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§ 2:1 General Considerations

If “the name of the game is the claim,” in Judge Rich’s phrase,\(^1\) to win this game a practitioner must know the rules of the game and then develop a strategy to win, employing various tactics.

The first thing which must be done is to select the claims and claim elements which must be construed by the court. The Federal Circuit stated in a 1988 decision:

The significance of claims in defining an invention was clearly expressed by our predecessor court in Autogiro Co. of America v. United States, 181 Ct. Cl. 55, 384 F.2d 391, 395–96, 155 USPQ 697, 701 (1967):

The claims of the patent provide the concise formal definition of the invention. They are the numbered paragraphs which “particularly [point] out and distinctly [claim] the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112. It is to these wordings that one must look to determine whether there has been infringement. [Footnote omitted.] Courts can neither broaden nor narrow the claims to give the patentee something different than what he has set forth. [Footnote omitted.] No matter how great the temptations of fairness or policy making, courts do not rework claims. They only interpret them.

In accordance with that instruction, this court has consistently adhered to the proposition that courts “cannot alter what the patentee has chosen to claim as his invention.” SSIH Equipment S.A. v. U.S. Int’l Trade Comm, 718 F.2d 365, 378, 218 USPQ 678, 689 [Fed. Cir. 1983] [citing Autogiro]; see also Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 867, 228 USPQ 90, 93 [Fed. Cir. 1985] (“Generally, particular limitations or embodiments appearing in the specification will not be read into the claims.”). Indeed, neither Du Pont nor the district court cites any case of this court reading extraneous limitations into a claim.\(^2\)

The procedures and practicalities of presenting claims for construction to the court are discussed in chapter 6. The present chapter is primarily an exploration of the law applicable to construing claims. It will discuss the “rules of the game,” that is, the law as it has been developed by the courts in construing claims.

Be careful about the use of the word “rules,” however. The Federal Circuit has fairly consistently rejected what some practitioners believed were the “rules” of claim construction. For example, there is a “doctrine of claim differentiation.” This doctrine says that any difference between claims is presumably significant. However, the Federal Circuit has made clear that this doctrine may not be used to interpret a claim broader than what is contained in the specification and claims as filed. As the court explained in Tandon Corp. v. U.S. International Trade Commission,\(^3\)

\[t\]here is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims. To the extent that the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant. [citing cases] At the same time, practice has long recognized that “claims may be multiplied . . . to define the metes and bounds of the invention in a variety of different ways.” . . . Thus two claims which read differently can cover the same subject matter. . . . “[c]laims are always interpretable in light of the specification that led to the patent.” . . . [Here] there was ‘simply no basis in either the specification or prosecution history’ for limiting the claim beyond its literal terms . . . . Whether or not claims differ from each other, one can not interpret a claim to be broader than what is contained in the specification and claims as filed.\(^4\)

\(^3\) Tandon Corp. v. U.S. Int’l Trade Comm’n, 831 F.2d 1017 [Fed. Cir. 1987].
\(^4\) Id. at 1023–24.
So there are only a few recognized rules or black letter law today in claim construction. One such rule of proper construction is that the words of a claim “are generally given their ordinary and customary meaning” or “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.”

If the issue before the court is infringement, the court, in deciding whether there was infringement, must first determine the proper scope of the claims and then the fact finder (the court or the jury) must determine whether the accused infringing product or method “reads on” the properly construed claims. As explained in Vitronics Corp. v. Conceptronic, Inc.: “A literal patent infringement analysis involves two steps: the proper construction of the asserted claim and a determination as to whether the accused method or product infringes the asserted claim as properly construed.”

The same is true in attempting to prove a patent is invalid as anticipated in the prior art under 35 U.S.C. § 102. The claim must first be construed by the court and then the fact finder must determine if a single prior art reference contains each element of the claim as construed: “Under 35 U.S.C. § 102, anticipation requires that each and every element of the claimed invention be disclosed in a prior art reference.”

