Important Terms In Claim Construction And Good Practices For Claim Drafting

I. TERMS THAT AVOID STRICT BOUNDARIES

The requirement for claims to be definite is set forth in the second paragraph of 35 USC § 112:

> The specification shall conclude with one or more claims ***particularly pointing out and distinctly claiming*** the subject matter which the applicant regards as his invention. (Emphasis added).

A claim of a patent is invalid for indefiniteness under 35 USC § 112, ¶ 2, if it fails to "particularly point[ ] out and distinctly claim[ ] the subject matter which the patentee regards as his invention." *Honeywell International Inc., v. ITC*, 341 F.3d 1332, 1342, 68 USPQ2d 1023, 1027-28 (Fed. Cir. 2003). If "[c]ompetitors trying to practice the invention or design around it would be unable to discern the bounds of the invention," then the claim fails to notify the public of the patentees' right to exclude. (*Id.*, 341 F.3d at 1341; 68 USPQ2d at 1030). When a claim is invalid for indefiniteness, as a matter of law, the claim cannot be construed and an infringement analysis cannot be performed. (*Id*. 341 F.3d at 1342; 68 USPQ2d at 1030).

TERMS THAT AVOID STRICT BOUNDARIES cont . . .

- The use of terms to avoid strict boundaries (so - called "fuzzy terms“) is ubiquitous in claim drafting, and there is nothing inherently improper in employing such terms. *See, e.g., Andrew Corp. v. Gabriel Elecs. Inc.,* 847 F. 2d 819, 821 - 822, 6 USPQ2d 2010, 2013 (Fed. Cir. 1988). Since each case is fact specific, when a patent applicant chooses to employ such terms, he or she must be careful, on the one hand, that the terms of a claim are not too vague that they create a zone of uncertainty where competitors could not determine whether they infringe and, on the other hand, not too vague that they might bump up against the prior art or would run into enablement and/or definiteness problems. While claim construction is a question of law, 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, *i.e.,* as of the effective filing date of the patent application. *See, Aero Products International, Inc. v. Intex Recreation Corp.,* 466 F. 3d 1000, 80 USPQ2d 1481 (Fed. Cir. 2006).

- Some examples of terms that have run into such problems are exemplified below.

"About" and "Approximately"

(generally employed with ranges or amounts)

- The phrase "about" is not inherently ambiguous. However, there are occasions where it can impart to a claim an unreasonable degree of uncertainty. *Amgen, Inc. v. Chugai Pharmaceutical Co.,* 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991) (finding that the use of the phrase "at least about" in combination with a specific activity limitation that was inherently ambiguous, rendered the metes and bounds of the claims indefinite - "When the meaning of claims is in doubt, especially when, as is the case here, there is close prior art, they are properly declared invalid."). "About" can, in addition, be construed to bring amounts recited in claims too close to prior art. *Merck & Co., Inc. v. Teva Pharmaceuticals USA, Inc.,* 395 F. 3d 1364, 73 USPQ2d 1641 (Fed. Cir. 2005) (finding the term "about" to be construed according to its ordinary meaning, which is "approximately," and finding claims obvious because the phrase "about" 70 mg and "about" 35 mg of alendronate monosodium trihydrate, on an alendonic acid basis, recited in the claims, was not defined clearly in the specification to exclude prior art disclosure of 40 mg and 80 mg of alendronate).

"About" and "Approximately"

(generally employed with ranges or amounts)

cont . . .

Cf. Ex parte Eastwood, 163 USPQ 316 (Bd. App. 1969) (reversing art based rejections because the Examiner, in part, unreasonably expanded the scope of "about" to bring the prior art into the claims at issue - "The descriptive word "about" is not indefinite as argued by the Examiner. Its meaning is not as broad and arbitrary as contended by the Examiner. Rather, the term is clear but flexible and is deemed to be similar to terms such as "approximately" or "nearly").

