# United States Court of Appeals for the Federal Circuit

IN RE THOMAS G. PACKARD

2013 - 1204

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Serial No. 12/004,324.

Decided: May 6, 2014

LOUIS W. TOMPROS, Wilmer Cutler Pickering Hale and Dorr, LLP, of Boston, Massachusetts, argued for appellant. With him on the brief were PROSHANTO MUKHERJI and CAITLIN R. LOOBY.

NATHAN K. KELLEY, Deputy General Counsel for Intellectual Property Law and Solicitor, United States Patent and Trademark Office, of Alexandria, Virginia, argued for appellee. With him on the brief were KRISTI L. R. SAWERT and STACY B. MARGOLIES, Associate Solicitors. Of counsel was WILLIAM LAMARCA, Attorney, United States Patent and Trademark Office, of Alexandria, Virginia.

## Before O'MALLEY, PLAGER, and TARANTO, Circuit Judges.

## Concurring opinion filed by *Circuit Judge* PLAGER.

## PER CURIAM.

This case raises an important question: what standard for indefiniteness should the U.S. Patent and Trademark Office ("USPTO") apply to pre-issuance claims? The parties point to no case in which we previously have addressed this question.

The Patent Trial and Appeal Board ("Board") held Mr. Packard's applied-for patent claims indefinite, and therefore not in compliance with the statutory drafting requirements of 35 U.S.C. § 112(b), which provide that the specification conclude with "one or more claims particularly pointing out and distinctly claiming" the subject matter of the invention.<sup>1</sup> Mr. Packard, on appeal to this court, insists that the Board misapplied the standard of indefiniteness by finding his claims indefinite on grounds that they "contain[] words or phrases whose meaning is unclear." J.A. 14. He believes that, had the Board applied an "insolubly ambiguous" standard to his claims, those claims would not have been held indefinite.

For the reasons we shall explain, we affirm the Board's rejection of Mr. Packard's claims.

<sup>&</sup>lt;sup>1</sup> The patent in this case was filed prior to the September 16, 2012 effective date of § 4(c) of the Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, which replaces paragraph 2 of 35 U.S.C. § 112 with newly designated § 112(b). For the benefit of current readers, we have adopted the current designation as the text in relevant part is unchanged.

## BACKGROUND

The application in this appeal covers a coin change holder. J.A. 24. The coin holder is a thin plastic card that has four different channels on its front surface for storing different types of coins, as shown in the patent figures reproduced below. J.A. 24.

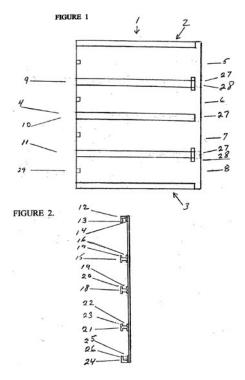


Figure 1 shows a frontal view of the card and Figure 2 shows a cross-section of the card. J.A. 37.

The examiner rejected Mr. Packard's original application on three grounds: lack of adequate written description, claim indefiniteness, and obviousness. J.A. 145-47. Following this rejection, Mr. Packard cancelled all of his original claims and substituted a new set of claims numbered 28 through 37. J.A. 95-99.

Claims 28 through 37 are at issue in this appeal, of which claims 28, 29 and 34 are representative:

28. I claim a small, thin, flat plane, rectangular change holding card and wallet/billfold or purse construction with the front top side of the card comprising three raised, straight, parallel, double flanged separators and two raised, straight, parallel, double flanged side edges and a raised side edge end thereby forming four parallel, side by side, flanged coin holding channels or rows of the same length and of different widths, one for guarters, one for dimes, one for nickels, and one for pennies, that are similarly blocked at one side edge by the raised side end edge with the other side of the channel/rows open except for small, fixed, flexible, partially moveable, rubber or plastic retainers that are attached to the topside and ends of the double flanged separators such that coins can be retained on the card and yet slide freely above the surface of the card and obliquely overlap as necessary within the channel/rows between the separators while the bottom, back side of the card is constructed with a wallet, billfold or purse extending from it.

29. The change holding card wallet, billfold, purse of claim 28, wherein the change holding card is constructed as part of the wallet, billfold, or purse and affixed to a surface and contained within the wallet, billfold or purse.

34. I claim a small thin uniformly flat plane rectangular coin holding card [c]omprising side edge retainers, a closed side retainer, small inclined/sloped end protrusions, multiple raised parallel, straight and double flanged channel/row separators, small flexible protruding retainers on the top side ends of the channel/row separators, all of which are arranged on the upper surface of the card such that a various denomination of coins can be held and retained on the card within a respective channel/row and can slide freely within the double flanges and slightly above the flat surface of the card and can also be stored obliquely partially overlapping.

## J.A. 95-98.

The examiner, in his final rejection, again found the pending claims invalid on the same three grounds: claims 28-33 and 37 for lack of written description, claims 28-37 for indefiniteness, and claims 28-37 for obviousness. J.A. 108-14. Regarding written description, the examiner noted that, while the claims required the change holding card to be attached to a wallet, this feature was not supported by the written description. J.A. 109. Regarding indefiniteness, the examiner pointed out that several claim limitations failed to meet the requirements of 35 U.S.C. § 112(b) because they lacked an antecedent basis or were otherwise unclear. J.A. 109-10.

Mr. Packard appealed the examiner's final rejection to the Board, which affirmed the examiner's written description and indefiniteness rejections, while reversing the obviousness rejection. J.A. 7-19. In the course of affirming the examiner's indefiniteness rejection, the Board applied the review standard set forth in the Manual of Patent Examining Procedure ("MPEP") § 2173.05(e), namely, "[a] claim is indefinite when it contains words or phrases whose meaning is unclear." J.A. 14. On rehearing, the Board declined to modify its decision. J.A. 2-5.

Mr. Packard appeals the Board's decision. In its response to Mr. Packard's opening brief on appeal, the USPTO focused on the indefiniteness issue, noting that, if we affirm the Board on that issue, which applies to all the claims, the adequacy of the written description, applicable to only some of the claims, becomes a moot issue. We accept the USPTO's suggestion that we address first the claim indefiniteness issue because it relates to all of the claims and it necessarily implicates the question of the content of the written description.

Actions of the USPTO are reviewed by us in accordance with the requirements of the Administrative Procedure Act. 5 U.S.C. § 701 et seq.; see Kappos v. Hyatt, 132 S. Ct. 1690, 1694 (2012) (citing Dickinson v. Zurko, 527 U.S. 150, 152 (1999)). Questions of law, as interpreted and applied by the agency, are given plenary review on appeal. Capon v. Eshhar, 418 F.3d 1349, 1351 (Fed. Cir. 2005). Indefiniteness, as a subset of claim construction, is a question of law which this court reviews without deference. Kinetic Concepts, Inc. v. Blue Sky Med. Grp., Inc., 554 F.3d 1010, 1022 (Fed. Cir. 2009).

We have jurisdiction over this appeal pursuant to 28 U.S.C. § 1295(a).

