘a theory of equivalen[ce] [that] would entirely vitiate a particular claim element.’” *Trading Techs. Int’l, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1355 (Fed. Cir. 2010)(Rader, J.)(quoting *Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 39 n.8 (1997)).

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; a dissent argued along the lines of the overruled *Texas Instruments* case that the court should be “[l]ooking ... at the invention as a whole....” *Malta v. Schulmerich Carillons, Inc.*, 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, “[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.3d at 1374 (quoting *Process Control Corp. v. Hydrexclaim Corp.*, 190 F.3d 1350, 1357 (Fed.Cir.1999)).

V. INTERNET CLAIMING, THE 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 “all elements” rule in the context of internet network claiming is one that Donald R. Dunner has described as the challenge of “wordsmithing”. As petitioner who successfully gained *en banc* review in the *Akamai* case in the proceedings below, the leading Federal Circuit appellate specialist made the argument that “[r]equiring [] awkward wordsmithing by the claim drafter goes against a patentee's obligation to clearly claim the invention.” Donald R. Dunner *et al., supra*.

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 which avoids what Thomas Irving called a “common patent drafting error[]”. Thus, “[a]s 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) (“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.

Professors Donald S. Chisum and Janice M. Mueller note that the *Liemlight* problem can be avoided by drafting claims “with a view to the ‘who’ as well as the ‘what,’ [which] can avoid problems with ‘divided’ infringement and the necessity of showing intent to infringe....The objective is to define ‘direct’ infringement in terms of the actions of single entity.” *Takeaways from Seattle Summer 2014*, *supra*.

Such drafting adds precision, making clear not just *what must be done* but what each potential infringer *must do* to infringe. By contrast, patents that describe desired results without precisely defining how a particular step of the method is performed “may leave the outer boundaries of the claim difficult to decipher.” Federal Trade Comm'n, *The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition* 100 (Mar. 2011), available at <http://www.ftc.gov/reports/evolving-ip-marketplace-aligning-patent-notice-remedies-competition>; see also Executive Office of the President, *Patent Assertion*

and *U.S. Innovation 7-9* (June 2013) (‘*Innovation Report*’), available at http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf; James Bessen & Michael J. Meurer, *Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk* 219 (2008).” *Limelight*, Initial Brief: Appellant-Petitioner, February 24, 2014.

The challenge to create direct infringement by a single actor where different parties are involved in a multi-step process 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):

Narrative Without Infringement	Single Actor -- Infringement
<p>A method of transferring money to a person at a remote terminal wherein</p> <p>(a) the person at the remote terminal inputs a series of keystrokes into a remote computer terminal which then transmits a unique signal to a central server; and</p> <p>(b) the central server sends a signal to the remote terminal to distribute a fixed amount of money based upon computations at the central server.</p>	<p>A method of transferring money to a person at a remote terminal wherein</p> <p>(a) the person at the remote terminal inputs a series of keystrokes into a remote computer terminal which then transmits a unique signal to a central server; and</p> <p>(b) the person receives from the central server [sends] a signal [to the remote terminal] to distribute a fixed amount of money based upon computations at the central server.</p>

Professor Richard Stern in a private communication has (properly) suggested that a single actor claim could also be drafted in terms of the *business* (central server) being the single actor. The Stern claim has the advantage that the business is a *direct* infringer. Under the “consumer” claim diagrammed above, the business would have infringement liability only under a theory of active inducement under 35 USC § 271(b).

VI. 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 requires that the claim boundaries protecting the pioneer patentee are clear, 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, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

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. Ortmyer*, 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*, 134 S. Ct. at 2129.

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; a dissent argued along the lines of the overruled *Texas Instruments* case that the court should be “[l]ooking ... at the invention as a whole....” *Malta v. Schulmerich Carillons, Inc.*, 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, “[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. The Intellectual Property Organization 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, Inc. v. Paymentech L.P.*, 498 F.3d 1373, 1381 (Fed. Cir. 2007)(Rader, J.), 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 redraft 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.)

VII. REFORM OF THE PATENT LICENSURE SYSTEM

A. Classic Patent Bar Goal: Claim Drafting Skills

The Patent Office started testing patent candidates for licensure for many decades from an era long before the multiple choice question came in vogue: Essay examination questions were presented that challenged the candidate's ability to apply legal principles.

