

# Advanced Intellectual Property Management TCMG 512

Lesson 4  
Claim Construction

# Claims

- A patent claim provides the basis for determining what has been protected
- Specification provides the support for understanding the meaning of the claims
- Unless it is claimed, you have no patent protection even though it may have been disclosed in the specification
- Limitations are found in the claims

# Types of Patent Claims

- Means Plus Function Claims
  - Doctrine of Equivalents
- Method Claims
- Apparatus Claims
- Genus/Species
- Jepson Claims
- Independent/Dependent Claims

# Means Plus Function

- Starts with “means for” , but not required
- Always followed by reciting the step or operation that is performed
- Means = structure
- Function = all you need to know which is happening
- Means clauses are typically used in broader claims
- Elements more narrowly defined in later dependent claims

# Means Plus Function

- A hammer comprising:
  - a head;
  - a handle; and
  - means for attaching said head to said handle.
- A jet driving device so constructed and located on the rotor as to drive the rotor.

*Both are means plus function*

# Means Plus Function

- “Resilient means for urging said carriage against said stop”
  - Later claim – “where said means is a spring”
- “Means for moving said fingers into contact with said carriage”
  - Later claim – “where said means is a lever”

# Method Claims

- Heating, Drying, Cooling, .....
- Typically end in “ing”
- Defines the “steps” to accomplish the result
- Order of steps need not be strictly followed
  - Unless “thereafter”
  - A method for drying clothes comprising loading, tumbling , and heating.
  - A method for drying clothes comprising loading, thereafter tumbling, and thereafter while tumbling heating.

# Product by Process Claim

- Defines a product in terms of how it is made
- Describes the method used to manufacture
- Used for
  - Manufacturing claims
  - Composition of matter claims
- “a cake prepared by the process consisting of (1) blending ingredients into a batter, (2) mixing said batter, and (3) baking said batter at 300 degrees for ten minutes”

# Markush Group

- A claim where a possible group of elements is included, any of which will make the invention work
- “The cake as defined in claim 1, where said frosting is selected from the group consisting of milk, sugar, and whipped cream”


# Apparatus Claims

- Used for machines, devices, electronic circuits, computer devices, hydraulic devices.
- Anything where parts “cooperate” to accomplish a result
- Select a preamble which describes overall function
- Be careful not include unnecessary limitations in preamble.

# Apparatus Claim Elements

- Identify the main elements
- Name (list) them in the body of claim
- Do this before you tell how they “cooperate”
- If an element is listed, it must cooperate with at least one other element.
- Specifications and drawings provide the “support” for the meaning of each element
- Use the same name as found in specification
- Elements may rely upon ordinary meaning

# Apparatus Claim Elements

- Plurality = more than one
- Do not include the same element twice with different names
- Definiteness, no alternatives
  -  • “a screw or a nail”
- Include necessary descriptors for the important features to the claim of the element
  - “an axle having threaded ends”

# Apparatus Claim Elements

- Order the elements according to arrangement of the elements
  - “an axle.....a left wheel.....a right wheel.....tires”
- Connect the elements together to show how they interact
  - “said tires mounted on said left and said right wheel”

# Apparatus Claim

- A standing bucket which comprises:
  - a container;
  - a base;
  - a plurality of parallel legs;
  - each of said legs connected pivotally at one end to said container;
  - each of said legs connected at the opposite end to said base to support said container

# Apparatus Claim

- Apparatus for shaking articles which comprises:
  - a container for the articles;
  - a base;
  - a plurality of parallel legs;
  - each of said legs connected pivotally at one end to said container;
  - each of said legs connected at the opposite end to said base to support said container to support said container for oscillating; and
  - Means for oscillating said container on said legs to shake said articles

# Independent/Dependent Claims

- Independent Claim
  - Stands on its own
  - Does not refer to another claim
- Dependent Claim
  - Relates back to a prior claim
  - The prior claim can be an independent claim or a dependent claim
  - Utilizes the “elements” in the referenced claim

# Multiple Dependent Claim

- A dependent claim which refers back
  - In the alternative
  - To a prior dependent or independent claim
- “A device according to claim 3, 4, or 5 comprising .....
- Avoid the use of these types of claims

# Claims in Software Patent

- Cannot patent just a mathematical expression
- However a mathematical expression can recited in the claim
- The mathematical expression must define the structural relationship of the elements or refine/limit the process steps
- Where the software algorithm is linked to a machine or process claim can be valid

