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CLAIMS AS POINTERS: THE STATUTORY APPROACH TO CLAIM CONSTRUCTION

*Joseph Mueller**

I. INTRODUCTION

The United States Court of Appeals for the Federal Circuit, recognizing the dissonance in the case law on claim construction, has taken en banc the case of *Phillips v. AWH Corp.*¹ The en banc order in *Phillips* suggests that the Federal Circuit intends to address the flashpoint for conflict in the case law on claim construction: the relative priority of the possible sources for claim meaning, and in particular the relative priority of the patent's written description as against extrinsic sources such as dictionaries.²

Those Federal Circuit cases that have attempted to probe this important question have usually focused on earlier decisions issued by the Federal Circuit and other courts. Two axioms run through these cases: first, claims must be read in light of the specification, and second, it is improper to import limitations from the specification into the claims.³ These two axioms regularly conflict, as defining a claim in light of the specification (as urged by the first axiom) can be substantively identical to importing a limitation from the specification (as prohibited by the second axiom). Attempts at reconciling these twin axioms have not succeeded, as shown by the decision to take *Phillips* en banc.

While considerable attention has been paid to the case law and its conflicting axioms, little attention has been given to the statutory text itself, which ironically

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¹ 376 F.3d 1382, 71 U.S.P.Q.2d (BNA) 1765 (Fed. Cir. 2004) (“This court has determined to hear this case en banc to resolve issues concerning the construction of patent claims.”).

² See *id.* at 1383 (“Is the public notice function of patent claims better served by referencing primarily to technical and general purpose dictionaries and similar sources to interpret a claim term or by looking primarily to the patentee’s use of the term in the specification?”).

³ See, e.g., *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 904, 69 U.S.P.Q.2d (BNA) 1801, 1806 (Fed. Cir. 2004). In *Liebel-Flarsheim*, the Federal Circuit remarked:

We have had many occasions to cite one or both of the twin axioms regarding the role of the specification in claim construction: On the one hand, claims must be read in view of the specification, of which they are a part. On the other hand, it is improper to read a limitation from the specification into the claims.

Id. (internal quotation marks and citations omitted).

provides a simple and normatively desirable conception of claims: Claims “point out” the invention in the written description.⁴ This Essay discusses the mechanics of following the statutory language, and the policy benefits that would result. Because these benefits are compelling, it is hoped that in *Phillips* the Federal Circuit—or, on review, the Supreme Court—focuses on the Patent Act itself in determining the proper approach to claim construction.

II. THE STATUTORY TEXT

The Patent Act states:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention. *The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*⁵

The italicized language traces its lineage back to section 6 of the Patent Act of 1836, which stated:

[B]efore any inventor shall receive a patent for any such new invention or discovery, he shall deliver a written description of his invention or discovery, and of the manner and process of making, constructing, using, and compounding the same, in such full, clear, and exact terms, avoiding unnecessary prolixity, as to enable any such person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of any machine, he shall fully explain the principle and the several modes in which he has contemplated the application of that principle or character by which it may be distinguished from other inventions; *and shall particularly*

⁴ 35 U.S.C. § 112 (2000) (“The specification shall conclude with one or more claims particularly *pointing out* and distinctly claiming the subject matter which the applicant regards as his invention.” (emphasis added)).

⁵ *Id.* (emphasis added).

*specify and point out the part, improvement, or combination, which he claims as his own invention or discovery.*⁶

As can be seen, both the original and the current statutory text require that the inventor point out the claimed invention. The current text makes clear that the claims themselves must do this pointing.