Of course, however the claim was construed for validity or invalidity purposes will also apply to determining obviousness under section 103, as well as for purposes of infringement.

5. Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005); see also Autogiro Co. of Am. v. United States, 384 F.2d 391, 397 (Ct. Cl. 1967) (“In deriving the meaning of a claim, we inspect all useful documents and reach what Justice Holmes called the ‘felt meaning’ of the claim. In seeking this goal, we make use of three parts of the patent: the specification, the drawings, and the file wrapper.”).


8. See SmithKline Diagnostics, Inc. v. Helena Labs. Corp., 859 F.2d 878, 882 (Fed. Cir. 1988). In a non-precedential opinion, the Federal Circuit affirmed a jury finding of invalidity due to obviousness even though the question of claim construction was submitted to the jury. The court found such submission was error, but harmless, since “we need not reach the infringement analysis.” The court said “the error is harmless due to our obviousness ruling.” However, any such “error” should apply to both infringement and validity since they both depend on the meaning of disputed terms. The only way the error could be harmless on the invalidity ruling is if the Federal Circuit had held that the patent claims were obvious under any reasonable construction of the claims. However, the court makes no mention of the appropriate claim construction in making its obviousness ruling. See Alloc, Inc. v. Pergo, Inc., Nos. 2009-1107, 2009-1122 (Fed. Cir. Feb. 25, 2009).
To properly construe claims, the Federal Circuit has distinguished between the use of intrinsic and extrinsic evidence. Intrinsic evidence is the patent and the file history (if in evidence), including the cited prior art. Intrinsic evidence is the primary source used to determine what the ordinary and customary meaning is to a person of ordinary skill in the art. Extrinsic evidence is everything else. Extrinsic evidence “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.”

Extrinsic evidence may be used but can never change the meaning as gleaned from the intrinsic evidence. As the Phillips court explained,

undue reliance on extrinsic evidence poses the risk that it will be used to change the meaning of claims in derogation of the “indisputable public records consisting of the claims, the specification and the prosecution history,” thereby undermining the public notice function of patents.

In sum, extrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.

§ 2:2 Intrinsic Evidence

The en banc Federal Circuit described intrinsic evidence, the most important evidence to use in claim construction, as follows:

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9. Phillips, 415 F.3d at 1317; see also Teva Pharm. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 135 S. Ct. 831, 841 (2015), concerning the standard for appellate review when the only evidence considered on claim construction is intrinsic. There, the Court said “when the district court reviews only evidence intrinsic to the patent [patent claims and specifications, along with the patent’s prosecution history], the judge’s determination will amount solely to a determination of law, and the Court of Appeals will review that construction de novo.”

10. See the discussion at section 2:2.1[B].


12. Id. at 1319 (citation omitted). Note, however, that in Teva Pharm. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 135 S. Ct. 831 (2015), the Supreme Court held that the Federal Circuit must give deference to a district court’s factual findings on extrinsic evidence. The Supreme Court said: “In some cases, however, the district court will need to look beyond the patent’s intrinsic evidence and consult extrinsic evidence . . . .” Id. at 841. The Supreme Court gave no indication that such extrinsic evidence should be viewed less favorably than intrinsic evidence on appeal. Indeed, the Supreme Court held that extrinsic evidence must be reviewed only for clear error, as all other factual findings are.
In addition to consulting the specification, we have held that a court “should also consider the patent’s prosecution history, if it is in evidence.” Markman, 52 F.3d at 980; see also Graham v. John Deere Co., 383 U.S. 1, 33, 86 S. Ct. 684, 15 L.Ed.2d 545 (1966) (“[A]n invention is construed not only in the light of the claims, but also with reference to the file wrapper or prosecution history in the Patent Office.”). The prosecution history, which we have designated as part of the “intrinsic evidence,” consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent. Autogiro, 384 F.2d at 399. Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent. 13