## DISCUSSION

### 1.

Petitioner Packard casts his appeal on broad grounds. First, he contends that the standard applied by this court for determining indefiniteness of a term in a claim under 35 U.S.C. § 112(b) is governed by the phrase "insolubly ambiguous." Under this standard, he tells us, a claim is not indefinite if a court can give any meaning to the disputed term in the context of the claim.

Second, Mr. Packard contends that the "insolubly ambiguous" standard of this court for indefiniteness is mandated not only for our use in deciding cases in which the patent has already issued and is being challenged ("postissuance cases"), but also for cases in which no patent has yet issued and in which the applied-for claims are being evaluated by the USPTO ("pre-issuance cases"). He states that this standard is more favorable to his case than the standard applied to his claims by the USPTO.

For the reasons we shall explain, we believe that the case before us can be resolved without addressing the broad issues raised by Mr. Packard. We conclude that, when the USPTO has initially issued a well-grounded rejection that identifies ways in which language in a claim is ambiguous, vague, incoherent, opaque, or otherwise unclear in describing and defining the claimed invention, and thereafter the applicant fails to provide a satisfactory response, the USPTO can properly reject the claim as failing to meet the statutory requirements of § 112(b). The satisfactory response by the applicant can take the form of a modification of the language identified as unclear, a separate definition of the unclear language. or, in an appropriate case, a persuasive explanation for the record of why the language at issue is not actually unclear. On the facts before us, this holding suffices to uphold the rejection that occurred here.

2.

The grounds for this holding derive from a combination of the USPTO's examination function under 35 U.S.C. § 131 *et seq.* and the substantive standard of 35 U.S.C. § 112(b). Congress assigned to the USPTO the responsibility to examine applications to ensure compliance with the statutory criteria for issuance of a patent. 35 U.S.C. § 131. In the USPTO, an applicant's "claim is, or is supposed to be, examined, scrutinized, limited, and made to conform to what he is entitled to." *Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U.S. 274, 278 (1877).

Congress also provided for examination to be an interactive process, which it commonly is. One or more rejections or objections by an examiner based on identified problems are followed by one or more responses from the applicant that address the identified problems, whether by revising claims or by furnishing information and explanation that shows why the initially perceived problems are not problems after all. 35 U.S.C. § 132; see also id. §§ 133, 134. The examination system regularly involves substantive interaction with applicants, relying on their distinctive incentives and abilities to enhance understanding and to help the USPTO ensure compliance with statutory standards.<sup>2</sup>

The USPTO must be able to make the congressionally created examination process work so that it fulfills its purpose of producing patents whose claims meet the statutory standards. We earlier approved a procedural mechanism for the USPTO to use in doing this, which we refer to as the "prima facie case." See In re Piasecki, 745 F.2d 1468 (Fed. Cir. 1984). "In the prosecution of a patent, the initial burden falls on the PTO [examiner] to set forth the basis for any rejection." Hyatt v. Dudas, 492 F.3d 1365, 1369-70 (Fed. Cir. 2007). The USPTO thus meets its obligation to explain adequately the shortcomings it perceives so that the applicant is properly notified and able to respond. "Once the applicant is so notified, the burden shifts to the applicant to rebut the prima facie case with evidence and/or argument." Id.

The "prima facie case" determination is a purely procedural device that operates at the examiner level to clarify how the interaction process proceeds. Thereafter any final rejection by the examiner, and any review of the rejection, whether by the Board or through appeal to the

<sup>&</sup>lt;sup>2</sup> See, e.g., Star Fruits S.N.C. v. United States, 393 F.3d 1277, 1284 (Fed. Cir. 2005) (upholding examiner demand, under 37 C.F.R. § 1.105, for "information that the applicant is in the best position to most cheaply provide"); see also, USPTO, Notice of Public Hearing and Request for Comments on Issues Related to the Identification of Prior Art During the Examination of a Patent Application, 64 Fed. Reg. 28803, 28805 (1999) (stressing that "inventors are generally in the best position to be aware of the state of the art").

courts, turns on the substantive question of the merits of the rejection. In re Piasecki, 745 F.2d at 1472 (citing In re Rinehart, 531 F.2d 1048, 1052 (CCPA 1976) ("When prima facie obviousness is established and evidence is submitted in rebuttal, the decision-maker must start over  $\ldots$ . An earlier decision should not, as it was here, be considered as set in concrete, and applicant's rebuttal evidence then be evaluated only on its knockdown ability  $\ldots$ . [A] final finding of obviousness may of course be reached, but such finding will rest upon evaluation of all facts in evidence, uninfluenced by any earlier conclusion reached  $\ldots$ .")); see also In re Jung, 637 F.3d 1356, 1362 (Fed. Cir. 2011).

The same approach to making the examination process work is an appropriate one for addressing the guestion of indefiniteness. We have elsewhere noted that indefiniteness rejections by the USPTO arise in a different posture from that of indefiniteness challenges to an issued patent. See Exxon Research & Eng'g v. United States, 265 F.3d 1370, 1380 (Fed. Cir. 2001). It makes good sense, for definiteness and clarity as for other validity requirements, for the USPTO initially to reject claims based on a well-founded prima facie case of lack of clarity (in its several forms) based on the perspective of one of ordinary skill in the art in view of the entire written description and developing prosecution history. Then, if the applicant does not adequately respond to that prima facie case, to confirm that rejection on the substantive basis of having failed to meet the requirements of § 112(b). Furthermore, we can reach that conclusion and decide the present case without regard to the proper formulation of the judicially-applied indefiniteness standard that may be appropriate for post-issuance assessment of indefiniteness, a matter currently under review by the Supreme Court. See Nautilus, Inc. v. Biosig Instruments, Inc., 715 F.3d 891 (Fed. Cir. 2013), cert. granted, 82 U.S.L.W. 3195 (U.S. Jan. 10, 2014) (No. 13-369).

As the statutory language of "particular[ity]" and "distinct[ness]" indicates, claims are required to be cast in clear—as opposed to ambiguous, vague, indefinite terms. It is the claims that notify the public of what is within the protections of the patent, and what is not. *See, e.g., Merrill v. Yeomans,* 94 U.S. 568, 573-74 (1876); *United Carbon Co. v. Binney & Smith Co.,* 317 U.S. 228, 236 (1942).

At the same time, this requirement is not a demand for unreasonable precision. The requirement, applied to the real world of modern technology, does not contemplate in every case a verbal precision of the kind found in mathematics. Nor could it do so in a patent system that actually works, in practice, to provide effective protection for modern-day inventions. Rather, how much clarity is required necessarily invokes some standard of reasonable precision in the use of language in the context of the circumstances. See Georgia-Pacific Corp. v. U.S. Plywood Corp., 258 F.2d 124, 136 (2d Cir. 1958) ("[P]atentable inventions cannot always be described in terms of exact measurements, symbols and formulae, and the applicant necessarily must use the meager tools provided by language, tools which admittedly lack exactitude and precision. If the claims, read in the light of the specifications, reasonably apprise those skilled in the art both of the utilization and scope of the invention, and if the language is as precise as the subject matter permits, the courts can demand no more.").

The USPTO, in examining an application, is obliged to test the claims for reasonable precision according to these principles. We have recognized the importance of the role that the USPTO can play in ensuring that patent claims are clear and unambiguous. For example, in *In re Zletz*, 893 F.2d 319, 321-22 (Fed. Cir. 1989), a patent interference case, the court said: during patent prosecution [] claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.