The statutory language indicates that something is being pointed to—that is to say, that the claims are referential rather than free-standing. The natural object of this pointing is the written description, which is required by the immediately preceding sentence in the current statute.⁷ Thus, basic grammar supports viewing the claims as pointers that refer to the written description. Indeed, Congress could have stated that claims “define” the invention, or “delimit” the invention, or used some other term indicating that claims are independent and free-standing. But by using “pointing out,” Congress cast the claims as inherently referential—and more specifically, referential towards the written description—rather than free-standing.⁸

Early claim practice was consistent with this referential conception of claims. As Ridsdale Ellis stated in his 1949 treatise *Patent Claims*:

It was the universal practice between the 1836 and 1870 [Patent] Acts to terminate the description with one, sometimes two and occasionally more claims. These claims, however, served merely to call attention to what the inventor considered the salient features of his invention. The drawings and description were the main thing, the claims a mere adjunct thereto. . . .

[T]he requirement of the Act of 1836 that an inventor shall “point out” the part, etc., which he claims as his invention or discovery seems to have been interpreted as requiring the inventor to point a finger, so to speak, at the novel parts of the machine described in the specification and illustrated in the drawings, as one would in pointing out the salient features of a landscape.⁹

⁶ Patent Act of 1836, ch. 357, § 6, 5 Stat. 117, 119 (repealed 1870) (emphasis added).

⁷ See 35 U.S.C. § 112.

⁸ We must rely on the statutory language alone, as, to the author's knowledge, no probative legislative history exists.

⁹ RIDSDALE ELLIS, PATENT CLAIMS §§ 3-4 (1949); see also Karl B. Lutz, *Evolution of the Claims of U.S. Patents*, 20 J. PAT. OFF. SOC'Y 134, 141-42 (1938) (discussing how the earliest claims “point[ed] out the novel features of the invention” and “lean[ed] rather heavily on the [written] description for their complete understanding”).

Thus, as Ellis noted, claims often would “point out the novel features . . . us[ing] the reference characters used in the specification and drawings.”¹⁰ Claims also would use referential language, claiming the invention “as herein described” or “as herein set forth.”¹¹

While the statutory text requiring pointing out of the claimed invention remained, in substance, essentially unchanged between 1836 and the present, claim practice eventually evolved away from express references to the written description, and toward the now-prevalent “peripheral” method of claiming.¹² This method treats claims as largely free-standing rather than referential, and uses claims to “mark[] out the periphery or boundary of the area covered by the claim.”¹³ The shift toward peripheral claiming was not required or authorized by any statutory amendment; as the Supreme Court stated in *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, the “change in claiming practice [toward peripheral claiming] . . . is not of statutory origin.”¹⁴

Despite its lack of statutory pedigree, the evolution in claim practice apparently exerted a gravitational pull on many (though not all) courts, with the unfortunate result being a schizophrenic body of cases that alternately viewed claims as referential and as free-standing, and that alternately relied on one or the other of the conflicting axioms discussed above in Part I—a swinging pendulum that the Federal Circuit seems resolved to bring to a halt in *Phillips*.¹⁵ This Essay sets aside both customary claim practice and the resulting case law, and instead examines a model of claim construction built on the ultimate authority: the statutory text, with its requirement that claims point out the invention in the written description.

¹⁰ ELLIS, *supra* note 9, § 5 (providing examples of claims using reference characters from the written description, and discussing 1869 Rules of Practice of the Patent Office, which included model claims using reference characters).

¹¹ See, e.g., U.S. Patent No. 300 (issued July 29, 1837) (claiming “[t]he application of this endless belt so as to twist the thread of the woolen roving on its passage from the back rollers to the front rollers, *as before described*” (emphasis added)); U.S. Patent No. 400 (issued Sept. 25, 1837) (claiming “[t]he application of springs *as herein described*” (emphasis added)); U.S. Patent No. 500 (issued Dec. 1, 1837) (claiming “[t]he form of the bottom of the plow, being made with two plane surfaces, instead of curved, as is usual, the line forming the angle of these two planes being so situated that the weight of the earth, when the box is full, will throw the front of the plow up, *as herein set forth*” (emphasis added)).

¹² ELLIS, *supra* note 9, §§ 4-8.

