

**A PATENT DRAFTER'S SWEET SIXTEEN ON THE ROAD  
TO A CHAMPION PATENT**

**Jerome R. Smith<sup>1,2</sup>  
Lathrop & Gage L.C.  
2345 Grand Blvd., Suite 2800  
Kansas City, MO 64108  
Tel: 816.292.2000 Direct: 816.460.5306  
Fax: 816.292.2001  
jsmith@lathropgage.com**

**Introduction**

U.S. Patent Litigation is dominating today's business headlines. Successful patentees have received damage awards from infringers in the hundreds of millions of dollars and higher.<sup>3</sup> Patent litigation is complex and extremely "high stakes," resulting in participants paying ever increasing legal fees, ranging upwards of five million dollars.

In many instances, patent litigations are "bet the company" cases, as they typically involve patents for a company's core and highly profitable technology. As patent litigation has risen to this high level, so has the scrutiny of the patents, on which these suits are based. This increased scrutiny has placed patents under greater attacks against validity and infringement avoidance.

A well drafted patent application will minimize attacks on validity and attempts to avoid infringement. This places a premium on patent application drafting, as patent professionals must draft applications with an eye toward litigation or other challenges. Accordingly, patent applications must be drafted with extreme care, clarity, and

---

<sup>1</sup> Registered U.S. Patent Attorney, Admitted in Minnesota and Illinois only. The views expressed herein are those of the author and not necessarily those of Lathrop & Gage L.C.

<sup>2</sup> The author also thanks Mr. Marshall Honeyman, his colleague at Lathrop & Gage L.C., for his comments and contributions.

<sup>3</sup> On February 22, 2007, a jury in the U.S. Federal District Court in San Diego (Case No. 3:02cv2060) awarded Alcatel-Lucent SA \$1.52 Billion in damages for Microsoft's infringement of Alcatel-Lucent's patents on its MP3 technology. This was the largest patent litigation damage award in U.S. history. This was reported in [www.iplaw360.com](http://www.iplaw360.com) on February 22, 2007.

consistency. The drafter must focus on detail, to provide complete and unequivocal support in the specification for all claimed subject matter, leaving nothing open to outside interpretation. This way, courts and administrative bodies will interpret the patent specification, drawings and claims in accordance with the interpretations intended by the drafter.

The quality of the patent application is not known until the patent is subject to a court or administrative proceeding. However, a patent issuing from a well drafted patent application will allow the patentee a stronger position to exclude others, control their competition, and survive court and other administrative challenges. This is because the subject matter was disclosed clearly and unambiguously, leaving little, if any, chances for other interpretations. Here are some ways to improve the chances that your patents will retain their validity and provide you with the ability to collect damages from and/or enjoin infringers, or obtain favorable licenses from potential infringers and others.

### **The "Sweet Sixteen"**

#### 1. View patents as adversarial legal document, not neutral technical documents

Patents must be seen for what they really are - adversarial legal documents disclosing technical subject matter in a manner in which a person of ordinary skill in the art, also known as a skilled artisan,<sup>4</sup> could make and use the subject matter without speculation or conjecture. In exchange for this disclosure, the government secured patent grant permits the patentee to exclude others from making, using or selling the patented subject matter for the statutory 20 year period.<sup>5</sup> Patent applications are not simply documents conveying technical information, and therefore, should be drafted to advocate or "sell" the patentability of the disclosed technical subject matter, first as patentable to Patent Examiners, and second, as enforceable patents to courts and other administrative bodies.

---

<sup>4</sup> The person of ordinary skill in the art is a hypothetical person in the technical field of the disclosed subject matter. This hypothetical person is used as an objective standard on which to determine obviousness of patent claims. While this person of ordinary skill in the art has been judicially defined, the author believes that such a person is, for practical purposes, your competitor.

<sup>5</sup> The twenty year patent term begins when the first non-provisional patent application is filed. 35 U.S.C. § 154.

## 2. Application Length

The length of a patent application is an age old question, for which only an age old answer is suitable: A patent application should be of a length that is as long as it takes to properly convey the disclosed subject matter, such that a person of ordinary skill in the art, upon reading the document can make and use the disclosed subject matter without speculation or conjecture. Remember, this means to use your words efficiently and effectively, with minimal redundancy or repetition of subject matter or concepts.