Even after multiple choice examinations became popular in society at large and even after much of the patent registration examination focused upon multiple choice tests of knowledge of the patent system, the essay examination and claim drafting questions in particular continued to be at the heart of the licensure test. In the 1970's and up through the mid-1990's the examination comprised a morning session that was entirely multiple choice while essays were featured in the "Afternoon Portion" of the examination.

A claim drafting exercise was at the heart of the “Afternoon Portion”. Two fact patterns were offered, one of a mechanical invention and the other of a chemical invention; the candidate could elect either one for his examination. The applicant would then need to draft a set of claims for generic and more specific coverage of the invention in the fact pattern. This was the major stumbling block for licensure for many of the candidates.

As a result, then-George Washington University Law School Professor Irving Kayton through his private bar review (as well as other private organizations) taught specialized patent claim drafting courses. The Kayton course included both classroom instruction as well as very small parallel breakout claim drafting sessions of no more than about ten students each; they were taught by the best and brightest recent law school graduates.

The Kayton course became very popular, and provided excellent training on both *how* to draft claims to pass the examination, but more importantly taught candidates how to draft claims for *meaningful protection*.

A. Lehman’s Abolition of Claim Drafting for Licensure

In 1998, the rush to filing internet business method patents was spurred on by the imprimatur given to patenting in this area in *State Street Bank*. The year before, the Lehman Administration abolished the requirement for a minimum proficiency in claim drafting skills as part of the patent licensure process. This witches brew of circumstances has led to a generation of patent practitioners in the internet arts who were never tested for claim drafting proficiency with the unfortunate result that many thousands of patents written in this area have useful protection on the order of fools gold.

In 1997 the Office *abandoned* all but the multiple choice portion of the examination. As explained by Professor Thomas, “the PTO abandoned the claims drafting portion of its registration examination in favor of a series of multiple choice questions. The official explanation for the shift was that the examination was too time-consuming to grade....” John R. Thomas, *Claim Re-Construction: The Doctrine of Equivalents in the Post-Markman Era*, 87 J. Pat. & Trademark Off. Soc’y 781, 798-99 (2005)(footnotes omitted citing Department of Commerce, U.S. Pat. & Trademark Off., *Registration Examination for Patent Practitioners and the Establishment of a Continuing Legal Education Requirement and an Annual Fee for Registered Patent Practitioners*, 61 Fed. Reg. 51,072 (Sept. 30, 1996); Department of Commerce, U.S. Pat. & Trademark Off., *Changes to Representation of Others Before the United States Patent and Trademark Office*, 69 Fed. Reg. 35,428 (June 24, 2004).

As explained by the PTO in its proposal to abolish the essay examination, “the preparation and administration of the Registration Examination has taxed OED's resources. ... The Registration Examination restructuring should provide greater assurance to our patent applicants that registered practitioners possess the essential skills necessary to practice before the PTO in patent cases.” 61 Federal Register at 51073.

A first hand account of the transition in 1997 is provided by one of this writer’s colleagues:

“In the summer of 1997 – days before some of my fellow first-year associates ... and I were about to head to Bethesda, MD, for Kayton's prep course -- we got word that live claim drafting would not be part of the exam. Instead, the afternoon session of the exam would involve multiple-choice questions aimed at testing claim-drafting acumen.

When we arrived, Kayton explained that nobody knew exactly what the new afternoon session would involve, but Kayton's minions had located some claim-drafting-oriented multiple-choice questions from older exams, which were then added to the volumes of three-ring binders that we had already received.

The fact that I remember my break-out instructor ... and the problem before us (drafting claims for a traveling lawn sprinkler), causes me to conclude that I must have retained something valuable from the lesson, as well.

I recall that the afternoon portion of the actual exam included several questions where all of the multiple-choice options seemed incorrect. (I remember that a particularly frustrating one involved a threaded champagne bottle closure.) I must have been right about some of those, as we were told that there was a record number of questions that were thrown out, in the scoring process, and that the withdrawn questions seemed to have created a distinct spike in the historical pass rate....”

B. The Registration Examination Today

1. Focus on Everything *but* Claim Drafting

The PTO Registration examination of today appears totally devoid of any questions that even relate to how claims should be drafted. This is seen from the fact that the first source for questions is based upon the *Manual of Patent Examining Procedure. Practitioner Registration Examination Source Material – Source Materials for the Registration Examination*, U.S. Patent and Trademark Office website, last visited November 15, 2011, http://www.uspto.gov/ip/boards/oed/exam/reg_exam_source_material.jsp (“For the updated registration examination beginning April 12, 2011, the source material for the questions and answers will be [based upon six sources]”).