"An effective amount"

(generally employed in method of treatment claims)

- The phrase "an effective amount" can sometimes run into issues relating to indefiniteness and lack of enablement depending on factors that include the breadth of the claims and the teachings in a specification. *See, In re Gardner*, 427 F. 2d 786, 166 USPQ 138 (CCPA 1970) (finding that claims directed to methods of producing antidepressant activity that recited an effective amount, but failed to recite any host, were definite but were not enabled because the uncertainty of the disclosed range "coupled with the total absence of any reference to a host, which, in turn, is coupled with an insistence that, within the claimed invention, the host is not necessarily a human being…".
- *See also In re Fuetterer*, 319 F.2d 259, 138 USPQ 217 (CCPA 1963):
  - Appellant stated before the board that when "any amount of the non-adhesive protein, carbohydrate, or a mixture thereof, is present, some effect will be obtained." The Patent Office does not dispute this statement. As in the case of *In re Gay, 50 CCPA 725, 309 F.2d 769, 135 USPQ 311,* when we consider what appellant's invention really is, we find that appellant has clearly stated in the written description of his invention that a particular aspect thereof is not crucial, in this instance that one could vary within wide limits the amounts of non-adhesive protein and or carbohydrate and still achieve an operable form of his invention. We do not consider pertinent to the instant rejection, which is not based on prior art, the obvious fact that if extremely small quantities of carbohydrate and/or non-adhesive protein were used the "effect obtained" would be extremely small.

"An effective amount"

(generally employed in method of treatment claims) cont. . .

- Accordingly, insofar as the instant rejection on indefiniteness and ambiguity may be considered to be based on the failure of appellant to comply with the requirements of the first paragraph of *35 U.S.C. 112,* we are not persuaded that any "undue burden" is placed on the public by appellant's disclosure. We therefore reverse the rejection of claims 38, 40, 42, 44, 46, and 48 as indefinite and ambiguous.

- *In re Halleck*, 422 F.2d 911, 164 USPQ 647 (CCPA 1970):
  - The functional term "an effective amount for growth stimulation" is not objectionable where the amount as such is not critical and its use has been approved in many cases. See *In re Caldwell, 50 CCPA 1464, 319 F.2d 254, 138 USPQ 243 (1963).* Those skilled in the art will be able to determine from the written disclosure and its examples what an effective amount for growth stimulation is. Granted that the proportions may vary for a specific agent and specific animal at a particular stage of growth, it does not appear from the facts of record that determination of such amounts would be beyond the skill of the art nor that it would involve undue experimentation to ascertain them. On the other hand, for appellant to ascertain and recite the numerical limits for each parasympatholytic agent known would very likely require undue research. We have also considered the board's concern with the lack of particulars regarding the disclosed administration by injection and the failure of the written disclosure to elaborate on the statement that in some cases inhibition of growth has been observed, but we do not share its view for the above reasons pointing out that the specification is directed to those skilled in the art.

"Aesthetically pleasing"

- A patent specification should include an objective method for determining the meaning of a claim. When the meaning of a claim is necessarily dependant upon the eye of the beholder, the claim would be subject to different interpretations, and may be indefinite. In *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 75 USPQ2d 1801 (Fed. Cir. 2005), the claims at issue recited a system that had an interface screen that was “aesthetically pleasing in look and feel. . . .” 417 F.3d at 1345, 75 USPQ2d at 1802. The District Court invalidated the claims as indefinite and the Federal Circuit affirmed. The Federal Circuit explained that:
  - In the absence of a workable objective standard, "aesthetically pleasing" does not just include a subjective element, it is completely dependent on a person's subjective opinion. To the extent Datamize argues that such a construction of "aesthetically pleasing" does not render the phrase indefinite, we disagree. The scope of claim language cannot depend solely on the unrestrained, subjective opinion of a particular individual purportedly practicing the invention. See *Application of Musgrave, 57 C.C.P.A. 1352, 431 F.2d 882, 893 (C. C.P.A. 1970)* (noting that "[a] step requiring the exercise of subjective judgment without restriction might be objectionable as rendering a claim indefinite"). ***Some objective standard must be provided in order to allow the public to determine the scope of the claimed invention***. Even if the relevant perspective is that of the system creator, the identity of who makes aesthetic choices fails to provide any direction regarding the relevant question of how to determine whether that person succeeded in creating an "aesthetically pleasing" look and feel for interface screens.

"Aesthetically pleasing" cont . . .