Drafting patent applications is not a paper generating exercise. Length is not directly proportional to quality. Rather, application quality is measured through the presentation of the disclosed subject matter, as expressed by the words in the application specification. Moreover, the longer, more repetitive and verbose a patent application is, the more likely it is to be open to interpretation, due to inconsistencies with other subject matter in the patent application. This could lead to unwanted or unintended claim interpretations.

## 3. Watch Your Language

While patents convey technical subject matter, they need to do so clearly, consistently, and in a manner understandable to judges and juries who may have little, if any, scientific training. Accordingly, use plain American English wherever possible. Also, keep terminology consistent throughout the specification, especially names of structures, elements and components. By doing so, these terms have the same meaning throughout the patent application, and are not likely to be subject to unwanted or unintended interpretations.

Use terms of art in very specific circumstances where the meaning of the term of art is an absolute industry standard. If a term is used in a particular industry, but it may not be accepted and defined industry-wide, define it in the specification, or list a reference defining the term in the specification. You may also want to disclose this reference in an Information Disclosure Statement (IDS) for additional safety.

When faced with evolving terms, such as those used in Internet and software technologies, for example, web site, banners, blogs, clicks, etc., and the industry and

technical literature is also unsettled on exact terminology, define the term in the specification. Courts and administrative bodies will define the term as it is written (defined) in the specification first, such that the term receives its intended interpretation.

By referencing and defining terms, courts and administrative bodies will interpret terms intrinsically, from the specification. This is in contrast to extrinsic interpretations of the requisite term, where courts or administrative bodies must look to sources outside of the specification to define the term. This may result in unintended or unwanted interpretations of the patent's specification and claims.

#### 4. Use Short Sentences

Use short sentences, especially if you plan on filing corresponding national applications in foreign countries where translations are required. Short sentences make translations easier, as they minimize translation errors, especially since many foreign languages may not have equivalents for complex English language sentences. Remember, the more translated applications, the greater chances for inconsistencies between the translations, leading to greater chances for unwanted or unintended specification and claim interpretations should a corresponding foreign application become part of a litigation or other proceeding.

#### 5. Each Section of the Application has a specific purpose

The Manual of Patent Examining Procedure (MPEP) § 608.01(a) suggests that patent applications be arranged in sections including: 1. Title; 2. Background of the Invention in two parts, a Field of the Invention and a Description of Related Art; 3. Brief Summary of the Invention; 4. Brief Description of the Several Views of the Drawing; 5. Detailed Description of the Invention; 6. A claim or claims; and, 7. Abstract. Drawings are also part of the patent application.

Although these sections have been provided by the MPEP, the following revised sections are proposed to better reflect the adversarial nature of the patent application. The patent application should be arranged in sections and subsections, as follows:

1. Title
2. Cross-References to Related Applications

3. Specification
  - a. Technical Field
  - b. Background
  - c. Summary
  - d. Brief Description of the Drawings
  - e. Detailed Description
4. Claims
5. Abstract
6. Drawings (appended to the application)

Looking at each section individually, the first section "Title" is self-explanatory. The title should be a direct reflection of the disclosed subject matter and should not use words such as "new," "improved" or other modifying words, but should define the disclosed subject matter, for example, "Method and System for Directing Packetized Communications," or "System and Method for Directing Packetized Communications," depending on the dominant subject matter of the application.

The "Cross-References to Related Applications" section should list all prior applications, typically, the provisional patent application(s) from which this application claims priority. It should be explicitly stated that all of these prior applications are incorporated by reference in this application. Additional related applications, that should also be incorporated by reference, include those whose subject matter is utilized as part of the disclosed subject matter of the present application. These related applications should be filed on the same day, if possible, to avoid one application being cited as prior art against the other.

Turning to the "Specification" section, the "Technical Field" subsection should be at most, one or two sentences focused on the nature of the disclosed subject matter. If written as two sentences, the first sentence should be a broad statement of the disclosed subject matter, with the second sentence more specific and serving to narrow the first sentence.

The "Background" should be used to set up the problem that the disclosed subject matter solves. It serves to familiarize the reader with the general technology that the disclosed subject matter addresses.

Backgrounds should be short, as all subject matter recited in this section is presumed to be prior art to the patent application. Avoid making sweeping statements about prior art or the state of the art, to avoid having to argue over these statements during prosecution. You do not want to place unnecessary statements into the file history, also known as the record, for they may be used to create an unwanted or unintended interpretation of the patent and its claims during litigation or other administrative proceeding.