The Federal Circuit has subsequently held that some applications, patents, and file histories related to the patent being litigated are also intrinsic evidence. Generally, the Federal Circuit “draws a distinct line between patents that have a familial relationship and those that do not.” 14 That is patents and file histories in the same family (generally claiming priority to the same application) are intrinsic evidence. 15 Otherwise, they are not. However, not all statements in familial applications are intrinsic evidence entitled to evidentiary weight. 16 Also, in certain instances, applications, patents and file histories which are not strictly part of the same family are also intrinsic evidence. These include, for example, a pending application of the same inventor, but not claiming priority to a common application, which was referred to in the prosecution history in a double patenting objection. 17

On the other hand, just because a nonfamilial application is referred to in the prosecution history and thus is intrinsic evidence, not all statements made in applications in the family of the incorporated application are intrinsic evidence. For example, statements made as

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13. Phillips, 415 F.3d at 1317.
15. See, e.g., Jonsson v. Stanley Works, 903 F.2d 812, 818 (Fed. Cir. 1990) (using statements from one patent’s prosecution history to construe the claims of another patent where the two patents shared a parent application); Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1350 (Fed. Cir. 2004) (permitting reliance on statements made subsequent to the issuance of a patent when construing its claims, where the statements were made in connection with continued prosecution of sibling applications).
17. Goldenberg, 373 F.3d at 1167.
new matter in a continuation-in-part application of the incorporated application were found not to be intrinsic evidence.\(^{18}\)

\[\S\ 2:2.1\quad \textit{The Patent}\]

\[\textbf{[A]}\quad \textbf{All Elements Rule}\]

Infringement of a patent may be either literal or under the Doctrine of Equivalents. In either event, infringement can only be proved if it is shown that the accused product or method embodies each and every element of the patent claim at issue.

As to literal infringement: “Literal infringement requires that the accused device embody every element of the patent claim.”\(^{19}\)

As to the Doctrine of Equivalents:

Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.\(^{20}\)

The same is true if the issue is one of invalidity based on anticipation by a prior art reference under 35 U.S.C. § 102.\(^{21}\)

So, the first step in claim construction is to parse the claim into its elements. This is normally done by preparing a claim chart. The preparation of claim charts is covered in section 5:3.1.

\[\textbf{[A][1]}\quad \textbf{The Doctrine of Equivalents}\]

The Doctrine of Equivalents is a huge subject and will not be discussed in detail here. For claim construction purposes, it is important to know that the law requires that each element of a claim must be shown to be present in the alleged infringing product for there to be infringement and to be present in a single piece of prior art for a patent to be invalid as anticipated. Also, each element must be considered in determining obviousness. Of course, this then leaves the question of what is an “element.” Whatever it is, dividing a claim into its elements is the start of any process of claim construction.

\(^{18}\) Id. at 1167–68.

\(^{19}\) Mannesmann Demag Corp. v. Engineered Metal Prods. Co., 793 F.2d 1279, 1282 [Fed. Cir. 1986].


There are a few major cases that define the general scope of the Doctrine of Equivalents: *Graver Tank,*\(^{22}\) *Warner-Jenkinson,*\(^{23}\) and a series of cases known as the *Festo* cases.\(^{24}\)

*Graver Tank* set out the modern contours of the Doctrine of Equivalents. There, the Supreme Court held that a product or process which does not literally infringe by meeting the express terms of a patent claim may nevertheless infringe if there is “equivalence” between the elements of the claims and the product or process.