A purely subjective construction of "aesthetically pleasing" would not notify the public of the patentee's right to exclude since the meaning of the claim language would depend on the unpredictable vagaries of any one person's opinion of the aesthetics of interface screens. While beauty is in the eye of the beholder, a claim term, to be definite, requires an objective anchor. Thus, even if we adopted a completely subjective construction of "aesthetically pleasing," this would still render the *'137 patent* invalid.

* * *

– Simply put, the definition of "aesthetically pleasing" cannot depend on an undefined standard. See *Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1342* (finding indefinite claim requiring comparison to moving target since the patent failed to direct those of ordinary skill in the art to a standard by which the appropriate comparison could be made). Reference to undefined standards, regardless of whose views might influence the formation of those standards, fails to provide any direction to one skilled in the art attempting to determine the scope of the claimed invention. In short, the definition of "aesthetically pleasing" cannot depend on the undefined views of unnamed persons, even if they are experts, specialists, or academics. ***Thus, the written description does not provide any reasonable, definite construction of "aesthetically pleasing."***

"Coupled" and "Connected"

- These terms have generally been construed as being synonymous absent facts to the contrary. *See*, Merriam Webster's Collegiate Thesaurus ("couple" - synonyms join 1, bracket, coalesce, combine, conjoin, connect, link, marry, unite, yoke; "connect" - synonyms join 1, associate, combine, conjoin, couple, link, relate, unite, yoke); *Johnson Worlwide Assocs. v. Zebco Corp.,* 175 F. 3d 985, 992 (Fed. Cir. 1999) ("Zebco…recognizes that the modified term 'couple' generically describes a connection, and does not require a mechanical or physical coupling."); *Silicon Graphics, Inc. v. nVidia Corp.,* 58 F. Supp. 2d 331,346 (D. Del. 1999) ("The court finds no reason not to apply the ordinary meaning of the terms 'couple,' and determines that the ordinary meaning in this context is 'coupled or connected, directly or indirectly."); and *Wycoff v. Motorola, Inc.,* 1997 U.S. Dist. Lexis 23657, *21 (D. Neb. Dec. 18, 1997).

“Substantially”

- The term “substantially” is a descriptive term commonly used in patent claims to avoid a strict numerical boundary to a specified parameter. Thus, in *Ecolab, Inc. v. Envirochem Inc*., 264 F. 3d 1358, 60 USPQ2d 1173 (Fed. Cir. 2001) "substantially unifrom" served to avoid a strict 100% nonunifromity boundary and was interpreted as largely but not wholly the same in form. "The term 'substantial' is a meaningful modifier implying "approximate," rather than "perfect.'" *Playtex Products, Inc., v. Procter & Gamble Company,* 400 F. 3d 901, 73 USPQ2d 2010 (Fed. Cir. 2005). "Expressions such as 'substantially' are used in patent documents when warranted by the nature of the invention, to accommodate the minor variations that may be appropriate to secure the invention." *Verve, LLC v. Crane Cams, Inc.,* 311 F. 3d 1116, 65 USPQ2d 1051 (Fed. Cir. 2002) (vacating a finding of indefiniteness because the district court did not consider extrinsic evidence regarding the term "substantially" as used in a claim reciting "substantially constant wall thickness").

“Integral”

- Integral does not mean "one piece" absent a clear definition that it does. *See In re Hotte*, 475 F.2d 644, 177 USPQ 326 (CCPA 1973) ("Appellants specification does not expressly restrict the meaning of 'integral' to 'one piece' and such a meaning is wholly irreconcilable with the recitation in [the] claim ... As indicated by the board, "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. *See Henderson v. Grable*, 339 F. 2d 465, 52 CCPA 920 (1964)").

“Comparing”

- Claims that require comparisons should clearly set forth in the specification the method by which the comparison is to be made. *See Union Pacific Resources Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 57 USPQ2d 1293 (Fed. Cir. 2001):
  - “The precise meaning of the term "comparing" is not explained in the written description. The patent suggests, however, that "comparing" (which incorporates "rescaling" in claim 1) involves the determination of TSD by correlation. As explained during trial, correlation is a process of stretching and squeezing a TVD log by carefully choosing assumed bed dip angles, until a portion of the TVD log matches a portion of the offset log. In other words, the "comparing" step presumably refers to a complex "correlation" step suggested (but not explained) in the written description.
  - Yet "comparing" could undoubtedly have other meanings to a person of skill in the art. For example, because the patent does not indicate that it is a technical or scientific term, the term "comparing" could simply mean "to examine in order to note the similarities or differences of." The American Heritage College Dictionary 283 (3d ed. 1997). Nothing in the specification describes "comparing" (or "rescaling") as a process of stretching and squeezing a TVD log by carefully choosing bed dip angles. Thus, the *'951* patent does not define the means to "compare" the two sets of characterizing information. The district court correctly found that the "comparing" steps in claims 1 and 6 are indefinite.