Do not characterize specific references in this section unless the disclosed subject matter is an improvement over a specific reference. Even then, be careful. Comments on references in the application may result in unnecessary statements on the record and ultimately, admissions, that may result in unwanted or unintended interpretations of the patent's specification and claims. Should you be incorrect about the reference, the statement about the reference will remain as an admission to which you will be bound, regardless of the statement being inexact or even incorrect.

Rather, disclose all relevant prior art in an Information Disclosure Statement (IDS) with the application. This way, the Examiner makes the first determination as to how the references apply to the claims, and you only need to comment on the record in response to the Examiner's comments.<sup>6</sup> Remember, you implicitly characterized the prior art when you drafted the claims so as to avoid this prior art.

By keeping the background short and limited to setting up the problem, you will avoid having to argue over your own statements in the prosecution history. As a general rule, arguments over your own admissions are the most difficult to overcome in the Patent Office during prosecution and may create litigable issues with the issued patent.

The "Summary" is typically in two parts. This subsection should not list any "objects of the invention." Such "objects" are rapidly becoming obsolete and may result in an attack on the patent for failure to disclose the best mode of the disclosed subject matter of the patent application.<sup>7, 8</sup> Specifically, challengers may assert that the listed

---

<sup>6</sup> Should the Examiner's comments not address art of record believed to be critical, or they completely misinterpret the art of record, the author believes that it is the Applicant's duty to explain why the claimed subject matter is patentably distinct over such pertinent art.

<sup>7</sup> 35 U.S.C. § 112, ¶1, requires that, "The specification . . . shall set forth the best mode contemplated by the inventor of carrying out his invention."

"objects of the invention" failed to recite the best way the inventor(s) knew to practice the disclosed subject matter when the patent application was filed.

The first part of the Summary should describe the disclosed subject matter in terms of solving the problem set up in the Background. Do not list advantages of the disclosed subject matter individually, but rather, describe these advantages as part of the narrative showing how the disclosed subject matter solves the problems or improves on the prior or contemporary art. Again, this will avoid potential challenges to the patent for the failure to disclose the best mode for carrying out the disclosed subject matter.

It is also in this first part that comparisons with the devices or works of others or the state of the art (the contemporary art) is expressed. This provides the reader with a standard, typically a known standard, to compare with the disclosed subject matter.

The second part includes paragraphs for each independent claim, paraphrasing the independent claim and any important features from its dependent claims. In order to avoid unwanted or unintended specification and claim interpretations, these paraphrasing paragraphs should be written in standard American English sentences, free of any legally defined terms such as "comprising," "in communication with," "approximately," "substantially," "consisting of," as well as other terms normally found only in the claims. Antecedents, such as "said," should be replaced with "the," and repetition from the actual claims should be eliminated. This way, the paragraphs for the paraphrased independent claims that may include important features from the respective dependent claims, read in standard American English.

The "Brief Description of the Drawings" provides a description of each drawing figure in one or two clauses. There should also be a statement that corresponding or like numbers or characters indicate corresponding or like structures. This allows the drafter to reference identical or similar structures in alternates of the disclosed subject matter. This

---

<sup>8</sup> Claims for failure to disclose the best mode in the specification have become commonplace in contemporary patent litigation. They are easy to assert, and evidence in support of these claims is obtainable through standard discovery techniques, such as depositions, document requests and interrogatories, and can result in the patent being invalidated without a court's defining and evaluating the patent claims.

point in the application is also a suitable location to reference Appendices, typically documents, attached the application, as well as references to trademark usage.<sup>9</sup>

The "Detailed Description" is a detailed narrative of the disclosed subject matter, including the subject matter of the drawings, as defined in the "Brief Description of the Drawings." This section is only for the disclosed subject matter. There should not be any comparisons to or discussions of other devices or methods. The description should be correlated with the drawing figures and the numbering of components therein, typically numbered upward from the beginning toward the end of this subsection, so that the application reads smoothly.

The Claims define the scope of legal protection afforded to the disclosed subject matter of the patent application and ultimately, the patent.<sup>10</sup> The claims function analogous to a deed for real property, that defines the metes and bounds of the property.<sup>11</sup> The claims are sequentially numbered single sentences and typically use legally defined and arcane language that is unique to the claims. This language should not be used anywhere else in the specification, as it will probably be given a different meaning, that you did not intend or want. Some suggestions for the claims are detailed below.

