

Interpreting Utility Patent Claims

by David Rogers

Utility patents constitute about 90% of the patents in the United States. Design patents and plant patents, which are not discussed here, comprise the other 10%. Utility patents protect the functional aspects of a machine, device, method, or composition of matter, and are usually considered to be the most valuable type of patent.

Interpreting utility patent claims begins with reviewing what is called *intrinsic* evidence, which consists of: (1) the language of the patent's claims; (2) the text of the remainder of the patent, and any drawing figures; and (3) the prosecution history of the patent, which is the record of communications between the inventor (or the attorney representing the inventor) and the United States Patent and Trademark Office ("USPTO") while obtaining the patent. If the intrinsic evidence is clear, the interpretation is complete.

If there is any ambiguity after reviewing the intrinsic evidence, then review what is called *extrinsic* evidence, which includes: (1) technical dictionaries and treatises; (2) general dictionaries; and (3) expert testimony. Other sources of extrinsic evidence include statements made by the inventor in prosecuting related patent applications, and definitions in other patents within the invention's technology field.

An Example of Interpreting a Claim Set

As mentioned above, to interpret a utility patent begin by reading the claims, which define the scope of what a utility patent *protects*, rather than what it *describes*. The claims are numbered sentences at the end of a utility patent and it is one or more of the claims that ultimately are or are not infringed. There are two basic types of claims: independent and dependent. An independent claim begins with either the indefinite article "a" or "an." A dependent claim begins with the definite article "the" and references (i.e., depends from) an independent claim. Following is a basic claim set including two independent claims (claim 1 and claim 7) and six dependent claims (claims 2-6 and 8). Each dependent claim *depends from, i.e., is based upon and directly or indirectly references*, an independent claim:

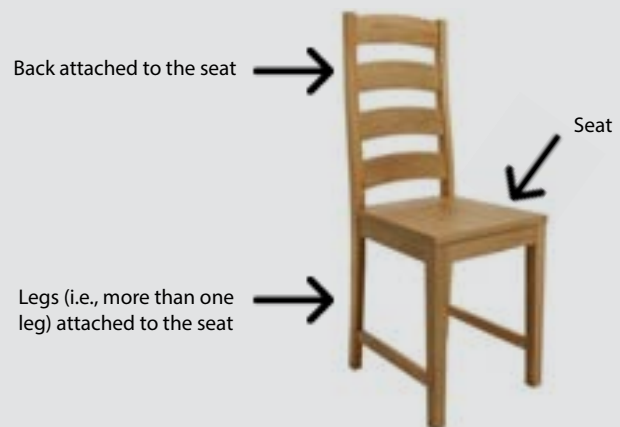
1. A chair with a seat, legs attached to the seat, and a back attached to the seat.
2. The chair of claim 1 wherein there are four legs.
3. The chair of claim 2 wherein the legs are parallel to one another.

4. The chair of claim 1 wherein the seat has a top surface and a cushion on the top surface.
5. The chair of claim 2 wherein the back includes spaced-apart slats.
6. The chair of claim 5 wherein the chair further includes a stabilizing structure between at least some of the legs.
7. A chair comprising a first structure that supports a person while seated, a second structure that provides back support, and a third structure that maintains the first structure above a surface upon which the second structure is positioned.
8. The chair of claim 6 wherein the first structure is a seat and the second structure is one or more legs extending from the first structure.

Claim 1 is an independent claim. Claims 2-6 depend either directly or indirectly from claim 1. Claim 7 is also an independent claim and claim 8 depends from claim 7. A chair according to each of claims 1-8 is illustrated below:

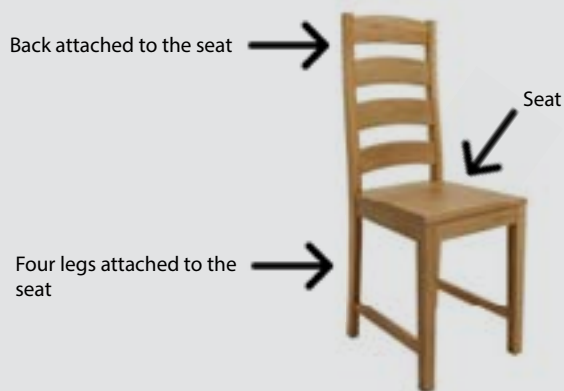
Independent Claim 1 and Dependent Claims 2-6

Claim 1: A chair with a seat, legs attached to the seat, and a back attached to the seat. For this example, there is no limitation on the structure of the seat, legs, or back. The only limitations are that the chair must include: a seat, legs (so more than one leg), and a back. The legs and back must also each be attached to the seat.