Recently, in *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008) (affirming the district court's finding that the term "fragile gel" was indefinite), the court said:

We note that the patent drafter is in the best position to resolve the ambiguity in the patent claims, and it is highly desirable that patent examiners demand that applicants do so in appropriate circumstances so that the patent can be amended during prosecution rather than attempting to resolve the ambiguity in litigation.

3.

Given the role of the applicant in the process, it is a reasonable implementation of the examination responsibility, as applied to § 112(b), for the USPTO, upon providing the applicant a well-grounded identification of clarity problems, to demand persuasive responses on pain of rejection. That approach decides this case, because Mr. Packard did not offer a satisfactory response to wellgrounded indefiniteness rejections in this case. The examiner here, having ample grounds, set forth a variety of ways in which he found the claims imprecise or confusing, sometimes not even understandable, considering them in light of the written description. See J.A. 109-12 (June 2010); J.A. 146-47 (Feb. 2011); J.A. 172-73 (July 2011); J.A. 228 (Feb. 2012); see also the more detailed factual discussion in Judge Plager's concurring opinion.

Mr. Packard did not respond adequately to this group of claim language problems. He ignored some entirely. As to others, he offered brief explanations of what he thought certain material in the written description and figures showed. But he did not focus on the claimlanguage difficulties, nor did he propose clarifying changes or show why, on close scrutiny, the existing claim language really was as reasonably precise as the circumstances permitted. *See* J.A. 126 (Nov. 2010); J.A. 151 (May 2011); J.A. 190-193 (Nov. 2011); J.A. 244 (Sept. 2012).

The Board relied on this failure of response to the examiner's well-grounded rejections in affirming on the merits the examiner's final rejection. The Board reviewed and agreed with the examiner's identification of the indefiniteness problems that constituted Mr. Packard's failure to adequately comply with the statutory requirements of § 112(b), and for which there had been no satisfactory response from Mr. Packard. J.A. 14-16. On reconsideration, the Board stood by its affirmance of the rejection, noting the crucial distinction between what Mr. Packard argued and what is required to address an indefiniteness problem: Mr. Packard's "arguments focus on what is contained in the disclosure, whereas the indefiniteness to which [§ 112(b)] is applied is in the language of the claims." J.A. 5.

In some cases it is difficult enough for courts to construe claims when the draftsperson has made every effort to be clear and concise, let alone when the claims have readily observable ambiguities or incoherencies within them. Because Mr. Packard had an opportunity to bring clarity to his claim language, we affirm the Board's findings as to indefiniteness under the MPEP standard properly applied by the USPTO, the standard which we have here approved. In view of our judgment upholding the Board's determination that the applied-for patent claims are invalid for failure to comply with the requirements of § 112(b), the requirement that a claim "particularly point[] out and distinctly claim[] the subject matter . . . ," we need not address the further issue of the problems with the written description under § 112(a).<sup>3</sup>

## CONCLUSION

We affirm the Board's decision on indefiniteness and approve the Board's application of the standard on which it is based.

## AFFIRMED

<sup>&</sup>lt;sup>3</sup> Similar to paragraph 2, paragraph 1 of 35 U.S.C. § 112 was replaced with newly designated § 112(a) by § 4(c) of the AIA; as explained previously, we have adopted the current designators.

## United States Court of Appeals for the Federal Circuit

IN RE THOMAS G. PACKARD

#### 2013-1204

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Serial No. 12/004,324.

PLAGER, Circuit Judge, concurring.

I join the *per curiam* opinion of the court, and fully support the conclusion stated therein. While the *per curiam* opinion reaches the right result and, as far as it goes, for the right reasons, it decides the case on grounds not argued by either party.

I write separately because I am of the view that a petitioner to this court seeking reversal of a decision is entitled to an explanation of why the arguments on which he relied for his appeal did not prevail. I also believe that the significant issues raised by Mr. Packard deserve to be addressed directly.

As the *per curiam* opinion explained, the Board, applying its understanding of the USPTO standard for clarity in claim drafting contained in the MPEP, held Mr. Packard's applied-for patent claims indefinite—they "contain[] words or phrases whose meaning is unclear." In effect, this was a finding by the USPTO that they were not in compliance with the statutory requirement that

"claims particularly point[] out and distinctly claim[] the subject matter [of] the invention." 35 U.S.C. § 112(b).<sup>1</sup>

Mr. Packard, on appeal to this court, insists that the only proper standard is the "insolubly ambiguous" standard, which he believes is invariably applied by this court to challenges to claim construction involving indefiniteness of terms, and not the different standard applied to his case by the Board. He believes that, had the Board applied the standard he advocates, his claims would not have been held indefinite.

To decide Mr. Packard's appeal on the terms he presents requires an examination of this court's 'indefiniteness' standard as well as the one applied by the Board. If they differ in significant ways, a determination must be made of the propriety, as a matter of law, of the Board's choice of standard.

I note at the outset an important point of judicial process. The Supreme Court recently agreed to address the question of the proper standard for this court to apply to cases coming before the court raising an 'indefiniteness' issue, including the role of the "insolubly ambiguous" standard in this court's jurisprudence. Fortunately, it is possible to explore fully the issues in Mr. Packard's appeal without transgressing upon the Supreme Court's territory—more on this later.

On the merits of the appeal, once we conclude what standard of review is applicable we would have to decide the correctness of the Board's conclusion regarding indefiniteness of the applicant's patent claims. For better or worse, the suspense regarding that part of the case is gone—the *per curiam* opinion has announced who wins; to

<sup>&</sup>lt;sup>1</sup> As we did in the *per curiam* opinion, since the relevant substantive language has not changed I will use the current designators for the sections of the statute.

help explain the outcome I will only add at the end some additional salient facts to those contained in the *per curiam* opinion.

## A.

Addressing then the arguments pressed by Mr. Packard. I turn first to the judicially crafted law-both of this court and the Supreme Court—regarding the standard for clarity of claims in an issued patent. As far back as 1853, when addressing the definiteness requirement of patents, the Supreme Court emphasized the overriding policy considerations that claims must unambiguously define any invention over the prior art, and provide notice to the public. See Brooks v. Fiske, 56 U.S. 212 (1853). The requirement of claim specificity was central "so that the public may know what they are prohibited from doing [during the term of the patent] and what they are to have at the end of the term, as consideration for the grant." Id. at 214-15. The Court in *Brooks* also emphasized that "[t]he patentee ought to state distinctly what it is for which he claims a patent and describe the limits . . . for the purpose of warning an innocent purchaser, or other person, using the machine, of his infringement . . . ." Id. at 215.