The Abstract is an extremely brief description of the disclosed subject matter. It is typically used by Patent Examiners and the public to get a very general understanding of the technology of the patent. The abstract should be taken directly from the Summary subsection and should include subject matter that is covered in the specification.

Drawings are required where necessary for the understanding of the disclosed subject matter.<sup>12</sup> The drawings include one or more figures, numbered consecutively, with reference numerals and/or characters corresponding with the same numbers or characters in the specification.

---

<sup>9</sup> For example, patent applications involving software typically include screen displays or "screen shots" that may have a look and feel of Windows®. Language addressing use of such a look and feel for the screen shots may be, for example, as follows: "Throughout this document, numerous textual and graphical references are made to trademarks. These trademarks are the property of their respective owners, and are referenced only for explanation purposes herein."

<sup>10</sup> Landis on Mechanics of Patent Claim Drafting, Fourth Ed., App. E-4 (December 2002)

<sup>11</sup> Id.

<sup>12</sup> 37 Code of Federal Regulations (C.F.R.) § 1.81

#### 6. Use legal terminology only in the Claims

As discussed above, the claims include legally defined terms, with unique meanings outside of their basic dictionary or plain English meaning. For this reason, legally defined claim terms such as: comprising, consisting of, consisting essentially of, substantially, approximately, in an effective amount, in communication with, the group consisting of ..., should only be used in the Claims portion of the application. This legally defined language should not be used in any of the sections of the Specification. Outside of the claims this language may be defined by standard or dictionary definitions, leading to unwanted or unintended interpretations of the patent specification and claims.

#### 7. Do not use the word "Invention"

The word "invention" should not be used, as it may cause unwanted or unintended claim interpretations, such that claims are avoided. This occurred in Honeywell International, Inc. v. ITT Industries, Inc., 452 F.3d 1312 (Fed. Cir. 2006), where the U.S. Court of Appeals for the Federal Circuit limited a claim to cover what the applicant stated was "the invention." The Court noted that a fuel filter of a fuel injection system was mentioned four times in the specification as "the invention." Accordingly, the claimed "fuel injection system component" included a fuel filter, since the patent mentioned "the invention" as the fuel filter.

Based on this decision, "the invention" is a limiting term, and alternate non-limiting words or phrases must be used. Some proposed suitable alternatives to "the invention," which will not invoke any limiting meaning may be, for example, "the disclosed subject matter," "the disclosed technology," or with method disclosures, "the disclosed technique," or other suitable variations.

#### 8. Watch out for incorporation by reference

Incorporation by reference of documents is very useful in U.S. patent applications. It saves drafting time and potentially exhaustive efforts to describe existing subject matter, since the document becomes part of the written specification. However, many foreign patent offices, such as Europe, do not allow for incorporation by reference.

If you seek to use the same U.S. patent application as the Patent Cooperation Treaty (PCT), or foreign national application, it is recommended that the U.S. application first explicitly state the requisite structure or method, and refer to the incorporated reference as a non-limiting example, or an alternate. This way, the incorporation by reference and the listed document can be removed from the corresponding foreign application, without harming the disclosure of the foreign patent application, as the specification will continue to support the disclosed subject matter and the claims.

However, if the disclosure of a document is essential to support the disclosed subject matter, it may be added to the patent application as an appendix with proper references. For safety, the necessary subject matter should also be written into the foreign application's specification.<sup>13</sup> In the U.S., this document, if incorporated by reference or listed as an appendix to the patent application, should be filed in an Information Disclosure Statement, along with the application, to show possession of the disclosed subject matter as of the filing date.

#### 9. Be careful in referring to preferred embodiments

Patent specifications typically refer to the disclosed subject matter in terms of embodiments, with an embodiment being a variation or alternate of a previously disclosed apparatus or method. Moreover, it has typically been common practice to refer to the first described embodiment as the preferred embodiment. Listing a specific embodiment as a preferred embodiment may result in challenges to the patent, for failure to disclose the best mode. This is because another embodiment, not designated as the preferred embodiment, may actually have been the best mode, for on the filing date, this other embodiment was the best way the inventor(s) knew to practice the disclosed subject matter.