# Genus/Species and Jepson Claims

- Genus/Species
  - Airplane (**genus**) = Jet (**species**) or Prop (**species**)
- Jepson Claim
  - A method or product claim
  - One or more claim limitations are the novelty
  - “A system for storing information in a computer wherein the improvement comprises rotating magnetic memory”

# Claim Deficiencies

*“What not to do”*

- Do not use inconsistent terminology
- Lack of antecedent basis
  - “the rear pair of wheels” is improper unless the rear wheels were previously introduced in the claim
  - The element must be introduced in the specification and be consistent with its use in the claim
- Indefiniteness
  - particularly point out and distinct claim the invention
  - Avoid the terms: large, small, big, tall, short, high, fast, quick, long

# Indefiniteness

- Comparative Expressions OK
  - Larger than, smaller than, faster than
- Unclear reference to antecedent element
  - “front wheels” and “rear wheels” cannot then refer to either by using “said wheels”
  - “ a handle connected to the gear, which is supported on the axis to pivot about it” .....ambiguous
  - “which” and “it” ....does it refer to handle, gear or axis
- Corrected claim
  - “ a handle connected to the gear, with the handle supported on the axis to pivot about the gear”

# Indefiniteness

- Cannot use alternative expressions
  - “glass or plastics” ..... “a weight or spring for urging the carriage to stop”
  - Instead use a generic expression that describes the qualities
  - Use individual dependent claims to name the specific elements one at a time in combination with the remainder of the claim
  - “the container of claim 1, where said container is constructed from glass”
  - “the container of claim 1, where said container is constructed from plastic”

# Other Claim Deficiencies

- Overly Broad
  - Cannot encompass every possible device which is capable of performing the recited function
  - “a woolen cloth having a tendency to wear rough rather than smooth”
  - Instead describe the physical structure of the cloth
  - “a woolen cloth containing silk threads having a tendency to wear rough rather than smooth”

# Other Claim Deficiencies

- Surplusage
  - Claims must be limited to technical description
  - Extra words which “praise the merits” of the invention cannot be included
  - “a combination steam and dry iron comprising elements A, B and C *thus ironing clothes more effectively and faster*”
  - “A new and novel.....” these are excess words that do not add to the understanding of the invention

# Other Claim Deficiencies

- Avoid using trademarks
  - use common name
  - Do not use “sharpee marker”
  - Instead use “permanent marking pen”
- Incomplete claims
  - Cannot omit necessary elements
  - However there is no requirement to add elements just because it makes the claim easier to understand or for the convenience of the examiner

# Other Claim Deficiencies

- Negative Limitations
  - “a space that is unobstructed”
  - Allowed negatives : “non-alcoholic”, “colorless” , “nonmagnetic”
  - Generally try to avoid these unless there is no other way to describe the element
- Cannot be Inoperable
  - An inoperable embodiment renders the claim invalid

# Drafting Claims Summary

- All elements must be linked
  - Draw boxes each containing an element
  - Connect the boxes the way the elements are related
  - An unconnected box results in an indefinite claim
  - Cannot simply list elements must show how they are interacting with each other
- Elements define the structure
- Limitations restrict the structure
  - A rod (element) having two tapered ends (limitation)

# Rules for Claim Construction

- Words in a Claim
  - Given their ordinary meaning unless inventor used them differently
  - If not defined in a special way then given their plain ordinary meaning
  - If the words do not appear in the specification they are given their ordinary plain meaning
  - Must be used with the same meaning in the claims as found in the specification

# Rules for Claim Construction

- Claims are given their broadest reasonable interpretation during prosecution
- Disclosed but unclaimed subject matter is dedicated to the public
- Claims are read view of the specification
  - Specification is used to determine the boundaries of the patent.
  - If meaning of claim is in doubt , we look to the specification for clarification
  - We next look to the prosecution history

# Specification Impacts Patent Scope

- Specification acts as a dictionary for claim construction purposes
- Patent is limited to what is described in the specification and what is stated in the claims
- The original claims filed in the application are considered part of the specification
- Resolves ambiguities in the claim language
- A unique or special meaning for a word must be clearly shown in the specification

# Unpatentable

- A new use for a known process for an analogous purpose is not patentable even if the new use had not been contemplated before
- Simply stating the effect of a machine is not patentable
- Alternate expressions can make a claim indefinite if it covers two different elements which are not basically equivalent
  - Brake or locking device

# Summary of Patent Application

- Title
- Background of Invention
- Description of Related Art
- Summary of Invention
- Description of Drawings
- Detailed Description of how invention works
- Claims
- Abstract