This emphasis by the Supreme Court has remained consistent over the last century and a half.<sup>2</sup> The Supreme

<sup>&</sup>lt;sup>2</sup> See, e.g., White v. Dunbar, 119 U.S. 47, 52 (1886) (reiterating that an inventor's patent claims must "define precisely what his invention is," because ambiguity is both "unjust to the public" and "an evasion of the law."); see also Merrill v. Yeomans, 94 U.S. 568, 570-74 (1887) (finding that a distinct claim is "of primary importance, in the effort to ascertain precisely what it is that is patented"); Gen. Elec. Co. v. Wabash Appliance Corp., 304 U.S. 364, 372 (1938) (analyzing whether or not the language of

Court's most recent case to date on indefiniteness and claim clarity is *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942).<sup>3</sup> Here the Supreme Court wrote that:

The statutory requirement of particularity and distinctness in claims is met only when they clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise. A zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims would discourage invention only a little less than unequivocal foreclosure of the field. Moreover, the claims must be reasonably clear-cut to enable courts to determine whether novelty and invention are genuine. . . . Whether the vagueness of the claim has its source in the language employed or in the somewhat indeterminate character of the advance claimed to have been made in the art is not material. An invention must be capable of accurate definition, and it must be accurately defined to be patentable.<sup>4</sup>

The United Carbon case further pointed out that patent claims that are "so indefinite as not to give the notice

the claims "conveyed definite meaning to those skilled in the [relevant] art").

<sup>&</sup>lt;sup>3</sup> As noted above, and cited in footnote 10 below, the Supreme Court currently has before it a case raising the issue of the standard for indefiniteness under § 112(b).

<sup>&</sup>lt;sup>4</sup> In this excerpt the Court used the term "claim" in two different senses: to mean what the patentee was claiming in the patent as its invention, and in the civil litigation sense of lawsuit. To avoid confusion, unless specifically stated otherwise, I will use the unmodified term "claim" only in the patent sense.

required by the statute would be in direct contravention of the public interest which Congress therein recognized and sought to protect." 317 U.S. at 233. As before, this understanding of the requirement for claim clarity focused on the precise language of the claim, and related to a theoretical person of skill in the art—the patent law version of the reasonable man—and how that person would understand the claim language.

The statute referred to by the United Carbon case was 35 U.S.C. § 33 (1932), the predecessor to today's § 112(b). That section included almost identical language to the current requirement—the applicant for a patent "shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery." 35 U.S.C. §  $33.^5$  Even before 1932, the Act of 1836 had similar language, stating that patent claims "shall particularly specify and point out the part, improvement, or combination which he claims as his own invention or discovery." See Miller v. Brass Co., 104 U.S. 350, 354 (1882). Thus, throughout this history of patents, the statutory language regarding claim clarity remained largely unchanged, and indeed so did the understanding of what the statute requires.

After the 1952 enactment of the current Patent Act (U.S. Patents Act, 35 U.S.C. §§ 1 *et seq.*, 66 Stat. 792 (July 19, 1952)), which now includes § 112(b),<sup>6</sup> cases continued the focus on the claim language, and what one of ordinary skill in the art would understand the claim to mean,

<sup>&</sup>lt;sup>5</sup> The current version of § 112(b) states in full: "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention." 35 U.S.C. § 112(b) (2012).

<sup>&</sup>lt;sup>6</sup> As explained earlier, pursuant to § 4(c) of the AIA, section 112(b) replaced paragraph 2 of 35 U.S.C. § 112.

viewed in the light of any language in the written description that explained or defined the claim. Sitting en banc, this court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) "restat[ed] the basic principles of claim construction." We said, "We have made clear, moreover, that the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention ...."

In his appeal, Mr. Packard argues that, whatever the historical standard may have been, the standard for indefiniteness of a term in a claim is now governed by the phrase "insolubly ambiguous," and that under this standard a claim is not indefinite if a court can give any meaning to the disputed term in the context of the claim. He is of the view that the "insolubly ambiguous" standard applies to how this court decides indefiniteness. Further, he argues, that this standard is mandated for both our use in deciding cases in which the patent has already issued and is being challenged ("post-issuance cases"), and also in cases in which no patent has yet issued but in which the applied for claims are being evaluated by the USPTO ("pre-issuance cases"). He believes that this standard is more favorable to his case than the traditional test of what one of ordinary skill in the art would understand, and clearly more favorable than the standard applied to him by the USPTO.

Mr. Packard cites as authority the 2001 case of *Exx*on Research and Engineering Company v. United States, 265 F.3d 1371 (Fed. Cir. 2001). In *Exxon*, the Government had filed a motion for summary judgment seeking to have the two patents at issue held invalid for indefiniteness. The trial court—the Court of Federal Claims granted the motion.

On appeal, this court reversed. The court conceded that a number of the terms in the patents were ambiguous—"the trial court was correct to fault the Exxon patents as lacking in specificity in several respects." *Id.* at 1376. Nevertheless, in pursuit of a way to construe the claims so as to uphold their validity—the court emphasized the fact that the Patent Act created a presumption of validity for issued claims—the court undertook a lengthy examination of the terms in the patents that were challenged. The court concluded that, though a close question (the patentee "could easily have cured the ambiguity by adding a single word or phrase to the claims . . ." *id.* at 1383), they nevertheless were not fatally flawed. *Id.* at 1384.

At the beginning of the relevant section of the *Exxon* opinion addressing the indefiniteness issue (there were multiple issues in the case), and again at the conclusion of the full opinion, the court stated the traditional test for claim construction: whether the claims were so ambiguous that one of skill in the art could not reasonably understand their scope. *See id.* at 1375, 1384. However, in the course of the opinion the court opined that claims need only "be amenable to construction, however difficult that task may be," and that a claim is invalid only when it is "insolubly ambiguous, and no narrowing construction can properly be adopted." *Id.* at 1375.

The phrase "insolubly ambiguous" was new; neither of the two cases cited in support contained the phrase, and no previous opinion of this court or the Supreme Court had employed it. It is interesting to note that four years later, when the court en banc purported to restate, based on our prior cases, the basic principles of claim construction, no mention was made of either *Exxon* or of the phrase "insolubly ambiguous." *See Phillips*, 415 F.3d at 1312.

Whatever the court in *Exxon* may have intended by the "insolubly ambiguous" phrase, Mr. Packard is not alone in his employment of it and what it seemed to mean. A number of later cases in this court dealing with indefiniteness issues recited both the traditional version of the doctrine—that the test was what one of ordinary skill in the art would understand the claim limitation to mean, or some variant of that language—and then at some point employed the *Exxon* notion of "insolubly ambiguous"—that claims need only be amenable to construction, however difficult for a court that task may be. Given this state of affairs, it should come as no surprise that it was not always clear which version of the test, or what other factors, may actually have dictated the result in some of these cases.<sup>7</sup>

For completeness, I note that the perceived differences in this court's articulation of the indefiniteness standard is said to have had an effect on the behavior of the trial courts as well. In a study of district court cases in the years immediately following *Exxon* (2001-2005), the author of the study stated that during those years "district courts sparingly invalidated patents for lack of definiteness." See David A. Kelley, In the Wake of Datamize and Halliburton: The Recent Spate of Patent Invalidations for Indefiniteness and the Implications for Patent Holders, 75 Pat. Trademark & Copyright J. (BNA) 456 (2008). The study noted, however, that there was a sharp increase in invalidations after 2005 and the issuance of

<sup>&</sup>lt;sup>7</sup> See Christa J. Laser, A Definite Claim on Claim Indefiniteness: An Empirical Study of Definiteness Cases of the Past Decade with a Focus on the Federal Circuit and the Insolubly Ambiguous Standard, 10 Chi.-Kent J. Intell. Prop. 25, 25 (Fall 2010) ("These differences [among the cases analyzed] partially result from the Federal Circuit incorporating an evidentiary burden into the 'insolubly ambiguous' standard and inconsistently applying the 'insolubly ambiguous' standard.").