¹³ *Id.* § 4.

¹⁴ 520 U.S. 17, 27 n.4, 41 U.S.P.Q.2d (BNA) 1865, 1876 n.4 (1997).

¹⁵ See *Phillips*, 376 F.3d at 1382.

III. THE MECHANICS OF TREATING CLAIMS AS POINTERS

If claims are pointers aimed at the written description, it follows that the meaning of a claim can only be determined by following the pointer to the relevant section or sections of the written description. Thus, the guiding rule of claim construction under a claims-as-pointers regime would be: A claim's meaning is determined by reference to the written description to which the claim points.

This rule necessarily sets the written description as the outer boundary for literal claim scope. This can be stated as a corollary to the guiding rule set out above: The literal scope of a claim can be no broader than the written description to which it points.¹⁶

A claims-as-pointers approach would not necessarily limit a claim to preferred embodiments, as claims could point to the broadest description in the written description. Many patents contain a general description of the invention that embraces a range of embodiments, including some not described in detail as preferred embodiments. Claims could point to these general, broader descriptions of the invention.¹⁷ Where, however, the broadest teaching of a written description is a single embodiment—that is, where the written description, from its beginning to its end, describes only one embodiment—a claim could be no broader than this single embodiment.

Extrinsic evidence, such as expert testimony and technical dictionaries, could play two valuable roles in a claims-as-pointers regime. First, extrinsic evidence could inform the determination of where a claim points, i.e., the section or sections of the written description a claim is pointing out. Second, extrinsic evidence could help explain these sections of the written description. Patents are technical documents to be read from the ordinary artisan's perspective, and extrinsic evidence can allow a court to better read the patent through the eyes of the artisan.

Extrinsic evidence could not, however, provide a competing source of claim meaning independent from the written description. The only relevant meaning would be the meaning an ordinary artisan would discern from reading a claim alongside the written description to which it points. Gone would be the now-

¹⁶ The doctrine of equivalents would afford an additional layer of patent scope.

¹⁷ At some point, however, a general description loses its descriptive value. Boilerplate language such as "skilled practitioners will recognize that the invention can be modified in many ways" is meaningless, and should not carry any weight in determining patent scope. Where to draw the line between such boilerplate and a meaningful general description is a difficult question, and one which should be a focus of the courts' claim construction jurisprudence.

prevalent contests between meanings derived from extrinsic evidence and meanings derived from intrinsic evidence.

IV. BENEFITS OF A CLAIMS-AS-POINTERS REGIME

The benefits of the claims-as-pointers approach would be significant, and are listed below.

A. A CAREFULLY TAILORED PATENT BARGAIN

Treating claims as pointers would carefully tailor the monopoly rights of the patent, rewarding inventors for described inventions, but otherwise protecting the public domain. Patent holders would be held to the invention actually described by the patent, and could not attempt to use a patent's claims to assert rights over other inventions not disclosed in the patent.¹⁸

B. BETTER WRITTEN DESCRIPTIONS, FEWER CLAIMS, AND MORE EFFICIENT PATENT EXAMINATIONS

A claims-as-pointers approach would place a premium on high-quality written descriptions that comprehensively canvass the scope of an invention. Such written descriptions would maximize the subject matter to which the claims could point. High-quality written descriptions also would provide better public notice as to the scope of the invention, and would better fertilize the relevant field of technology, more readily allowing other inventors to build on the described inventions.

A claims-as-pointers system would discourage filing numerous claims (in a single application or in a series of continuation applications) in an attempt to parlay linguistic differences among the claims into greater patent scope, as the scope of any claim would be limited to the outer boundary of the written description. With better written descriptions and fewer claims, patent examiners would be able to process applications more efficiently and expeditiously.