Consider the specification, that as drafted, discloses one or more embodiments for helping the reader to understand the disclosed subject matter. Additional embodiments are always possible, but listing all possible embodiments in the specification may be endless. In fact, all embodiments, disclosed and even not disclosed, are preferred

---

<sup>13</sup> The author believes that it is simply too risky to have the necessary document as only an appendix, with the possibility of writing in the necessary subject matter as a later-filed amendment or addition, if the particular foreign nation does not accept appendices to patent applications.

embodiments. Therefore, embodiments should be referred to in the specification as only "embodiments," not indicative of a preference. Then, in another portion of the specification, typically in a concluding paragraph, reference may be made to all embodiments as preferred embodiments.

#### 10. Draft claims in sets

Claims should be drafted in sets, with each set of a varying breadth. By drafting claims in sets, some of the sets may issue in the patent as unamended. These unamended sets, if not limited by arguments in support of patentability during prosecution, will lack any narrowing amendments, and accordingly, will not invoke the Festo presumption (that if unrebutted, will limit or eliminate claim equivalents).<sup>14</sup> Although the Festo presumption is rebuttable,<sup>15</sup> successful rebuttals are extremely difficult and rare. By drafting claim sets of various breadths, amendments and creation of additional record may be avoided. The Festo presumption will not be applicable to the claims in this situation. As a result, the patentee will possess a patent with a full range of equivalents, for use against infringers.

#### 11. Avoid freestanding "whereby" clauses in the claims

It was once common practice to include freestanding "whereby" and equivalent clauses, i.e., "wherein," "whereas," etc., collectively "whereby" clauses, in the claims.

---

<sup>14</sup> The Festo presumption was judicially created in a trilogy of decisions (Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., Ltd., 234 F.3d 558 (Fed. Cir. 2000), Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., Ltd., 535 U.S. 722, 152 L.Ed.2d 944, 122 S. Ct. 1831 (2002), and Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., Ltd., 344 F.3d 1359 (Fed. Cir. 2003) (en banc)), that addressed the judicially created Doctrine of Equivalents (DOE). The Festo presumption is a rebuttable presumption in which a patentee's narrowing amendments or arguments to claim language causes a surrender of the entire territory between the original claim language and the limitation made to the claim by amendment or argument. This surrender limits equivalents under the DOE. Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., Ltd., 535 U.S. 722, 741 (2002). See also, Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., Ltd., 344 F.3d 1359, 1365 (Fed. Cir. 2003)(en banc).

<sup>15</sup> The Festo presumption is rebutted if: 1) the patentee can demonstrate that the alleged equivalent would have been unforeseeable and not claimable, at the time the narrowing amendment or argument was made; 2) the rationale underlying the narrowing amendment or argument bore no more than a tangential relation to the equivalent in question; or, 3) there may be some other reason suggesting that the patentee could not reasonably have been expected to have described the alleged equivalent. Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., Ltd., 535 U.S. 722, 740-741 (2002). See also, Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., Ltd., 344 F.3d 1359, 1365 (Fed. Cir. 2003)(en banc).

The general logic was that these freestanding "whereby" clauses, at the end of the claim or at the end of a clause reciting structure, were merely functional and did not add structure to the claim. However, it is respectfully believed that this is no longer the case. Patent Examiners, courts and administrative bodies will view subject matter of the "whereby" clause as structural or otherwise limiting, resulting in a further limited claim.

Accordingly, it is best to recite all necessary structure positively in a claim to overcome the prior art. Should functional language be necessary, such language describing the function of the feature may immediately follow the recitation of the feature. However, be careful with this functional language, as it may be considered as structure, hence, further limiting the claim.

#### 12. Draft at least one claim set to the commercial product

Claims sets typically involve recitations to the general structures and the disclosed subject matter. However, if the disclosed subject matter is currently being manufactured or will be manufactured, claim sets should also be drafted specifically to this commercial apparatus. These claims sets will provide the patentee with coverage over all potential infringers, who typically copy commercially successful products or methods. Such claim sets may also serve to deter copying of these commercially successful products or methods, for fear of an infringement lawsuit.

#### 13. Use dependent claims wisely

Dependent claims should be used strategically in order to maintain the breadth of the independent claims. By using such a dependent claim in this manner, the doctrine of claim differentiation applies, and an independent claim will not be interpreted narrowly because the limitation is positively recited in the dependent claim. For example, if the independent claim recites a colored widget, a dependent claim, may recite the color as blue. As a result, the independent claim will not be limited to specific colors but will rather encompass all colors, with specific colors covered in the dependent claims.<sup>16</sup>

---

<sup>16</sup> The specification should include support for all possible colors, to be in accordance with Lizardtech, Inc. v. Earth Resource Mapping, Inc., 424 F.3d 1336 (Fed. Cir. 2005), rehearing en banc denied, 433 F.3d 1373 (Fed. Cir. 2006). The Court invalidated a broad independent claim because the specification taught only a

Dependent claims should also be used to recite important structures or methods disclosed in the specification that are also patentable. These further recitations are kept in dependent claims, for if in the independent claim, they would unduly narrow the independent claim, enabling it to be avoided.