#### IN RE PACKARD

## Datamize, LLC v. Plumtree Software, Inc., 417 F.3d. 1342, 1347 (Fed. Cir. 2005). Id.

In *Datamize* the court cited to the *Exxon* "insolubly ambiguous" language, but then added that "[s]ome objective standard must be provided in order to allow the public to determine the scope of the claimed invention," id. at 1350; consequently the court held the phrase "aesthetically pleasing" to be fatally ambiguous. 417 F.3d at 1356. The author of the district court study reads this addition as undercutting the Exxon standard, and, according to the study, indefiniteness invalidations in the district courts rose nearly 250 percent in the 30 months following *Datamize*, compared to the 30 months preceding it.<sup>8</sup> (The other case the study thought significant, Halliburton Energy Servs., Inc. v. M-I LLC, 514 F.3d. 1244 (Fed. Cir. 2008), affirmed a district court's holding that "fragile gel" was fatally ambiguous, citing the Datamize standard.)

Thus, over time the "insolubly ambiguous" phrase that Mr. Packard alleges is the only correct test of indefiniteness has taken on a life of its own. It has generated considerable controversy,<sup>9</sup> and has now led to this case in

<sup>&</sup>lt;sup>8</sup> See also David A. Kelley, Indefiniteness Invalidations Continue to Rise Sharply in 2008, 77 Pat. Trademark & Copyright J. (BNA) 576, 576 (2009).

<sup>&</sup>lt;sup>9</sup> See, e.g., Dennis Crouch, Is "Insolubly Ambiguous" the Correct Standard for Indefiniteness?, PATENTLY-O (Sept. 21, 2013), http://patentlyo.com/patent/2013/09/isinsolubly-ambiguous-the-correct-standard-for-

indefiniteness.html; Federal Trade Comm'n, The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition, 94-103 (March 2011), http://www.ftc.gov/reports/evolving-ip-marketplace-

aligning-patent-notice-remedies-competition; David A. Loewenstein and Clyde Shuman, United States: The

which the issue of what the phrase might mean is argued as determinative of the appellant's patent rights. And most recently it has led to a petition to the Supreme Court, that the Court has now granted, that challenges the fundamental validity of the "insolubly ambiguous" standard.<sup>10</sup>

Of particular importance to this discussion and to the outcome in the case, and though Mr. Packard's argument is to the contrary, for purposes of deciding this case it is not necessary to determine whether the traditional test employed by courts for determining indefiniteness has or has not been modified or superseded by *Exxon's* "insolubly ambiguous" phrase. Nor is it therefore necessary, assuming "insolubly ambiguous" differs from the traditional test, to address whether that test is a permissible reading of the statutory requirement that claims "particularly point[] out and distinctly claim[] the subject matter" of the invention. As noted, the Supreme Court has decided that it is the proper forum for those questions, and it would be inappropriate at this time for a lower court to address them in an opinion.

Fortunately, I need not go there in order to judge Mr. Packard's arguments. This is because, having now identified these two arguably controlling tests applied by this

Federal Circuit's "Insolubly Ambiguous" Standard of Indefiniteness, MONDAQ BUSINESS BRIEFING (Nov. 26, 2008), http://www.mondaq.com/unitedstates/x/70266 /Patent/The+Federal+Circuits+Insolubly+Ambiguous+Sta ndard+Of+Indefiniteness; Eric Yeager, Claim Whose Undefined Terms Are Reasonably Discernable Is Not Invalid, 67 Pat. Trademark & Copyright J. (BNA) 427 (2004).

<sup>&</sup>lt;sup>10</sup> Nautilus, Inc. v. Biosig Instruments, Inc., 715 F.3d 891 (Fed. Cir. 2013), cert. granted, 82 U.S.L.W. 3195 (U.S. Jan. 10, 2014) (No. 13-369), argued on April 28, 2014.

court to cases on review from the district courts, it will be enough to show that both of the tests, whatever their scope may be, differ in material respects from the test applied to Mr. Packard's claims by the Board. And then, it will be only necessary to decide whether the USPTO test, even though it differs materially from ours, is a permissible one under the law for the Board to apply to proposed claims under USPTO review.

В.

Before proceeding further, there are definitional questions that require some clarification. So far I have used the term "indefiniteness" as shorthand for the complex of issues surrounding the requirements for clear drafting in patents. It is the custom among patent practitioners, and the courts as well, to refer to something called "indefiniteness" as a generalized drafting error that, when recognized, will invalidate a patent, or a patent claim in particular. However, the term "indefiniteness" (or its grammatical variants) subsumes several different and distinct issues that require separate analysis.

First, as a matter of legal terminology there is, under current law, no statutory reference to a definiteness requirement, nor a statutory provision that invalidates a patent or a patent claim for "indefiniteness." The relevant statutory requirements are found, as earlier noted, in section 112 of the Patent Act. This section is entitled "Specification." Subsection (a) of section 112 states that "the specification shall contain a written description of the invention," and sets out specific criteria for judging its adequacy—it must be set out in "full, clear, concise, and exact terms . . . ." 35 U.S.C. § 112(a) (2011).

As previously noted, subsection (b) of § 112 provides that the Specification shall conclude with one or more claims "particularly pointing out and distinctly claiming the subject matter which the inventor . . . regards as the invention." 35 U.S.C. § 112(b) (2011). Thus, the written description (which presumptively includes the significant parts of the patent related to claim construction other than the claims themselves) and the claims themselves each have separate and specific criteria they must meet.<sup>11</sup>

There is a second level of distinction that is important to recognize in any given case. In terms of inadequacy of descriptiveness to meet the applicable statutory standard, whether for a written description or for a claim, a term or phrase may have one of two shortcomings: it may be ambiguous, or it may be incoherent. (For simplicity, hereafter I will use "term" to include "phrase," i.e., to include one or more words.)

An incoherent term means that there is no reasonably understandable meaning of the term in the context in which it appears. More correctly, it means that one of ordinary skill in the art cannot ascertain *any* reasonable meaning of the term as used. In patent litigation the labeling of a disputed patent claim term as "incoherent" is rarely seen.

<sup>&</sup>lt;sup>11</sup> With regard to terminology, the casual use by practitioners, including counsel in this case, of "specification" when what is meant is actually the "written description" is incorrect, though widely practiced. The statutory term "specification" includes both the written description and the claims. The use of the broader term "specification" when what is meant specifically is "written description" adds to verbal confusion as well as the potential for thought confusion. Importantly, there are no statutory requirements as such governing the adequacy of something called a "specification," while there are specific statutory requirements governing both the "written description" and the "claims." The late honored and beloved Judge Giles Rich, one of the principal architects of the 1952 Patent Act, decried the profession's constant misuse of these terms.