C. INCREASED PREDICTABILITY AS TO PATENT SCOPE

If the written description were the outer boundary for claim scope, the range of possible claim constructions would decrease, and the public would be able to predict more precisely the scope of the claims and adjust their behavior accord-

¹⁸ The structure of the patent bargain is discussed at greater length in Part V.C, *infra*.

ingly. The prose style of the written description would enhance this predictability.¹⁹ Gone would be the confusing etymological inquiry into the ordinary meaning of a claim and the equally confusing analysis of when the written description clearly disavows this ordinary meaning.²⁰

D. LOWER APPELLATE REVERSAL RATE OF CLAIM CONSTRUCTIONS

As noted above, the claims-as-pointers regime would restrict the range of possible constructions. This would, in turn, narrow the ground for Federal Circuit disagreement with district court constructions.

E. FEWER WRITTEN DESCRIPTION INVALIDITY ATTACKS

Because no claim could be construed as embracing matter not included in the written description, written description invalidity attacks would likely plummet under a claims-as-pointers regime. Indeed, unless the Patent Office were derelict, and allowed a claim to issue that was wholly unrelated to the written description—such that the claim could not be reasonably read to point to anything in the written description—it would be highly difficult (if not impossible) to mount a written description validity attack in a claims-as-pointers regime.²¹

¹⁹ It is perhaps telling that when patents are cited as prior art, the citations are usually to the written descriptions of the patents, as the prose of the written description provides the best explanation of the technology. Indeed, in the context of its recent decision on the doctrine of prosecution history estoppel, the Supreme Court highlighted the written description's notice function, stating:

A patent holder should know what he owns, and the public should know what he does not. For this reason, the patent laws require inventors to describe their work in “full, clear, concise, and exact terms.” 35 U.S.C. § 112, as part of the delicate balance the law attempts to maintain between inventors, who rely on the promise of the law to bring the invention forth, and the public, which should be encouraged to pursue inventions, creations, and new ideas beyond the inventor's exclusive rights.

Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 730-31, 62 U.S.P.Q.2d (BNA) 1705, 1709 (2002).

²⁰ *See, e.g., Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Comm'n*, 383 F.3d 1352, 1364 (Fed. Cir. 2004) (stating that a court will give a claim term “the full range of its ordinary meaning” as “determined by reviewing a variety of sources, which may include the claims themselves; dictionaries and treatises; and the written description, the drawings, and the prosecution history” unless “the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope” (internal quotations and citations omitted)).

²¹ For similar reasons, a claims-as-pointers approach might tend to reduce the number of enablement attacks. Enablement challengers could, however, still argue that the written description

F. MORE EFFICIENT PATENT LITIGATION

The increased determinacy and predictability of patent scope would result in more efficient adjudication of patent scope. Because patent scope lies at the heart of patent litigation, this efficiency gain would streamline the disposition of patent cases at the district courts and on appellate review. The fewer written description (and perhaps enablement) invalidity attacks would also help streamline the process. Moreover, with a lower appellate reversal rate, the incentive to appeal—and thereby to prolong the litigation—would diminish. The end result would be a reduction in the costs of patent litigation for the courts and the litigants.

V. ANTICIPATED QUESTIONS

The significant benefits of a claims-as-pointers regime notwithstanding, several questions about the wisdom of the regime are foreseeable.

A. WOULD THE VALUE OF PATENTS BE UNDULY DIMINISHED?

Answering this important question requires starting from first principles. The patent system is designed to promote invention.²² Patents are aimed at remedying a problem inherent in all inventions—namely, that inventions can be copied, depriving the inventors of the full economic benefit of their innovations. Indeed, without patent protection, copyists could freely appropriate the fruits of inventors' labors, chilling future invention. To counter this free-rider problem, and to ensure a normative level of inventive activity, the patent law provides inventors with certain monopoly rights over their inventions.²³

Against this backdrop, the question of whether a claims-as-pointers regime would unduly diminish the value of patents is better expressed as: Must the monopoly rights conveyed by a patent be broader than the patent's written description, to encourage the normative level of inventive activity? The author is unaware of any empirical evidence suggesting that the answer is yes—that is, that prospective inventors need the incentive of an additional layer of monopoly

to which a claim points fails to impart enough information to allow enablement.