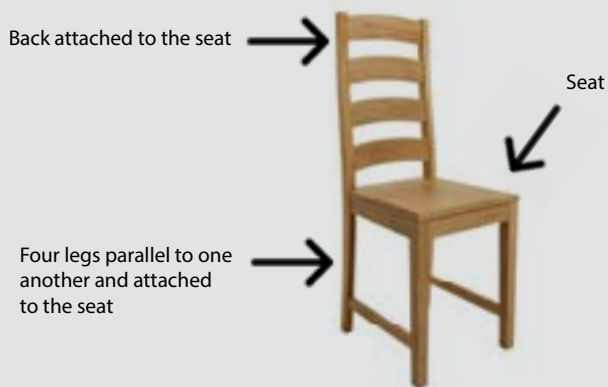
Claim 2: The chair of claim 1 wherein there are four legs.

Claim 2 includes all of the structural limitations of claim 1, plus adds the limitation that the chair must have four legs – not three, five, or any other number. In contrast, claims 1 and 4 are not limited to any number of legs, as long as there is more than one, so a chair with two, three, four, five, or six legs, or any number other than one, could infringe claims 1 and 4.



Claim 3: The chair of claim 2 wherein the legs are parallel to one another.

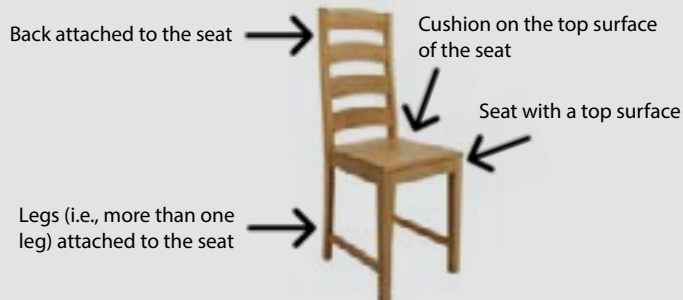
Claim 3 depends from claim 2, which depends from claim 1. Therefore, claim 3 includes all of the structural limitations of claim 1 and claim 2, plus adds the limitation that the legs are parallel to one another. Claims 1, 2, 4 and 5 do not include the limitation that the legs must be parallel, and a chair with legs that are not parallel could infringe those claims.



Claim 4: The chair of claim 1 wherein the seat has a top surface and a cushion on the top surface.

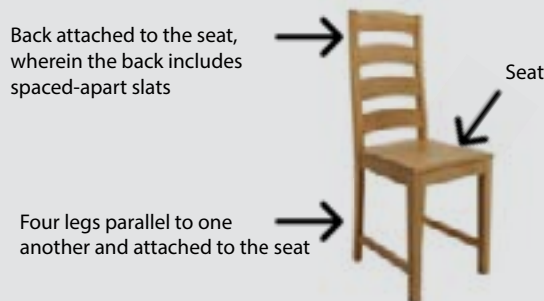
Claim 4 depends directly from claim 1, so it includes all of the structural limitations of claim 1 (but not of claims 2 or 3) and further adds the limitation of a cushion on a top surface of the seat. To infringe claim 4 a chair must include this cushion. Claims

1-3, and 5 do not include this limitation, and a chair without a cushion on the top surface of the seat could infringe those.



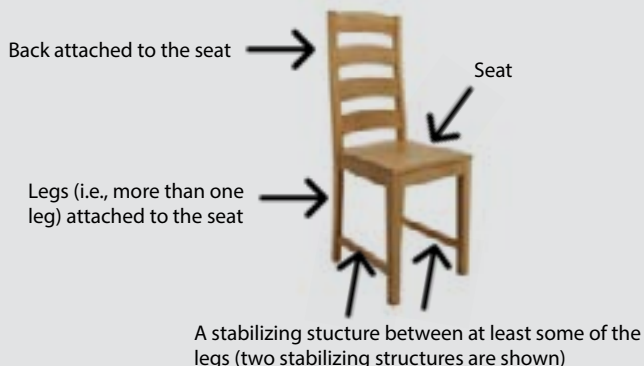
Claim 5: The chair of claim 3 wherein the back includes spaced-apart slats.