After that case, there arose a body of case law about how to determine such equivalence. Some cases looked at the alleged infringer’s intent. If a person was determined to have intentionally copied, some case law said that there was an inference that any differences were only insubstantial.\(^{25}\) A so-called three-part test (function, way, result) also came into being saying that if the allegedly infringing product or process included substantially the same function operating in substantially the same way to produce substantially the same result, then there was infringement.\(^{26}\)

The Supreme Court rejected all of these tests in the *Warner-Jenkinson* case. First, it affirmed that the Doctrine of Equivalents was still good law, even though the patent statutes had been extensively changed in 1952 after the *Graver Tank* case had been decided. The Court said:

Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole.\(^{27}\) . . . Today we adhere to the doctrine of equivalents. The determination of equivalence should be applied as an objective inquiry on an element-by-element basis.\(^{28}\)

In *Festo,* the Court addressed the issue of prosecution history estoppel. This doctrine is that a patentee may not obtain a scope of the claim in litigation through equivalence which would encompass what

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28. *Id.* at 40.
had been disclaimed in obtaining the patent in prosecution. Here, the Supreme Court was hearing a case where the Federal Circuit held that estoppel arises from any amendment that narrows a claim to comply with the patent statutes, not only from amendments made to avoid prior art. The court of appeals also held that when estoppel applies, it stands as a complete bar against any claim of equivalence for the element that was amended. Previous decisions had held that prosecution history estoppel constituted a flexible bar, foreclosing some, but not all, claims of equivalence, depending on the purpose of the amendment and the alterations in the text. The Federal Circuit concluded that a complete-bar rule, under which estoppel bars all claims of equivalence to the narrowed element, would promote certainty in the determination of infringement cases because the case-by-case approach had proved unworkable.

The Supreme Court rejected the absolute bar rule:

[W]e hold here that the patentee should bear the burden of showing that the amendment does not surrender the particular equivalent in question. . . .

There are some cases, however, where the amendment cannot reasonably be viewed as surrendering a particular equivalent. The equivalent may have been unforeseeable at the time of the application; the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question; or there may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question. In those cases the patentee can overcome the presumption that prosecution history estoppel bars a finding of equivalence.29

It should also be noted, however, that equivalency can exist when separate claim limitations are combined into a single component of an accused device.30

Furthermore, there can be equivalency even where the accused device or process includes an element which is different in some aspects from the claimed element. In Novartis Pharmaceuticals Corp. v. Abbott Laboratories,31 the Federal Circuit explained the difference between finding equivalence or not in situations where the accused element is different from the claimed element as follows:

In both *Graver Tank* and *Wright Medical*, the fact that certain claimed limitations in the element at issue were missing in the accused product did not change the fact that the element, albeit different from that expressly claimed, was indeed present in the accused product. In *Graver Tank*, for instance, although the accused product used manganese metal instead of an alkaline earth metal, that substitution did not transform the disputed element, i.e., metal silicate, into something that was not a metal silicate. Similarly, in *Wright Medical*, although the intramedullary rod in the accused product did not tightly fit and extend through the isthmus of the femur, as required by the literal claim language, the absence of those claimed limitations did not vitiate the fact that the accused product possessed an “intramedullary rod.”

When the substitution of one feature, however, for another into an element of the accused product places it outside the scope of the recited claim element, the doctrine of equivalents may not be applied. *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1423 (Fed.Cir.1997); see, e.g., *Durel Corp.*, 256 F.3d at 1305 (finding that the addition of hydroxyl groups to the alleged oxide coating in the accused product made it no longer an “oxide coating” as properly construed under the asserted patent, and thus placing the accused product outside the reach of the doctrine of equivalents). Permitting such an element in the accused product to come within the bounds of the claimed element would impermissibly extend the scope of the claim language beyond what the patentee actually claimed.

The fact that an element in a claim is given a particular construction by the court does not preclude infringement by an equivalent to the construed element.³¹ In the *Adams* case, the claim required a patient to receive “at least” a certain amount of a drug. The lower court construed “at least” to be the absolute lowest limit of a range of drug that the patient would receive. The lower court granted summary judgment of non-infringement because the accused product would only provide a drug amount below the lower limit in the claim. In so doing, the trial court refused to allow a showing of equivalence of a lower amount to that required by that element because to do so would vitiate the claim element.³²

The Federal Circuit reversed. It held the Doctrine of Equivalents could apply. It stated: “The mere existence of a numerical value or

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range in a claim, absent more limiting language in the intrinsic record, does not preclude application of the doctrine of equivalents.  