"Up to"
(generally employed with ranges)

- The phrase "up to" has been construed to include "0“. *See, In re Mochel*, 470 F.2d 638 176 USPQ 194 (CCPA 1974):
  - We join the board in disregarding any coeffect of K(2)O (claims 2 and 3). As this Court has held, the phrase "up to" of claim 2 includes zero as the lower limit. *Arness v. Franks, 31 CCPA 737, 138 F.2d 213, 59 USPQ 154 (1943);* accord, *In re Egbert 49 CCPA 888, 298 F.2d 947, 132 USPQ 456 (1962).* Claim 3 explicitly includes 0%. Inclusion of K(2)O not being mandatory, either in the minimum quantity shown in appellant's examples (3%) or in any quantity, we limit our consideration to the invention as set forth in claim 1).
- Except where that phrase would require that a process would not work. *See, In re Kirsch*, 498 F.2d 1389, 182 USPQ 286, 290 (CCPA 1974):
  - The basis of that rejection is that the recitation therein (reading like item (ii) of claim 77), requiring the amount of unreacted olefin in the reaction mixture be maintained at less than 7 mole percent based on the unreacted isobutane, is vague and indefinite. The rejection is based on the view that the language of the recitation sets only a maximum amount of olefin and hence "is inclusive of substantially no olefin, resulting in the termination of any reaction." We see no merit in this rejection. The claim requires a process for the preparation of olefin-paraffin alkylate by contacting the two reactants under defined conditions. The imposition of a maximum limit on the quantity of one of the reactants without specifying a minimum does not warrant distorting the overall meaning of the claim, to preclude performing the claimed process. The rejection of claim 86 will not be sustained.

“Removably Attached” And “Removably Secured”

- “Removably attached” and “removably secured” merely require that two objects are designed, at some time or another, to come apart, not that they must be capable of easy separation. *See Dorel Juvenile Group, Inc. v. Craco Children’s Products, Inc.*, 429 F.3d 1043, 77 USPQ2d 1090 (Fed. Cir. 2005):
  - The district court correctly interpreted "removably attached" and "removably secured." The specifications of the patents in suit are mainly directed to the claimed cupholder feature of the inventions, and there is little reference to the concept of the removability of the seat from the base. See ‘862 patent, Abstract ("A juvenile vehicle seat is provided including a cup holder. The cup holder is movable between a retracted position adjacent the seat and an extended position spaced from the seat."); ’649 patent, Abstract (same). The specifications speak of "means for coupling" the seat bottom to the base, but expressly state that such means are not shown in the drawings. ‘862 patent, col. 2, ll. 52-53;’649 patent, col. 2, ll. 55-56. Further, the "seat base is configured to releasably couple to the seat bottom." ‘862 patent, col. 1, ll. 27-29; ‘649 patent, col. 1, ll. 31-33.
  - To impart "ease of separation" to the claims would require adding the words "easily" or "relatively easily" to the "removable" limitations, as the district court noted. Nothing in the patent's specification suggests "ease of separation." If anything, the specification teaches the meaning given to the "removable" limitations by the district court.

Means Plus Function

- Construing §112 ¶6 Limitations
  - "An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 USC § 112, ¶6.
  - If a claim limitation recites "means for" (step for), there is a presumption that the limitation in question is a so-called "means plus function" limitation. "The use of the word 'means,' which is part of the classic template for functional claim elements, gives rise to a 'presumption that the inventor used the term advisedly to invoke the statutory mandates for means-plus-function clauses." *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427 (Fed. Cir. 1997).

Means Plus Function cont. . .