An ambiguous term, on the other hand, is a term that offers to one of skill in the art more than one reasonable meaning, each of which meanings may have more or less justification in context for being what was intended, and each of which meanings would result in different patently-distinctive outcomes. This is the oft-seen claim construction dispute, in which each party in a patent suit will provide expert testimony from one of allegedly ordinary skill in the art in support of that party's construction of a disputed claim term, in hopes that it will be adopted by the court and result in a ruling in the party's favor, whether regarding validity or infringement, or both.

The interpretive issue in these claim construction disputes presents several policy options, including:

1) Give controlling weight to the policy of upholding the USPTO's decision to issue a presumptively valid patent, with substantially less concern for the notice function of patents. Thus, find a possible meaning that preserves the validity of the patent claim, without particular regard for what competitors or the public might have understood, i.e., what would be understood by those skilled in the art involved at the time of the invention.<sup>12</sup>

Since claim construction is a matter of law with no formal deference given to the trial judge (*Cybor Corp. v. FAS Tech., Inc.,* 138 F.3d 1448 (Fed. Cir. 1998) (en banc); see also *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.,* \_\_\_\_\_ F.3d \_\_\_\_, 2014 WL 667499 (Fed. Cir. Feb.

<sup>&</sup>lt;sup>12</sup> But see Phillips, 415 F.3d at 1327 ("While we have acknowledged the maxim that claims should be construed to preserve their validity, we have not applied that principle broadly, and we have certainly not endorsed a regime in which validity analysis is a regular component of claim construction.")

21, 2014), under this interpretive option the "right" construction will be known definitively only when the Court of Appeals judges (or the Supreme Court) choose it.

2) Give weight to the notice function of patents, while still recognizing the role of the presumption of validity. Thus, choose from among the available meanings the one that seems to best accord with what one of reasonable skill in the art would understand to be intended, and which the public, including competitors, would assume to be the correct reading. When there is more than one such understanding, as sometimes appears to be the case, this could lead to a preference for the understanding that preserves the validity of the patent claim.<sup>13</sup>

3) Give full weight to the importance of the notice function of patents, recognizing that it is the claim drafter/patentee who is ultimately responsible for problems created by ambiguous terms. When confronted with a patent claim that has several reasonable meanings for which the patent itself demonstrates no preference (and certainly true of an incoherent term), the result of this option would be a holding that an ambiguous term by definition fails to comply with the statutory requirements for claim drafting. Thus, if a member of the public in order to understand the patent claim must guess about the meaning of an ambiguous term, the claim would not be patentable and is otherwise invalid.<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> See Athletic Alts., Inc. v. Prince Mfg., Inc., 73 F.3d 1573, 1581 (Fed. Cir. 1996), for a subset of this option, choosing the narrowest meaning that upholds the patent, thus maximizing the opportunity for competitors to design around it without infringing.

<sup>&</sup>lt;sup>14</sup> For a statement of this interpretive option by the courts in Canada, see Lord Loreborn's three-part test, cited in Harold C. Wegner, *Lord Loreborn's Test for* 

When addressing "indefiniteness" in an issued patent (a post-issuance case), these are among the interpretive options available to judges. Mr. Packard's argument regarding the "insolubly ambiguous" standard essentially incorporates the first of these interpretive options. As between the second and third interpretive options, there appears to be nothing in the cases invoking the traditional standard—what one of ordinary skill in the art would understand—that necessarily dictates which of these latter interpretive options controls in a given case, or even whether there should be an established policy option for all post-issuance cases.

C.

The discussion thus far has focused on the question of this court's standard for review of compliance with the statutory requirement for claims as they appear in issued patents, the post-issuance situation. This examination was made necessary by Mr. Packard's insistence that this court has a singular standard for such cases, that this standard differs materially from the standard applied by the Board to his case, and that our standard is the one that must be used by the Board.

However, the above discussion reveals that there currently is not one singular standard used by this court but rather a complex of standards, though a complex whose range nevertheless can be described. The question then remains, is the Board's standard substantively different from the standard(s) ostensibly applied by this court and, if so, is it nevertheless permissible.

Mr. Packard is correct when he argues that this court's "standard" (or complex of standards, however

\$112(b) Indefiniteness, Paper presented at the Second Annual Naples Midwinter Patent Experts Conference, Naples, FL (February 10-11, 2014).

understood) for indefiniteness in post-issuance cases differs materially from the standard for indefiniteness applied by the Board to pre-issuance cases. In its opinion in this case the Board, as noted earlier, invoked as its standard for determining compliance with the requirements of § 112(b) the standard set forth in the MPEP: a claim is indefinite when it contains words or phrases whose meaning is unclear. *See* MPEP § 2173.05(e).

In effect, the USPTO reads the statutory requirement that claims "particularly point[] out and distinctly claim [] the subject matter . . ." to mean that ambiguity in claiming, whether intended or inadvertent, is not acceptable.<sup>15</sup> The patent examiner's duty is to insist that the applicant remove the perceived ambiguity by more precisely defining the scope of the claim. And should an examiner's rejection on grounds of noncompliance with the statute be taken up on appeal to the Board, the Board will enforce the same standard. This position comports most closely to the third of the policy options outlined in the preceding section.

From its response to Mr. Packard, I understand the Board position to be that it applies the traditional test to claims proposed by a patent applicant, namely, whether what is claimed is reasonably understood by one of ordinary skill in the art. However, in applying this test the Board does so in a manner—the "lower threshold"—that is uniquely applicable to the pre-issuance situation.

<sup>&</sup>lt;sup>15</sup> See 3M Innovative Props. v. Tredegar Corp., 725 F.3d 1315, 1334 (Fed. Cir. 2013) (Plager, J., concurring) ("[s]ometimes such ambiguity [in claim drafting] is the result of sloppy drafting, and sometimes it appears that claims are drafted with a degree of indefiniteness so as to leave room to later argue for a broad interpretation designed to capture later-developed competition.").

A review of our post-issuance cases reveals that when this court has been called upon to decide an indefiniteness challenge, no opinion has yet expressly adopted the third interpretive option described previously, essentially the one that the USPTO now uses. Thus our precedents make clear that, whether our standard is thought to be either the first option—"insolubly ambiguous" (however understood)—or the second option—the traditional "one of ordinary skill" test—discussed earlier, the USPTO's application of the traditional standard goes well beyond what this court is known to apply to claim interpretation when the issue is post-issuance compliance with § 112(b).

Thus the issue remaining to be decided is whether the Board, as a matter of law, is entitled to apply the third interpretive option to its understanding of the traditional test for indefiniteness. Mr. Packard argues that the Board may not do that. He propounds that in his case the Board applied the wrong standard for indefiniteness in two ways. First, Mr. Packard argues that a "person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Appellant's Br. 35 (citing *Phillips*, 415 F.3d at 1313). The Board, he argues, refused to do that, and instead stated that its analysis focused solely on "the language of the claims, ... [not] on what is contained in the disclosure." Id. at 36.