A search under “claim drafting” in the *Manual* (Westlaw FIP-MPEP) gives only three hits, relating to of three isolated aspects of claim interpretation, “comprising” and other claim transitions (§ MPEP 2111.03, *Transitional Phrases*); “[a]cceptability of the claim language depend[ing] on whether one of ordinary skill in the art would understand what is claimed, in light of the specification”(MPEP § 2173.05(b), *Relative Terminology*); and interpretation of “means” claims (MPEP § 2181, *Identifying a 35 U.S.C. 112, Sixth Paragraph Limitation*).

In addition to information from the *Manual*, the *Practitioner Registration Examination Source Material* lists five further sources for test questions, none focused remotely on claim drafting:

2. Examination Guidelines Update: Developments in the Obviousness Inquiry After *KSR v. Teleflex* (available at <http://edocket.access.gpo.gov/2010/pdf/2010-21646.pdf>);

“3. New Interim Patent Subject Matter Eligibility Examination Instructions, August 2009 (available at http://www.uspto.gov/web/offices/pac/dapp/opla/2009-08-25_interim_101_instructions.pdf);

“4. Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of *Bilski v. Kappos* (available at <http://edocket.access.gpo.gov/2010/pdf/2010-18424.pdf>);

“5. Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of *Bilski v. Kappos*, July 2010 (available at http://www.uspto.gov/patents/law/exam/bilski_guidance_27jul2010.pdf); and

“6. Supplementary Examination Guidelines for Determining Compliance with 35 U.S.C. § 112 and for Treatment of Related Issues in Patent Applications (available at <http://edocket.access.gpo.gov/2011/pdf/2011-2841.pdf>).”

2. A Quick \$ 3,000 Passport to the Patent Agent Profession

There is a world of difference between the educational requirements and practical training for a patent agent and a patent lawyer. The latter has *at least* a three year, full time legal education (or four years if an evening student), all after having a B.S. in a science or engineering program that qualifies one to sit for the patent practitioner examination.

The patent agent, after receiving the same B.S. degree, can *immediately* take the examination to qualify as a patent agent. Thus, for example, a twenty-one year old B.S. graduate may sit for the patent practitioner examination. For under \$ 3,000 he can enroll with either of the two most popular patent bar review courses and, if he's a good multiple choice test taker, be fairly well assured that he will soon be a registered patent agent, available to serve the public with the full imprimatur of his licensure by the government, *simply by virtue of being able to pass a single multiple choice test without any training of any kind whatsoever nor any experience in how to write a patent claim.*

A 98.3 % pass rate by taking a bar review course? Yes, according to one course advertisement. <http://www.omnipreppatent.com/passrate.htm>. A more widely known course that focuses entirely on examination passage without teaching about such irrelevant matters as claim drafting, claims a pass rate of roughly 90 %. <http://ipwatchdog.com/patent-bar-exam/patent-bar-review-courses/>. "[E]ventually everyone who takes [the PLI] course passes" because the test can be retaken over and over. *Id.* Thus, a PLI instructor explains that "the pass rate [with or without a review course]... is typically in the range of 50%. ... The pass rate for those who take the [PLI] live ... course is generally around 89 %

and the pass rate for those who take the [PLI] 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.” *Id.*

According to one bar examination course advertisement, the patent registration examination is an *open book* examination focused upon the *Manual* where the test taker will have a *searchable* on line version of the text: “All of the questions on the exam will come from the ... [*Manual*] ... The testing facility will provide you with an online, searchable version of the [*Manual*].”

www.omnipreppatent.com/examformat.htm Another patent bar course says that the *Manual* is not enough: It advertises that the *questions that will be given* should be provided, integrated into a study of the *Manual*:

PatBar offers detailed, customized and hand-selected materials, broken down into concise, easily digestible modules and summaries. You cannot learn the MPEP by rote memorization; only the PatBar Method promotes your mastery of the MPEP. ... PatBar includes previous *and current* exam questions, meticulously culled from recent test-takers and correlated to the materials in your study sessions. <http://patbar.com/patent-bar.shtml>.

Two of the more popular continuing education organizations offering patent bar review courses bluntly advertise that the entire focus of their courses relates to passing the patent bar examination and thus has nothing to do with teaching how to draft claims:

“The [PLI course] is geared to one thing and one thing only - ensuring you pass the PTO Exam! *** All course materials are 100% Exam-Focused, and updated continually to all current USPTO rules tested on the Exam.”

www.pli.edu/Patentbarreview/default.aspx.