- The presumption may be rebutted for several reasons including where no function is recited in the limitation in question. *Id.; York Prods., Inc. v. Central Tractor Farm & Family*, 99 F.3d 1568 (Fed. Cir. 1996; and *see Sage*, 126 at 1427-28. "Where a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function formal."
- Alternatively, the presumption may be rebutted where the claim limitation includes sufficient structural elements to define it as a structure. *See Cole v. Kimberly-Clark Corp.*, 102 F.3d 524 (Fed. Cir. 1996).
- In addition, "absence of the word 'means' creates a presumption that section 112, paragraph 6 has not been invoked, and that presumption may likewise be rebutted if the claim limitation is determined not to recite sufficiently definite structure to perform the claimed function." *Kemco Sales, Inc. v. Control Papers Co., Inc.*, 208 F.3d 1352, 1362 (Fed. Cir. 2000).

Means Plus Function cont. . .

- Determining whether or not a disclosed structure corresponds to the function recited in a means-plus-function limitation involves a question of law for the court. *IMS Tech. v. Haas Automation, Inc.*, 206 F.3d 1422, 1436 (Fed. Cir. 2000)). The focus should be, not on whether or not the disclosed structure can perform the claimed function, but rather, on whether or not the patent specification indicates to one of skill in the art that the disclosed structure can perform the claimed function. *See Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001) ("structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claims (citation omitted).") Thus, even if the patent specification discloses multiple structures that are capable of performing the claimed function, it may be appropriate for a court to identify only one of these structures as the "corresponding structure." *Id.* at 1315.
- Structures are equivalent if one of skill in the art would consider the differences between them to be insubstantial. *See IMS Tech. v. Haas Automation, Inc.*, 206 F.3d 1422, 1436 (Fed. Cir. 2000). Courts have recognized two ways for determining whether or not such differences are unsubstantial: (1) whether or not the accused product performs the identical function in substantially the same way to achieve substantially the same result (*see IMS Tech*, 206 F.3d at 1436); and (2) whether or not one of ordinary skill in the art would recognize the interchangeability of the element in the accused product and the disclosed structure (*see Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus.*, 145 F.3d 1303, 1310 (Fed. Cir. 1998)).

II. GOOD PRACTICES IN CLAIM DRAFTING

- Read your claims before you file. Ask yourself, objectively looking at the claims you drafted, (i) do they make sense, because a court will not correct them for you (*See, e.g., Chef America Inc. v. Lamb Weston, Inc.,* 358 F.3d 1371, 69 USPQ2d 1857 (Fed. Cir 2004) (construing claims as they were written to require that a dough be heated to a temperature of 400 F° to 850 F°, rather than the oven be heated to that temperature)); (ii) can you figure out what they mean in light of the disclosure of your specification and are they commensurate in scope with the teachings in the specification and the knowledge in the art; and (iii) how could you avoid infringing them.
- Check your draft specification for technical errors.
- If possible know the terms you are employing in your claims. If they are too restrictive, choose different terms or be your own lexicographer
- Always make sure you have a tight dependant claim to cover what you will believe will be a commercial embodiment.

GOOD PRACTICES IN CLAIM DRAFTING cont. . .

- Know the closest prior art that you are drafting your claims against.
- Make sure your specification has varying scopes of embodiments so that you can add broader or narrower claims during prosecution if necessary.
- Determine if the technology you are working with contains any elements that are inherently ambiguous.
- Try to have reasonable explanations and/or examples demonstrating how one may be able to determine whether they infringe.
- Know your specification's disclosure and avoid the doctrine of dedication by including several independent claims to cover each embodiment where the art precludes a few very broad independent claims.
- Avoid negative and quantitative limitations, as there will not likely be any equivalents as to such limitations.

GOOD PRACTICES IN CLAIM DRAFTING cont. . .

- When drafting specification, keep in mind that a Judge may be reaching it some day. Be clear, avoid excess technical jargon.
- Take advantage of competition intelligence when drafting claims; draft claims anticipating where competition may go.
- For important inventions, keep an application on file for as long as possible.
- Never characterize your claims/your invention during prosecution; always attack a rejection and the Examiner's characterization thereof.
- When drafting claims to cover your invention also consider blocking claims to keep competitors out/for use as bargaining chips/cross-licensing opportunities, etc.