Claim 5 depends from claim 3, so it includes all of the structural limitations of claim 3, claim 2 (from which claim 3 depends), and claim 1 (from which claim 2 depends). Claim 5 adds the structural limitation of the back including spaced-apart slats. To infringe claim 5, a chair must include this limitation. Claims 1-4 do not include this limitation, and a chair without spaced-apart slats on the back could infringe those.



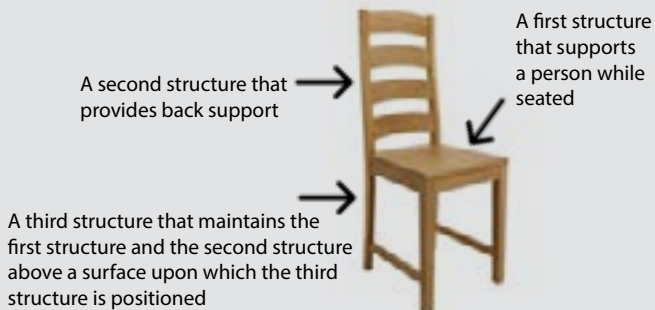
Claim 6: The chair of claim 1 wherein the chair further includes a stabilizing structure between at least some of the legs.

Claim 6 depends directly from claim 1, so it includes all of the structural limitations of claim 1, as well as the additional structural limitation that there be a stabilizing structure between at least some of the legs.

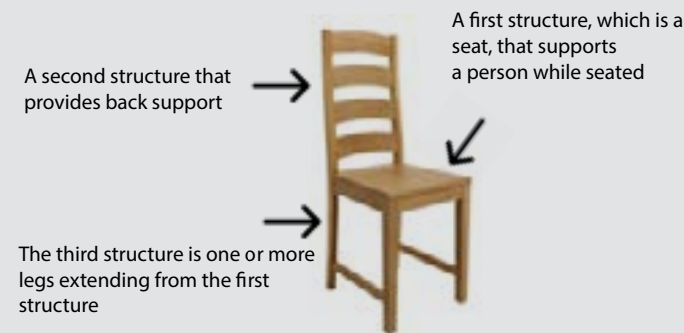


Independent Claim 7 and Dependent Claim 8

Claim 7: A chair comprising a first structure that supports a person while seated, a second structure that provides back support, and a third structure that maintains the first structure and the second structure above a surface upon which the third structure is positioned.



Claim 8: The chair of claim 7 wherein the first structure is a seat and the third structure is one or more legs extending from the first structure. Claim 8 depends from claim 7, so it includes all of the structural limitations of claim 7, and adds the limitations that the first structure is a seat, and the third structure is one or more legs extending from the first structure (i.e., from the seat).



What Is the Purpose of Dependent Claims 2-6 and 8?

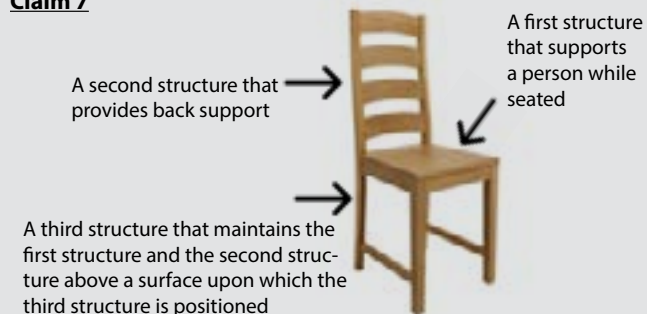
Each of claims 2-6 add additional limitations to claim 1. So, independent claim 1 has the broadest scope and the dependent claims 2-6 and have a narrower scope than claim 1. Likewise, claim 8 adds additional limitations to, and is narrower than, claim 7. So, what is the purpose of the dependent claims if they narrow the scope of the claimed invention? Dependent claims serve two primary purposes. First, they provide a fallback position in case the broader independent claim from which they depend is found to be invalid, either during prosecution, litigation, or a Patent and Trademark Appellate Board (PTAB) proceeding. In that case, one or more of the dependent claims may still be found to be valid and infringed by a competitor's product or method.

Second, a legal doctrine called claim differentiation creates a presumption that a limitation expressly recited in one claim, but not in others, is not implicitly included in the other claims. As one example, using claims 1-6, only claim 4 states that the top surface of the seat has a cushion on it. That creates a legal presumption that the other claims do not implicitly include the limitation of a cushion, and a competitor's chair would not require a cushion to infringe claims 1-3, or 5-6.