“WHAT YOU NEED TO KNOW TO PASS THE NEW EXAM! ...[O]ur [PRG] industry-leading Patent Bar Review Course is 100% focused on helping you to pass the latest version of the exam.”

www.patentresources.com/Courses.aspx?link=Patent+Bar+Review+%E2%80%93+Classroom+or+Online+Video+Course.

The latter course is focused upon a memory bank of 2000 questions: Learn the questions and answers and, presto, you’re a registered patent agent:

“You’ll love the new [PRG] web-based [examination material]. You’ll get every edge to pass the new exam with:

Approximately 2,000 exam Q&As

Access to both a study mode and an automatically timed simulated exam mode

Rationales behind each correct answer and explanations of why the other answers are incorrect.” *Id.*

D. Abandoned Promise to Teach Claim Drafting

When the Office abolished claim drafting from the examination in favor of multiple choice examination of patentability and practice principles, the Office openly admitted that elimination of the claim drafting portion of the examination created a vacuum in its testing procedure, which it planned to fill through yet another mechanism:

“As a further requirement for registration, the PTO is considering substituting the claim drafting portion of the Registration Examination with a comprehensive course on preparation and prosecution of patent applications, including drafting of specifications, claims, and responses to office actions. The PTO is also considering apprenticeships as alternatives to the comprehensive course.” 61 Federal Register at 51073.

But, the Office adopted neither proposal nor does the current examination provide even a hint or suggestion of a question that tests *how to draft claims*.

With the total abolition of any need to gain claim drafting skills to pass the patent registration examination, this led to the demise of claim drafting courses by the private bar that had *de facto* been a mandatory part of training leading up to taking the patent bar examination.

While claim drafting is still taught by the private organizations, the classes are more often at a higher level of claim interpretation that do not challenge claim skills in a meaningful way. More importantly, patent practitioners as a rule do not find it necessary for their practice, particularly if all they do is prep’n’pros work where the need for meaningful post-grant coverage is not apparent from such a perspective.

Certainly, the Kayton era of claim drafting instruction in small, parallel groups where students actually wrote claims and had them critiqued on the spot is long gone.

The *Limelight* case is not the first time that the claim drafting omission of the Patent Office licensure examination has been called to the attention of the Office. In fact, this issue was repeatedly raised in the decade following the abolition of the claim drafting portion of the examination. The back corridor answer from the official in charge of the examination was that it was too burdensome to grade essay examinations. Nearly ten years ago on the occasion of an updating of the Regulations, it was once again pointed out that the Patent Office *must* reinstate an examination that tests for claim drafting expertise:

[The PTO] has completely abandoned the patent [licensure] examination in its classic form [that included an essay examination to test claim drafting skills] in favor of an entirely multiple choice test. Now, it is only a matter of memorization of the Manual of Patent Examining Procedure in pertinent portions – or having sufficient familiarity to look up the relevant portions during the examination which is an open book examination. Perpetuation of this form of examination ... will soon generate ever more perfect test preparation courses that will permit candidates for the test to simply regurgitate multiple choice answers much in the same manner as prep courses for the SAT or LSAT. Being able to memorize or regurgitate answers to repeating multiple choice test questions in no way certifies the candidate as having the slightest ability to use the English language, particularly not in the context of the complex art of patent claim drafting.

Accordingly, if registration is to continue and to fulfill the statutory task of identifying those capable of rendering the statutorily asked for necessary qualifications to draft patent applications and claims, the immediate reform that must be made to the [PTO] process is to reinstate the essay question format that requires demonstration of claim drafting skills as an integral part of the examination.

Testimony of Harold C. Wegner concerning the proposed Modification to Code of Federal Regulations, Changes to Representation of Others Before the United States Patent and Trademark Office, Rulemaking Notice of December 12, 2003, 68 Fed. Reg. 69442, submitted via facsimile February 6, 2004,
<http://www.uspto.gov/ip/rules/comments/representation/wegner.jsp>

E. Claim Drafting Education on the Fly

1. Learning from an Examiner’s Rejections

The bulk of patent claim drafting education today comes from the give and take of patent practice before the examiner. Claims are rejected by Examiners whereupon the patent practitioner crafts claim amendments to overcome the rejections. In this way, the patent practitioner learns how to *gain allowance* of the claims and to deal with patent practice *rejections* of claims.