14. Do not use Jepson claims unless the patent is clearly an improvement patent

Jepson claims already start with an admission of what is prior art. Specifically, they include a recitation of "old" subject matter, followed by transitional words, "the improvement comprising," followed by recitations of "new" subject matter. Despite the admission that the recitations before the transition are conventional, these elements are given weight and considered in combination with the "new" subject matter, indicated as the improvement.

While this seems to be good in theory, in practice most U.S. Patent Examiners typically search for the "new" subject matter and propose a combination with the "old" subject matter to meet the claim. While the "old" and "new" subject matter should be treated "as a whole" for examination, this is typically not the case.

For example, examiners often read improper motivation into the claim from the preamble. Sometimes this creates unnecessary and undesirable record in the prosecution history. Additionally, prosecution of Jepson claims is typically more difficult than prosecution of non-Jepson claims, as arguments may need to be presented over the "old" subject matter which you have admitted to be prior art. As stated above, arguments over your own admissions are difficult to overcome in the Patent Office and in other judicial and administrative forums.

Overall, it is probably best to list all of the claim elements in a standard, non-Jepson claim form so that the claim will be considered as a whole for examination. By doing so, you may avoid examiners overreaching when making obviousness rejections. The resultant prosecution may be shorter and less difficult, with less record created, that could harm the patent in litigation or administrative proceedings.

---

single way for performing the requisite portion of subject matter of the claim. A limitation to this single way was already existing in another narrower independent claim.

15. Do not assume that standard concluding statements will cover structure or methods not explicitly mentioned in the specification or alternates and permutations of the disclosed structure or methods

The written specification should define all structural elements or methods as well as all possible permutations. By listing all the possible permutations along with the base element itself the drafter can avoid having to rely on standard concluding paragraphs, commonly referred to as "boilerplate," to assert that such structure or methods were part of the disclosed subject matter. As courts and administrative bodies look to the specification and drawings to interpret the claims, components and structures need to be explicitly stated in the actual specification to avoid challenges that the applicant did not contemplate or possess the structure or method as part of the disclosed subject matter.

If alternates and permutations are known, they should be described explicitly in the specification. One way to list alternates and permutations in the specification is to do so in separate paragraphs after the component or method portion shown in the drawing figures has been fully described. Alternates should be described structurally, but also functionally, to cover any equivalents.

For example, the requisite structure is introduced as follows: "An arm is movable between a stop surface and a base plate, as shown in the drawings. . . ." Once the description of the arm is complete, alternates may be described, typically offset in a separate paragraph. For example, the alternate for the arm may be as follows: "Alternately, the arm may be any suitable member for moving between the stop surface and the base plate."

Additionally, listing alternate arrangements will normally help support broad generic limitations in the claims. For example, if citric acid is a component of a formulation, claimed only as "acid" alternates including citric acid and other acids should explicitly listed in the specification. Otherwise, the claim may be stricken for lack of support for only "acid," or the "acid" may be limited to only citric acid, in accordance with Lizardtech.<sup>17</sup>

---

<sup>17</sup> See footnote 16 above.

#### 16. File the patent application with formal drawings

Patent applications should be filed with formal drawings in order to minimize disputes over new matter, or unintended or unwanted interpretations of the specification or claims, from ambiguous drawings. This requires budgeting extra lead time to contact and work with the drafter early on in the application drafting process, including time to review and closely edit the drawings. The resultant patent application benefits from such advanced planning. Any extra costs associated with obtaining technically correct and precise, high quality formal drawings far outweigh the costs of having to litigate drawing ambiguities, and possible claim interpretations arising therefrom.

#### **Conclusion**

The suggestions provided are for clients to benefit from their patent applications over the long term - as the patent laws continue to evolve. A patent application drafted with these suggestions in mind has a strong chance of being a champion patent that will survive litigation and remain enforceable against future infringers and challengers. It is from such champion patents that the patentees can bounce along the patent road to glory, reaping the monetary and equitable awards that come with a valid patent respected by potential infringers and challengers.