Second, and more to the point, Mr. Packard argues that the Board wrongly invoked its own "lower threshold" for indefiniteness, rather than this court's "insolubly ambiguous" standard. Mr. Packard argues that it is an error for the Board to adopt a test for indefiniteness that differs from what he describes as this court's "longestablished 'insoluble ambiguity" test. Appellant's Br. 18. He further argues that the "Board cannot ignore this [c]ourt's precedent or substitute its own test for indefiniteness for this [c]ourt's analysis." *Id.* at 39. Overall, in Mr. Packard's view, "this [c]ourt has consistently applied a single standard for claim definiteness, both pre-issuance and post-issuance," and Mr. Packard argues that "[t]he Board's rejection of this [c]ourt's 'insolubly ambiguous' standard and its implicit application of a 'lower threshold of ambiguity' pursuant to *Miyazaki* was error." *Id.* at 38-39 (citing *Ex Parte Miyazaki*, 89 U.S.P.Q.2d 1207, 1211 (B.P.A.I. 2008)).

The USPTO, in response to Mr. Packard's first point, argues that the Board's decision clearly shows that it attempted to read the claims in light of the written description. "But the specification [read written description] only added to the ambiguity of the claims, because it describes the features of the coin-holder in a manner both internally inconsistent and inconsistent with the claims."<sup>16</sup> Appellee's Br. 8.

Second, addressing the main question, that of the proper test for the Board to use, the USPTO says it "asks the same question as this [c]ourt in assessing the indefiniteness of a claim—i.e., whether a skilled artisan could reasonably discern the metes and bounds of the claim." *Id.* at 9. But, says the USPTO, while their approach to answering that question during prosecution may effectively result in a lower threshold for ambiguity than a court's, their approach provides a legitimate means for ferreting out indefinite claims prior to issuance.

The USPTO argues that the patent system works best when claim ambiguity is resolved during examination, rather than to await litigation to determine the actual scope of a claim. Accordingly, says the USPTO, the

<sup>&</sup>lt;sup>16</sup> The USPTO also pointed out that the Board did not rely upon the *Miyazaki* decision in upholding the Examiner's rejection of the claims for indefiniteness. Appellee's Br. 21.

agency must have the ability to require applicants to amend their claims to ensure that the claims are concise, clear, and unambiguous, or in the words of the statute, that they particularly point out and distinctly claim the subject matter which the inventor regards as the invention.

As I noted at the end of introductory section A, above, the issue of the permissible test for USPTO pre-issuance indefiniteness cases can be decided without resolving whether this court's current test for post-issuance indefiniteness is the traditional standard, focused on what one of skill in the art would understand, or the allegedly different "insolubly ambiguous" standard as Mr. Packard views it, or some combination of the two. This is because, as the above discussion makes clear and as Mr. Packard argues, the test proposed by the Board for its use in preissuance claim disputes differs materially from this court's application of either (or both) of those standards. On this question I agree with Mr. Packard.

## D.

I turn then to Mr. Packard's underlying argument, that the test applied by the Board to pre-issuance matters of claim interpretation cannot differ from that applied by this court to post-issuance claim construction disputes. As explained above, the Board proposes to apply the traditional standard but with the third of the interpretive policy options outlined earlier. Namely, if one of ordinary skill in the art, after considering the information provided by the applicant including the written description, and after putting the disputed term in the context of the proposed patent, finds the claim to contain words or phrases whose meaning is unclear, then the examiner is to require the applicant to "more precisely define the metes and bounds of the claimed invention" by issuing an indefiniteness rejection. See Miyazaki, 89 U.S.P.Q.2d at 1211. And on appeal to the Board, should the applicant fail or refuse to provide the needed clarification, the Board will apply the same interpretation requirement.

In my view (and that of the *per curiam* court), it is within the authority of the USPTO to so interpret the applicable standard. Further, it is my view that, as a policy matter, this court should support the USPTO in so doing. To begin with, I find nothing in the statutes that precludes the USPTO from adopting such guidance for the examiners and the Board.<sup>17</sup> Beyond that, no precedent of this court or of the Supreme Court addressing patent claim construction issues suggests that such a position on the part of the USPTO would be beyond its authority in the proper administration of the governing statutes. On the contrary, as pointed out in the *per curiam* opinion, this court in In re Zletz, 863 F.2d 319 (Fed. Cir. 1989), and in Halliburton, 514 F.3d 1244 highlighted the important role that the USPTO, through its examination process, plays in ensuring the quality of patents and compliance with the statutory requirements.

The problem of indefiniteness in patent claiming has been a major concern of courts, as well as commentators,<sup>18</sup> and efforts by the USPTO to improve the situation

<sup>&</sup>lt;sup>17</sup> There is no issue regarding the USPTO's rulemaking authority. The application of a "lower threshold" for ambiguity is an interpretive policy regarding an already existing statutory standard. It is not the establishment of a new previously non-existent substantive standard such as would be at issue in a *Chevron*-type analysis.

<sup>&</sup>lt;sup>18</sup> *Phillips*, 415 F.3d at 1312 ("The role of the specification in claim construction has been an issue in patent law decisions in this country for nearly two centuries."); Laser, *supra* note 5, at 25 (An empirical study of patent claim definiteness cases finding that the Federal Circuit inconsistently applies the "insolubly ambiguous" standard

certainly are to be encouraged. There are good reasons why unnecessary incoherence and ambiguity in claim constructions should be disapproved:

- they generate many of the claim construction disputes that plague the courts;<sup>19</sup>
- they increase the cost to the society of new products and ideas. As one study put it, "[l]ow quality patents are those that protect inventions of limited

when evaluating claim clarity.); Jeanne C. Fromer, Claiming Intellectual Property, 76 U. Chi. L. Rev. 719, 772-781 (2009) (arguing for a return to 'central' claiming and a departure from 'peripheral' claiming in patent cases); Monica C. Moran and Tony Dutra, Professor Suggests Supplementing Patent, Copyright Claiming to Stimulate Innovation, 77 Pat. Trademark & Copyright J. (BNA) 41, 41 (2008) (analyzing Jeanne Fromer's central claiming arguments); Kirk M. Hartung, Claim Construction: Another Matter of Chance and Confusion, 88 J. Pat.& Trademark Off. Soc'y 831, 831 (2006) ("Unfortunately, claim construction still is a matter of chance and confusion for patent owners, accused infringers and their patent attorneys. And the matter is only getting worse."); S. Jay Plager, Challenges for Intellectual Property Law in the Twenty-First Century: Indeterminacy and Other Problems, 2001 U. Ill. L. Rev. 69, 72 (2001) ("The challenge here is how to help trial judges, as well as ourselves, understand what is being claimed so that there is less room for misunderstanding.").