While this on the job training may be meaningful in terms of gaining the grant of patents, the training is mythical in terms of creating claims that will protect the applicants' inventions: This is a case of the blind leading the blind, because an Examiner's concern is that the claims meet the formal requirements of 35 USC § 112 and define a novel and nonobvious contribution under 35 USC §§102, 103.

The typical examiner has never drafted a claim for a client in his entire professional life, which typically has not included any practice outside the Office. It is of no concern to the Examiner whether the claims provide meaningful protection, a subject that has nothing to do with the examiner's role in the patent examination process. (As seen from the above discussion of the *Manual of Patent Examining Procedure* the Patent Office places no emphasis on claim drafting skills particularly as this is not the function of the Office; neither are career examiners trained in this area nor do they have any experience whatsoever in the crafting of claims, absent the few who have joined the Office after being in outside practice.)

2. Learning through Legal Practice

A substantial minority of patent practitioners are lawyers who earn their bread and butter in major and sometimes boutique law firms through a litigation practice or an upper end counseling practice which includes a focus on opinions on infringement and validity.

This training is not a satisfactory alternative for the patent system at large as it is only a minority of practitioners who fit into this mold.

F. "Cold Comfort" for Picture Claim Victims

Perhaps the most dramatic example of the breakdown of patent licensure may be found in the area of internet patenting where multistep inventions were routinely describing as involving the "*transmission by 'A'*" of information on the internet to a server "B" and then "*transmission by server 'B'*" of further data, a claim having no single direct infringer. It is a simple matter to recast the claim to focus on a single actor, for example, by claims the steps of "*transmission by 'A'*" followed by "*receipt by 'A' of a transmission by server 'B'*". Yet, without the legal training enjoyed by the minority of practitioners who are part of a litigation or upper end counseling practice, the newly minted patent practitioner by and large has learned his craft through the give and take of examiner rejections.

As noted in the quotation from a leading intellectual property organization, *thousands* of patents have been written without this necessary focus on a single actor direct infringer, receiving the "cold comfort" of the advice of the current Chief Judge that the claims could have been better drafted.

The problem for the patent practitioner untutored in drafting an enforceable patent is that the self-training by many practitioners has been with the goal of obtaining a patent. This goal is achieved without a focus upon what the claims mean in terms of actual protection: It is not that the practitioner is not generally aware that such protection is important; rather, the issue becomes one of theory and not practice where the person never had significant actual dealings reading granted patent claims on potentially infringing products.

The experience gained from dealing with examiners also leads the practitioner toward the presentation of narrow claims. Narrow claims are more easily allowed. Picture claims that include all the elements of an embodiment are easiest to draft and are favored by examiners because they are easiest to understand and, being so very narrow in scope, much easier to examine than broad generic claims.

Without the training in litigation or upper end counseling, the experienced patent practitioner with only prep’n’pros experience before the Office more often than not tends to craft claims *for allowance* and without primary regard for *infringement coverage*.

G. “Registered Practitioner”, a Shallow Imprimatur

The PTO has thus put its imprimatur on patent practitioners who have never been tested for minimum competency in claim drafting, the single most important part of application draftsmanship. Furthermore, it is extremely difficult for the purchaser of patent legal services to determine what constitutes a “good” claim from a “bad” claim.

Indeed, the consumers of patent practitioner talent are not always able to make a judgment as to the quality of a patent practitioner, much as a prospective patient for brain surgery is unable on his own to distinguish amongst the potential surgeons who may perform a life or death operation. The problem in the patent area is underscored by Professor Thomas who writes that “[s]uboptimally drafted claims may arise ... from a persistent and widespread inability [of patent law consumers] to discern good claims drafters from bad.” John R. Thomas, *Claim Re-*

Construction: The Doctrine of Equivalents in the Post-Markman Era, 87 J. Pat. & Trademark Off. Soc'y 781, 799 (2005).

H. Bar Membership, a Metric to Gauge Proficiency

To be sure, there are other ways of testing the ability of a candidate's proficiency than passing the patent registration examination: It's called a year law school education coupled with passing a State bar examination.

Thus, if someone is able to both graduate from law school and become a member of the bar, then such a person does not need to take a licensure examination to establish his ability to express himself in English. By way of contrast, the patent agent candidate who has no formal legal training, perhaps a twenty-one year old graduate from an engineering school may be able to “test out” on a multiple choice test: He is able to become fully licensed as a registered patent agent without establishing his proficiency in concepts in concise, legal English, and *a fortiori* is unable to properly draft patent claims.