²² See U.S. CONST. art. I, § 8, cl. 8 (giving Congress the power “[t]o promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”).

²³ See, e.g., Mark A. Lemley, *Ex Ante Versus Ex Post Justifications for Intellectual Property*, 71 U. CHI. L. REV. 129, 129 (2004) (“The traditional economic justification for intellectual property is well known. . . . [A]bsent intellectual property protection, most would prefer to copy rather than create new ideas, and inefficiently few new ideas would be created.”).

rights, beyond the described invention, before they will engage in a normative level of inventive activity.

Moreover, such an additional layer of patent protection carries with it economic costs. Patent monopoly rights create the same problems as all monopolies, i.e., lower supply and higher prices than would occur in a competitive market. While a certain level of monopoly rights is necessary to counter the free-rider problem discussed above, these rights should be carefully tailored so that the costs of the monopoly do not outstrip the benefits. In the absence of evidence demonstrating that encouraging a normative level of inventive activity requires extending a patent's monopoly beyond its written description, such extension should be precluded by law—as it would be under a claims-as-pointers system.²⁴

Moving from general principles to specific doctrine, three points must be noted. First, as discussed above, a claims-as-pointers approach would not necessarily result in patents of narrow scope. To the extent a patent's written description describes a broad range of embodiments (and not just particular preferred embodiments), the patent's claims could point to this broad description. Second, in a claims-as-pointers regime the doctrine of equivalents would continue to provide the flexibility needed to capture copyists. Third, because the claims-as-pointers approach would result in claims that are less vulnerable to written description validity attacks,²⁵ in this respect the value of patents would be enhanced. A narrower, valid claim is preferable to a broader, invalid claim.

B. WOULD CLAIMS BE SUPERFLUOUS?

Claims would not be superfluous, for two reasons. First, claims would provide a mechanism for claiming less than what is disclosed in the written description. This mechanism is needed in several contexts, including divisional applications, situations where prior art surfaces during examination and requires cutting back on the originally intended scope of the patent, and the rare instances of public dedication.

²⁴ For recent discussion of the problems posed by bad patents, see, for example, Jonathan D. Putnam & Andrew B. Tepperman, *Revisiting the Cost of Bad Patents: For Whom Is "Rational Ignorance" Rational?*, INTEL. PROP. TODAY, Oct. 2004, at 17, 19 ("The issuance of poor quality patents causes an externality to transacting parties which largely cannot be otherwise internalized."); Thomas J. Engellenner, *Don't Stymie Competition*, NAT'L L.J., Mar. 1, 2004, at 30 ("Unduly broad patents also cause companies to forgo research and development in the areas that the patent improperly covers."); Jonathan Krim, *Patenting Air or Protecting Property?*, WASH. POST, Dec. 11, 2003, at E1, E4 ("[A] growing chorus of corporate and government officials is warning that the U.S. Patent System is broken, threatening to stunt technological innovation.").

²⁵ See *supra* Part IV.E.

Second, by pointing out the invention in the specification, claims would direct the reader to the relevant portions of the specification. This could be illuminating, particularly if it is otherwise unclear where the description of the prior art ends and the description of the invention begins. Indeed, as discussed above, this seems to have been the original purpose of claims.²⁶

C. WOULD PARAGRAPH 6 OF 35 U.S.C. § 112 BE SUPERFLUOUS?

Paragraph 6 of 35 U.S.C. § 112 would be rendered superfluous in one sense, but not another. Paragraph 6 would be superfluous in the sense that a claims-as-pointers regime would involve construing all claims to cover the subject matter the claims pointed to in the written description, plus whatever additional coverage is afforded by the doctrine of equivalents. This approach would obviate the need to specify that claims using means-plus-function or step-plus-function language “shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”²⁷

But paragraph 6 would not be superfluous from a historical perspective. The event that led Congress to enact paragraph 6 was the Supreme Court’s decision in *Halliburton Oil Well Cementing Co. v. Walker*, which held a means-plus-function claim to be exceptionally broad and ambiguous, and therefore invalid.²⁸ By effectively reversing this holding, the statutory provision had meaning—even if all it did was recognize that claims written in means-plus-function or step-plus-function form are unexceptional and simply subject to the normal rules of claim construction.