<sup>19</sup> See, e.g., James R. Barney and Charles T. Collins-Chase, An Empirical Analysis of District Court Claim Construction Decisions, January to December 2009, 2011 Stan. Tech. L. Rev. 2, 7 (2011); see also, David L. Schwartz, Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases, 107 Mich. L. Rev. 223, 246 (Nov. 2008). novelty or that provide overly broad protection ..., which can be costly to society," *Patents and Innovation: Trends and Policy Challenges*, OECD, 28 (2004), http://www.oecd.org/science/sci-tech /24508541.pdf;

- they inhibit the opportunity for design-arounds and legitimate competition. A Federal Trade Commission Study observed that an overly broad patent "can block competition . . . and harm innovation," Federal Trade Commission, To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, A Report by the Federal Trade Commission, at 3 (October 2003), http://www.ftc.gov /sites/default/files/documents/reports/promoteinnovation-proper-balance-competition-and-patentlaw-and-policy/innovationrpt.pdf;<sup>20</sup>
- and they waste scarce judicial resources on claim construction cases that should never have been necessary to litigate, supporting and encouraging the kinds of litigation that have made "patent trolls" dirty words. (Patent trolls are also known by a variety of other names: "patent assertion entities" (PAEs), "non-practicing entities" (NPEs).)<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> See also Keith E. Maskus, *Reforming U.S. Patent Policy: Getting the Incentives Right*, COUNCIL ON FOREIGN RELATIONS, CSR No. 19, at 19 (Nov. 2006), *available at* http://www.cfr.org/content/publications/attachments/Pate ntCSR.pdf ("[P]atent holders with broad claims on platform technologies may try to use those claims to discourage competitors through licensing restrictions and litigation against technologies on similar products.")

<sup>&</sup>lt;sup>21</sup> See, e.g., Executive Office of the President, Patent Assertion and U.S. Innovation, at 9 (June 2013), http://www.whitehouse.gov/sites/default/files/docs/patent\_

Beyond these persuasive policy reasons, as a legal matter the USPTO does not have to deal with the presumption of validity the statutes grant to post-issuance patents—sometimes said to hinder such an interpretation by courts. Furthermore, unlike courts which have a full prosecution record to consider, the prosecution record before the USPTO is in development and not fixed during examination, and the USPTO does not rely on it for interpreting claims.

The fact that this court has not yet seen fit to apply the same interpretive policy option to post-issuance cases as the USPTO wishes to apply to pre-issuance cases is no reason why the USPTO, given its unique and central role in the patenting process, should not be able to apply it in dealing with pre-issuance patent applications.

In short, there are no legal obstacles to the USPTO's proposed interpretation, and there are compelling reasons why, as a policy matter, this court should not preclude or otherwise interfere with the USPTO carrying out its full responsibilities under the Patent Act. Further, there is no reason why those trained and employed in the art of

report.pdf ("Even if patent assertion entities do not prevail in the courtroom, their actions can significantly reduce incremental innovation while litigation is ongoing, a situation that can persist for years,"); James Bessen, et al., *The Private and Social Costs of Patent Trolls*, 34 Regulation 26, 26 (Winter 2011-2012) ("To the extent that ... NPEs opportunistically assert 'fuzzy patents' against real technology firms, they can decrease the incentives for these firms to innovate."); *but see* Mark A. Lemley & A. Douglas Melamed, *Missing The Forest For the Trolls*, 113 Colum. L. Rev. 2117, 2117 (2013) ("trolls are a symptom of larger flaws in the patent system . . . those who have focused on trolls have, in effect, been missing the forest for the trolls.").

patent and patent claim drafting cannot comply with the USPTO requirements, recognizing that the nature of the invention and the particular art involved will affect the degree to which precision in language is possible.<sup>22</sup>

Ε.

Finally, as noted in the *per curiam* opinion, I offer a few additional notes with regard to the question of Mr. Packard's proposed claims and their compliance with the standard of review the USPTO has chosen to apply.

The disputed phrases and arguments of Mr. Packard and the USPTO are outlined in Appendix 1. I agree with the Board that the term "front top side" is indefinite. Mr. Packard might have used either "front side" or "top side" and done so in a way that was consistent with the terminology in the written description. Using different terms to refer to the same portion of the card—"front top side" and "surface of the card"—creates its own ambiguity. Thus, I would affirm the Board's finding that the terms "front top side" and "surface of the card" are indefinite.

I also agree with the Board that Mr. Packard created an ambiguity in his claims when he introduced "a raised . .. end edge" and then referred later to "the ... edge end." It is not clear whether these two phrases refer to the same "end" or to two different "ends." Mr. Packard should have corrected this ambiguity during prosecution. Therefore, I would affirm the Board's finding that the claim terms "a raised ... end edge" and "the edge end" are indefinite. Lastly, I agree that it is unclear whether "one side edge" refers back to the "double flanged side edges" introduced

<sup>&</sup>lt;sup>22</sup> See generally Thomas Suddendorf, The Gap: The Science of What Separates Us from Other Animals (Basic Books, 2013) (the difference ultimately is the motivation of authors to create symbols and grammar to share what they know).

previously in the claim or if it refers to something else entirely. Therefore, I would affirm the Board's finding that this term is indefinite.

I have considered each of Mr. Packard's remaining arguments and find them unpersuasive. Mr. Packard's over ten pages of explanatory briefing illustrates that the claim language itself lacks the requisite minimum clarity to define the boundaries of the claims. By leaving the claims ambiguous, the public and the courts are left to clarify the patent's boundaries, in direct conflict with the requirements of the case law. *See, e.g., United Carbon*, 317 U.S. at 236.

As stated at the beginning of this opinion, I arrive at the same conclusion as we arrived at in the *per curiam* opinion. I get there both by way of the "narrow" route in the *per curiam* opinion, which I join, and also by way of addressing Mr. Packard's arguments directly; for the reasons I explained I find the latter unavailing.

## **APPENDIX** 1

Disputed Term	Mr. Packard's Argument	USPTO's Argument
"flat plane"	The Board erred by construing "flat plane" to be so perfectly and impossibly "flat" that it could not include "raised" edges. The written description makes it clear that the "flat plane card" is not intended to be absolutely flat, but rather it is described with many raised com- ponents.	"[F]lat plane" is indefinite on the basis that the claimed card cannot be a flat plane when its front top side also includes a plurality of "raised" edges. "[F]lat," by its plain meaning in the dictionary, means having a smooth level surface, and the court should not redraft the claims to mean "mostly flat."
"front top side" and "surface of the card"	The "front top side" is the entire front side of the card, including struc- tures such as the raised edges. "[T]he surface" requires no ante- cedent basis be- cause the card only has two surfaces, and one skilled in the art would	"[F]ront top side" per se lacks clarity, as it suggests that the front side possesses both "top" and "bot- tom" portions, of which claim 28 specifies that only the "top" portion contains the separa- tors and retainers. Because the claim employs two different

	understand that "the surface" is on the side of the card where the coins are stored.	terms, "the surface" does not necessarily imply the "front top side," as the Board correctly explained.
"the raised side end edge"	"[T]he raised side end edge" does not lack antecedent basis because a person of skill in the art would understand that it refers to the claimed "raised side edge end."	This term has no antecedent basis. Also, as the Board observed, whether the term "a raised side edge end" refers to the west or the east edge of the coin holder is unclear because the claim provides no location for this element, and the specification fails to describe "a raised side edge end."
"one side edge"	The "one side edge" does not require antecedent basis because it is not preceded by "the" or any other word referring to a previous claim element.	Ambiguity exists as to whether the "one side edge" refers back to the "double flanged side edges" located at the north and south edges of the coin holder, or some other edge, such as the west edge of the coin holder.