I. Maintaining the Patent Agent Profession

Sage plutocrat Hal Wegner proposes that patent agents be proscribed from practicing before the new Patent Trial and Appeal Board.... Hal wants slicker reptilian obfuscation from higher-priced lawyers. Next up on Hal's hit list - those lame pro se prosecutors that are creating a backlog with their dime-store applications. After all, the only ‘people’ deserving patent protection are corporations.

-- “The Patent Hawk”*

* The Patent Hawk a/k/a Gary Odom, *Back of the Bus*, The Patent Prospector, September 26, 2011, http://www.patenthawk.com/blog/2011/09/back_of_the_bus.html.

The Leahy Smith Act – more formally the *Leahy Smith America Invents Act*, Public Law 112-29 (September 16, 2011), greatly restructures the statutory patent landscape and opens the door to questions concerning representation before the Office, particularly with its highly complex legal administrative patent trials:

Should patent agent practice be continued in its present form? Should patent agent practice focus on prosecution? Should lawyers, without more, be admitted to practice at the new Patent Trial and Appeal Board, the PTAB?

Are registered patent practitioners uniformly competent to draft enforceable claims? Does this implicate continued patent agent practice? The current paper focuses upon this last set of questions as part of an overall rethinking of patent licensure under *Sperry v. Florida*, 373 U.S. 379 (1963).

Questions raised in the wake of the Leahy Smith Act create a new professional divide prosecution practitioners and between the ranks of “prep’n’pros” mainstream patent practitioners and lawyers involved in patent enforcement.

Yet, the public interest should overshadow differences between the disparate parts of the registered patent practitioner bar and further differences between the attorneys within and outside the patent attorney category. Are practitioners, whether attorney or agent, *qualified* to represent the public at the Patent Office in prosecution areas? Or, a legal practice in the administrative trials at the PTAB? Is the supply of counsel artificially limited because of guild-like restrictions on practice, minimizing supply and maximizing price of patent legal services?

The mainstream prep’n’pros practitioner at the Office prepares and prosecutes patent applications while a significant minority of the lawyers who perform the bulk of today’s more legal services such as interferences and reexaminations will gravitate toward the trial work created under the Leahy Smith Act at the Board level, the statutorily rechristened Patent Trial and Appeal Board, the PTAB.

The overall theme of an ongoing study by this writer is the growing divide between the “prep’n’pros” mainstream patent practitioner and the legal specialty practice areas that will now become ever more important at the PTAB;

That ongoing study includes a focus on the very narrow scope of patent licensure that a patent agent enjoys where the Patent Office considers a patent agent to be practicing *law* outside the scope of his patent agent licensure where he drafts a patent assignment or gives an opinion on the infringement or validity of a patent. For the moment, however, this paper focuses upon a single aspect of the divide within the profession, “wordsmithing”:

A rising tension exists between lawyers and patent agents concerning the future of patent practice under the Leahy Smith Act where some wonder whether the patent agent profession is in jeopardy at some point in the future.

To be sure, to continue the viability of the patent agent profession the minimum standards for licensure must be upgraded to include within the licensure an assurance of a minimum competence level by a patent agent. When the Supreme Court in 1963 placed its imprimatur on patent agent practice it specifically cited the “reform ... effected by the Patent Office, which now requires

all practitioners to pass a rigorous examination....” *Sperry*, 373 U.S. at 395-96(citation to regulation omitted).

Surely, *some* aspects of practice at the Office comprising administrative trials at the new Patent Trial and Appeal Board will require an understanding of complex legal and procedural rules and litigation aspects such as discovery including depositions of key witnesses.

It is not within this writer’s agenda that patent agent practice should be proscribed but rather that the system should be reformed whereby patent agents and lawyers will be better able to represent their clients before the Office. Certainly, at the very center is the need for better claim drafting skills. Whether the practice should be bifurcated to have Ph.D. and other highly technical trained scientists and engineers focused upon procurement before the examiner and have trial level practice at the new PTAB restricted to lawyers is a bridge that does not yet have to be crossed.

To the extent that lawyers are, without more, admitted to practice at the PTAB, this would in any event *increase* the supply of talent available to all, *increase* price competition. The legal consumer would benefit. Any change in practice would, of course, require a grandfather clause to permit all currently registered patent practitioners the right to continue practice within the scope of their licensure.

The Patent Hawk expresses mock concern about "those ... pro se prosecutors that are creating a backlog..." being proscribed from practice; this is not a practical problem as the backlog is created more by the major corporations with thousands of patents in their portfolios.