If the rule of construction laid out in paragraph 6 were deemed a reference to the normal approach of claim construction, it would substantially simplify the paragraph 6 doctrine. For example, no longer would courts need to puzzle over the statute’s reference to “equivalents thereof,” attempting to distinguish between this language and the doctrine of equivalents.²⁹ Instead, the statutory language

²⁶ See ELLIS, *supra* note 9, §§ 3-4.

²⁷ 35 U.S.C. § 112, ¶ 6 (2000). This analysis assumes that the reference in paragraph 6 to “corresponding structure, material, or acts described in the specification” embraces the broadest description in the specification, as opposed to embracing only the preferred embodiments that are described in detail. *Id.*; see *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258, 52 U.S.P.Q.2d (BNA) 1258, 1264 (Fed. Cir. 1999) (“When multiple embodiments in the specification correspond to the claimed function, proper application of § 112, ¶ 6 generally reads the claim element to embrace each of those embodiments.”). To the extent that the language in paragraph 6 is interpreted to embrace something less than the broadest description of the specification, paragraph 6 would require a different methodology of claim construction than the claims-as-pointers approach as set out in this Essay.

²⁸ 329 U.S. 1, 71 U.S.P.Q. (BNA) 175 (1946).

²⁹ 35 U.S.C. § 112, ¶ 6.

would be understood as simply a reference to the traditional doctrine of equivalents.³⁰

VI. CONCLUSION

The referential conception of claims as pointers directed to the written description is not new. Indeed, as discussed above in Part II, claim practice contemporaneous with the 1836 enactment of the “point out” statutory language was consistent with this referential conception.³¹ Over the years, customary claim practice moved away from this referential conception, and apparently took many courts with it. But not all courts: As a recent Federal Circuit panel noted, a long line of cases has taken the view that “the patent is an integrated document, with the claims ‘pointing out and distinctly claiming,’ the invention described in the rest of the specification.”³² As this Essay attempts to show, this referential conception of claims is both required by the statute and normatively desirable, and in *Phillips* the Federal Circuit—or the Supreme Court—would be well served to declare it the law of the land.

³⁰ At least one commentator, citing certain legislative history, has stated that the statutory reference to equivalents “was meant to codify the doctrine of equivalents for functional claim elements.” David R. Todd, *How Modern Treatment of 35 U.S.C. § 112(6) Has Caused Confusion: Hilton Davis v. Warner-Jenkinson and the Right to a Jury on the Issue of Patent Infringement Under the “Equitable” Doctrine of Equivalents*, 1996 BYU L. REV. 141, 156 (1996).

³¹ See *supra* notes 9-11 and accompanying text.

³² *Astrazeneca AB v. Mut. Pharm. Co.*, 384 F.3d 1333, 1337, 72 U.S.P.Q.2d (BNA) 1726, 1728-29 (Fed. Cir. 2004) (quoting 35 U.S.C. § 112 (2000)). Judge Learned Hand, writing for the Second Circuit sixty years ago, stated: “As in the case of any other claim, a product claim may, and indeed must, be read upon the specifications: its terms are no more than a shorthand from the fuller explanation which the specifications should contain.” *Musher Found., Inc. v. Alba Trading Co.*, 150 F.2d 885, 888, 66 U.S.P.Q. (BNA) 183, 186 (2d Cir. 1945).