However, there cannot be infringement by an equivalent to the construed term when that asserted equivalent is disclosed in the specification but not claimed. This is often referred to as disclaiming that equivalent and dedicating it to the public. As explained in SanDisk Corp. v. Kingston Technology Co.:

Under the doctrine of equivalents, “a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.” Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 21, 117 S. Ct. 1040, 137 L.Ed.2d 146 (1997). A patentee, however, can disclaim an equivalent by disclosing it in the specification. As we held in Johnson & Johnston, “[W]hen a patent drafter discloses but declines to claim subject matter, . . . this action dedicates that unclaimed subject matter to the public.” 285 F.3d at 1054.

The SanDisk case also addressed whether a document incorporated by reference in the specification, but not claimed, is dedicated by disclosure. The court explained:

Because a document incorporated by reference “becomes effectively part of the host document as if it were explicitly contained therein,” Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1329 [Fed. Cir. 2001], the disclosure of subject matter in an incorporated document can dedicate that subject matter to the public for purposes of the host patent. Incorporation by reference, however, “does not convert the invention of the incorporated patent into the invention of the host patent.” Modine Mfg. Co. v. Int’l Trade Comm’n, 75 F.3d 1545, 1552 [Fed. Cir. 1996]. Thus, in determining whether incorporated subject matter satisfies the disclosure-dedication rule standards . . . we must look first to the teachings of the host patent. . . . [T]he host patent must sufficiently inform one of ordinary skill that the incorporated document contains subject matter that is an alternative to a claim limitation. . . . If it does, the inquiry then shifts to the incorporated document to assess whether the disclosure of that subject matter is “of such specificity that one of ordinary skill in the art could identify the subject matter that had been disclosed and not claimed.”

31.3. Adams Respiratory Therapeutics, 616 F.3d at 1292.
31.5. Id. at 1366 [some citations omitted].
Further, the Federal Circuit held that the fact that the claim did not contain words of approximation (for example, “about at least [a certain amount]”) did not affect the analysis. It quoted with approval from Phillips, that “terms like ‘approximately’ serve only to expand the scope of literal infringement, not to enable application of the doctrine of equivalents.”

31.6

[A][2] What Is an Element of a Claim?

It is important to note that not every important word in a claim for purposes of literal infringement is necessarily an “element” for the purposes of the Doctrine of Equivalents. One example is found in Kustom Signals, Inc. v. Applied Concepts, Inc., where the patent was on a flight traffic radar system. The system could search by either the fastest search mode or the strongest search mode. All of the claims of the patent used the word “or” in saying that the system used one or the other of these search modes. The district court granted summary judgment of non-infringement because the alleged infringer’s system used both search modes. It construed the word “or” as requiring that the system incorporated one or the other but not both.

The Federal Circuit affirmed that holding of no literal infringement. It held, however, that the district court was wrong in granting summary judgment of no infringement under the Doctrine of Equivalents on this basis. The appellate court said that the word “or” was not an element for the purposes of this doctrine. It held:

The all-elements rule is that an accused device must contain every claimed element of the invention or the equivalent of every claimed element. See Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 117 S. Ct. 1040, 137 L.Ed.2d 146, 41 USPQ2d 1865, 1871 [1997]. No claimed element, or an equivalent thereof, can be absent if the doctrine of equivalents is invoked. However, all of the steps or elements of method claim 1 or apparatus claims 16 and 20 are undisputedly present in the accused device. The word “or” is not itself an “element” of an apparatus or a step of a method, and its presence to signify alternative elements does not convert “or” into an element. The ruling of non-infringement can not be sustained on this ground.33

31.6. Adams Respiratory Therapeutics, 616 F.3d at 1292.
33. Id. at 1333.