Neither is there any way that pro se representation could or should be eliminated even if that were a goal: If a capital murder defendant is permitted *pro se* representation where his very life is on the line *a fortiori* the inventor should and must be permitted to act *pro se*.

The answer is *not* to simply "do nothing" as a way to advance the cause of patent agents. To the contrary, the Leahy Smith Act coupled with increased competition will in the end lead to the crippling of the patent agent profession, absent reforms in the system. The current interpretation of the scope of patent agent licensure is quite limited and calls into question the legality of various patent agents (and patent attorneys not licensed where they practice) who today represent clients in legal matters that deal with infringement and validity opinions and other matters outside the licensure of a patent agent, and hence outside the safe harbor of *Sperry*. *Changes to Representation of Others Before the United States Patent and Trademark Office* (Final Rule), 73 Federal Register 47650 (August 14, 2008)

The extreme nature of the problem is seen by the fact that the typical patent agent who does no more than draft assignments is practicing outside *Sperry* and subject to criminal prosecution by a State that chooses to enforce its laws against the unauthorized practice of law:

Registration does not authorize a registered practitioner to recommend or determine the terms to be included in an assignment. The practitioner is not authorized to select or recommend a particular form assignment from among standard form assignments. Registration does not authorize a practitioner to draft an assignment or other document in circumstances that do not contemplate a proceeding before the Office involving a patent application or patent. For example, where an assignment is prepared in contemplation of selling a patent or in contemplation of litigation, there is no proceeding before the Office. When, after a patent issues, there is no proceeding before the Office in which the patent agent may represent the patent owner, drafting an assignment or causing the assignment to be signed are not activities reasonably necessary and incidental to representing a patent owner before the Office. *Id.*, 73 Federal Register at 47666.

If the Patent Office interpretation is followed by a State, the patent agent who merely drafts a patent assignment is outside the licensure “safe harbor” of *Sperry*, 373 U.S. at 383, and subject to criminal prosecution in a State court for the unauthorized practice of law.

Patent agents represent a critical area of prep’n’pros practice, particularly insofar as drafting of cutting edge high technology applications by a Ph.D. specialist in the area can offer assistance to the applicant that may not be equaled by others.

The system must be reformed so that (a) the scope of licensure is defined in a way to more broadly reflected the realities of a patent practice to encompass such matters as patent contracts and opinions; while (b) *prospective* licensure requirements are tightened up so that all persons who are licensed will have established their proficiencies in the areas of their licensure.

Without reforms, the patent agent will stand in the precarious position of being at least arguably outside the safe harbor of *Sperry* and thus subject to prosecution for unauthorized practice of law while at the same time holding a licensure with an imprimatur that has lost its shine.

J. *Limelight*, Manifestation of a Need for Change

Nothing better underscores the failure of the patent licensure examination than the current controversy over *Limelight*. Indeed, as argued by the unsuccessful *amicus* in *Muniaution*, there may well be “thousands of applicants” who have had their patent rights destroyed by their failure to understand the all elements rule. It is, indeed, “cold comfort” for them to know that they could have properly claimed their inventions had they had better “wordsmith[s]”.

Reform of the licensure process for the patent profession is long overdue.

The point *is not* to blame the Patent Office under the Lehman Administration for the short-sighted abandonment of claim drafting for patent licensure.

But, the point *is* that the Patent Office today must reinstitute a requirement for demonstrated claim drafting expertise as a condition precedent to licensure

VIII. OPTIONS OPEN TO THE PANEL IN “AKAMAI II”

The Supreme Court in *Limelight* has left the door open to revisit the question of direct infringement under 35 USC § 271(a) “if it so chooses”. More fully, the Supreme Court has said that:

“[T]he question presented [in *Limelight*] is clearly focused on § 271(b), not §271(a). We granted certiorari on the following question: ‘Whether the Federal Circuit erred in holding that a defendant may be held liable for inducing patent infringement under 35 U.S.C. § 271(b) even though no one has committed direct infringement under §271(a).’ The question presupposes that *Limelight* has not committed direct infringement under §271(a). And since the question on which we granted certiorari did not involve § 271(a), petitioner did not address that important issue in its opening brief. Our decision on the § 271(b) question necessitates a remand to the Federal Circuit, and *on remand, the Federal Circuit will have the opportunity to revisit the §271(a) question if it so chooses.*”
Limelight, 134 S. Ct. at 2120 (emphasis added).