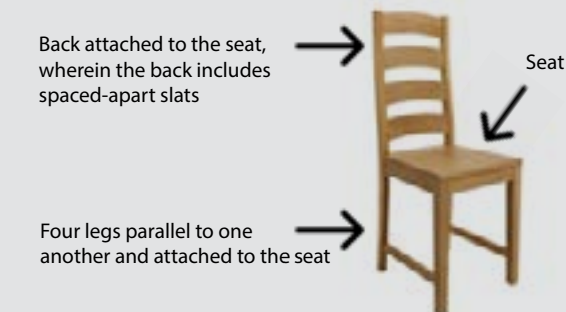
The Less Detail In the Claims, the Broader the Scope, and the More Valuable the Patent

Typically, the less detail in a claim, the broader its scope, and the more likely a competitor will infringe it. The more detail in a claim, the narrower its scope and the less likely a competitor will infringe it. Thus, the broader the scope, the more likely competitors will infringe the patent if they try to develop a competitive product, and the more valuable the patent. Compare the broadest claim (claim 7) of claims 1-8, to one of the narrowest claims (claim 5):

Claim 7



Claim 5



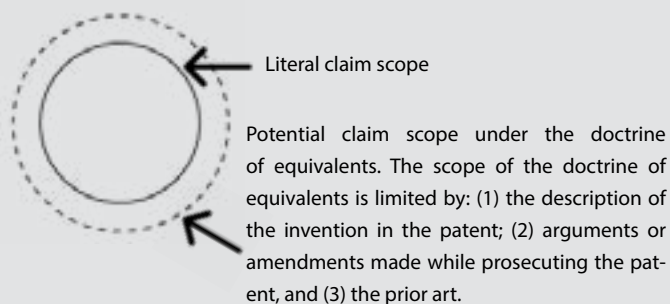
To infringe claim 5, a competitor's chair must include a back attached to the seat with spaced-apart slats, a seat, and four legs parallel to one another and attached to the seat. A competitor's chair need not have any of those structures to infringe claim 7.

The Doctrine of Equivalents

Patent claims can have a scope beyond their literal scope. This added scope is conferred by a legal rule called the doctrine of equivalents.

The doctrine of equivalents is based on principles of fairness and prevents others from stealing the benefit of an invention by making an insubstantial change to a product or method to keep it from falling within the literal scope of a patent claim. The doctrine is applied to the patent claims on a limitation-by-limitation basis and, among the tests used to determine whether a change is insubstantial, are whether at the time of infringement: (a) a person skilled in the technology field to which the invention pertains would recognize the different structure used by the infringer as being interchangeable with the structure recited in the claim; or (b) the different structure used by the infringer performs substantially the same function, in substantially the same way, to achieve substantially the same result, as the structure recited in the claim.

The diagram below depicts the scope that may be available under the doctrine of equivalents. The scope of a claim under the doctrine of equivalents is limited by one or more of: (1) the description of the invention in the patent; (2) arguments or amendments made while prosecuting the patent (called prosecution history estoppel); and (3) the prior art.



So, a claim limitation may or may not have any additional scope based on the doctrine of equivalents.

Returning to our chair example, claim 1 recites: **A chair with a seat, legs attached to the seat, and a back attached to the seat.**

If a competitor’s chair does not have legs and a back attached to the seat, but instead has legs and a back attached to a frame to which the seat is attached, there is no literal infringement. But, could such a configuration infringe claim 1 under the doctrine of equivalents? Possibly.

Again, the key inquiry is whether someone skilled in the art would consider the modification in the potentially infringing product to be an insubstantial change to the claimed structural limitation.

Determining the scope of the doctrine of equivalents is a complex task that should be performed by a seasoned attorney, sometimes with input by a technical expert.

Conclusion

Interpreting utility patent claims is performed by: (1) reading the claims, giving each term in the claim its ordinary meaning, to the extent it has one; (2) reading the remainder of the patent to determine if a particular meaning was imported to any of the claim terms; (3) reviewing the prosecution history of the patent to determine if the inventor amended the claims or made remarks that import meaning to any of the claim terms; and (4) if, after completing steps (1) - (3), the meaning of any claim term is still ambiguous, consulting information such as dictionaries, technical treatises, other patents, and experts in the field to which the invention pertains.



David E. Rogers
602.382.6225
drogers@swlaw.com

David Rogers practices patent, trademark, trade secret and unfair competition law, including litigation, patent and trademark preparation and prosecution; trademark oppositions, trademark cancellations and domain name disputes; and preparing manufacturing, consulting and technology contracts.