United States patents are rights of exclusion. That is, U.S. patent law provides that the patentee has the right to exclude others from making, using, offering for sale, selling, or importing the patented invention in the United States. A patent generally includes a specification, claims, and drawings, in the event that drawings are necessary to understand the claimed invention. The claims of the patent follow the specification and define the legal scope of protection provided by the patent. The purpose of the specification is to assist those having ordinary skill in the art in understanding and using the claimed invention, and is used to assist in determining the scope of the patent claims.

It is a bedrock principal of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude. Phillips v. AWH Corp., 415 F.3d 1303, 1310 (Fed. Cir. 2005). While this article is not intended to be an exhaustive discussion on the law of patent claim construction, it should be noted that an the patent infringement analysis requires two separate steps. First, the asserted patent claims must be interpreted by the court as a matter of law to determine their meaning and scope. In the second step, the trier of fact (for example, a jury) determines whether the claims as thus construed read on the accused product. Southwall Technologies, Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed. Cir. 1995); Markman v. Westview Instruments Inc., 53 F.3d 967 (Fed. Cir. 1991) (en banc), aff’d 517 U.S. 967 (1996); Cybor Corp. v. FAS Technologies, Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998).

It is important that one be able to distinguish the various parts of a patent claims. A patent claim is normally divided into three sections: (1) the preamble, (2) the transition, and (3) the body. Bristol-Myers Squibb Co. v. Immunex Corp., 86 F.Supp.2d 447 (D. N.J. 2000). The different parts of a patent claim may be illustrated by considering a simple hypothetical claim:

“A building structure comprising four vertically extending side walls and a roof.”

In the above example, the phrase “A building structure” is the preamble, the word “comprising” is the claim transition, and the phrase “four vertically extending side walls and a roof” is the body of the claim. The transition of the claim is a word or phrase that links the preamble of the patent claim to the body. The three most commonly used transitions in patent drafting are the transitions “comprising,” “consisting essentially of,” and “consisting of.”

The transitional term “comprising” is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261 (Fed. Cir. 1986); Dow Chemical Corp. v. American Cyanamid Co., 615 F.Supp. 471, aff’d 816 F.2d 617 (Fed. Cir. 1987), cert. denied 484 U.S.649 (1987).

In the above hypothetical claim, a building structure having four vertically extending side walls and a roof would literally infringe the claim. Additionally, a building structure having four vertically extending side walls, a roof, and a door (or a window, or a door and window) would also literally infringe the hypothetical claim as the claim transition “comprising” is open-ended and does not exclude additional elements that are not recited in the claim.

By contrast to the transition “comprising,” the transitional phrase “consisting of” is closed. AFG Industries, Inc. v. Cardinal IG Company, Inc., 239 F.3d 1239 (Fed. Cir. 2001) (“...’closed’ transition phrases such as ‘consisting of’ are understood to exclude any elements, steps, or ingredients not specified in the claim”). A patent claim reciting the closed transition “consisting of” does not generally encompass elements or features that are not recited in the claim. The difference between a claim using the open-ended claim transition “comprising” and a claim using the closed claim transition “consisting of” can be illustrated by rewriting the above hypothetical claim to read as follows:

“A building structure consisting of four vertically extending side walls and a roof.”

The scope of the rewritten hypothetical claim, where the claim transition “comprising” has been replaced by the claim transition “consisting of,” is much different from the original hypothetical claim. Only a building structure that has precisely four vertically extending side walls and a roof would literally infringe the rewritten “consisting of” claim.

Building structures that include additional elements, such as doors, windows, plumbing fixtures, electrical fixtures, and the like would not literally infringe the “consisting of” claim as this claim transition excludes additional elements that are not recited in the claim.

While the transition “comprising” is open-ended and the transition “consisting of” is closed-ended, the transitional phrase “consisting essentially of” is partially open. A “consisting essentially of” claim occupies a middle ground between closed claims that are written in a ‘comprising’ format and fully open claims that are drafted in a ‘comprising’ format. PPG Industries v. Guardian Industries, 156 F.3d 1351, 1354 (Fed. Cir. 1998). The phrase “consisting essentially of” excludes ingredients that would materially affect the basic and novel characteristics of the claimed composition. Atlas Powder Co. v. E.I. du Pont de Nemours & Co., 750 F.2d 1569, 1574 (Fed. Cir. 1984). The determination of whether certain elements, features, or ingredients fall within or outside the scope of a particular claim using the transition “consisting of” must be determined on a case-by-case basis, drawing upon information from the patent itself, its corresponding prosecution history, the prior art, the state of the art, and the knowledge or those having ordinary skill in the art.

Although far less common in the United States, additional transitional words and phrases may be used in patent drafting, such as “containing,” “having,” or “including” to signify that a claim is open-ended. Crystal Semiconductor Corp. v. Tritech Microelectronics Intl., Inc., 246 F.3d 1336, 1348 (Fed. Cir. 2001) (“The transition ‘having’ can also make a claim open.”); Regents of the
Univ. of Cal. v. Eli Lilly & Co., 119 F.3d 1559, 1573 (Fed. Cir. 1997) (“The word ‘having’ still permitted the inclusion of other moieties”); Mobil Oil Corp. v. Amoco Chemicals Corp., 779 F.Supp. 1429, 1450 (D. Del. 1991) aff’d 980 F.2d 742 (Fed. Cir. 1992) (“When a claim recites the transitional term ‘having,’ it generally indicates that the claim is open.”)

Having a fundamental understanding of patent claim structure and the scope conferred by the use of the various patent claim transitions can assist those in your business in conducting patent searches and competitive technology analysis, and can further facilitate a more constructive dialogue between you and your patent attorney.

**Patent Reform Update**

As you may recall from my article in the Fall 2011 publication of the SVC Bulletin, President Obama signed the America Invents Act (AIA) into law in September, 2011. A number of the provisions of the AIA went into effect on September 16, 2011. The USPTO has recently published proposed rules to implement provisions of the AIA dealing with the inventor’s oath or declaration, preissuance submission of prior art by third parties, and discipline proceedings. These proposed rules may viewed at the www.uspto.gov, and the public is invited to submit comments to the USPTO by March 5 and 6, 2012.

Mr. Sidoti can be reached at (440) 808-0011 or sidoti@patentandtm.com.

Disclaimer: Nothing contained in this article constitutes individualized legal advice. The views expressed in this article are those of the author and not of Curatolo Sidoti Co., LPA, or any of its past, present or future client.