The *Akamai I* panel (Rader, C.J., Linn, Prost, JJ.) concluded that there is no direct infringement where multiple independent parties cumulatively perform all steps of a method claim.

En banc rehearing was granted for the purpose of addressing the issue of direct infringement. *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 419 Fed. Appx. 989 (Fed. Cir. 2011)(per curiam)(Order)(“The parties are requested to file new briefs addressing the following issue: If separate entities each perform separate steps of a method claim, under what circumstances would that claim be *directly infringed* and to what extent would each of the parties be liable?”)(emphasis added).

The *en banc* decision completely avoided an answer to the issue of direct infringement under 35 USC § 271(a) and instead *sua sponte* reached a conclusion of induced infringement under 35 USC § 271(b). On appeal to the Supreme Court as the *Limelight* case, the Supreme Court reversed to find noninfringement under § 271(b) but as part of the remand concluded the opinion with the statement that “the question on which we granted certiorari did not involve §271(a) ...[o]ur decision on the §271(b) question necessitates a remand to the Federal Circuit [which] will have the opportunity to revisit the §271(a) question *if it so chooses*.” (emphasis added).

Although there was Federal Circuit binding precedent on all fours answering the direct infringement question in the negative, *Muniauction, Inc. v. Thomson*, 532 F.3d 1318 (Fed. Cir. 2008), the *en banc* Federal Circuit would have had discretion to overrule *Muniauction*. Instead, the *en banc* Court issued an order that returned the case to the original panel of Prost, C.J., Linn, J., and a third person (to be named the day of the hearing) to replace the retired Chief Judge. That panel, of course, is without discretion to disobey the binding precedent of *Muniauction*.

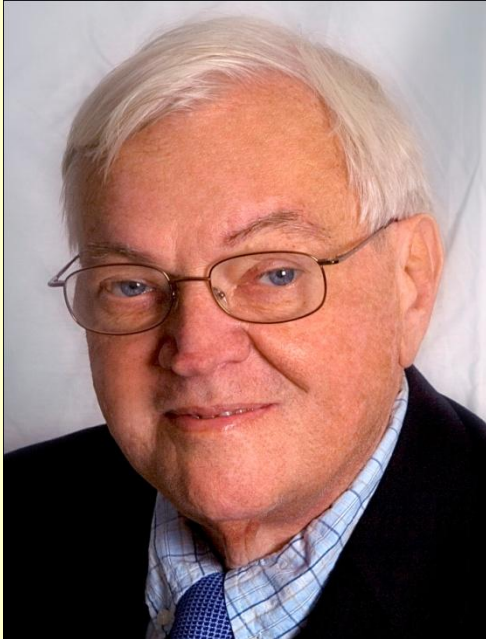
The *Akamai II* panel now is without discretion to disregard binding precedent such as *Muniauction*, but, if it does disagree with *Muniauction* could request the *en banc* Court to take up this issue anew.

IX. CONCLUSION

Confusion over the “all elements” rule has been the order of the day for the eight years since *On Demand* opened the door through *dictum* that there can be direct infringement of a multi-step process without a single direct infringer. Whether *Limelight* is the final chapter or not now depends upon what the *en banc* Court does on remand: Will the Federal Circuit simply accept the law of direct infringement to close this chapter of uncertainty, or will the Federal Circuit choose to answer the question of direct infringement which it dodged in its *Akamai* decision by focusing only on the issue of inducement under 35 USC § 271(b)?

As a practical matter, patentees who have the option to cure claiming mistakes through a reissue should consider this option without waiting for the Federal Circuit to act.

About the Author



HAROLD C. WEGNER this October celebrates his twentieth year with Foley & Lardner LLP where he focuses upon business counseling and patent appellate and opinion practice.

Prof. Wegner’s patent career commenced with service at the U.S. Department of Commerce as a Patent Examiner.

His academic involvement started with a three year period in Munich and Kyoto first as a *Wissenschaftliche Mitarbeiter* at what is today the Max Planck Institute for Innovation and Competition.

After living in Munich, he continued his comparative studies as a *Kenshuin* at the Kyoto University Law Faculty in collaboration with the late Dr. Zentaro Kitagawa.

After eight years on the adjunct faculty at the Georgetown University Law Center, Prof. Wegner commenced a twenty year affiliation with the George Washington University Law School; at GW he was Director of the Intellectual Property Law Program and Professor of Law. His involvement with other academic institutions has included service as a Visiting Professor at Tokyo University.

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