

Guidebook of IP/Technology Transfer

Track 1

Entry-level Tech Transfer Professional

Topic 1.5.3

**Understanding “Inventiveness”
(aka “non-obviousness”)**

**Its Importance to Scope and Quality of Patentability,
& the Value Proposition**

Key Points

- What role does IP play in new technology development?
- What is “inventiveness”? Why is it so essential?
- What is “patentability scope analysis” and how is it related to inventiveness?
- The importance of “inventiveness”
- The “Property Control Position” (“PCP”)
- Patentability scope analysis and the PCP
- How to do a patentability scope analysis
- The step-wise process of defining the PCP
- The PCP: other IP & bioproperty

What role does IP play in new technology development?

- IP is a property right that can be sold, traded, licensed, etc.
- It transforms inventions into monetizable assets
- It provides the owner control. Control to:
 - Direct usage and a commercialization strategy
 - Incentivize and justify investment
 - Establish and structure partnerships
 - Capture value
 - Create effective contractual and other business arrangements
 - Manage transactions

What is Inventiveness?

Why is it so essential?

Inventive = Unique features

....that provide performance
characteristics

These unique performance characteristics
confer certain advantages/superior
attributes

What is Inventiveness?

Why is it so essential?

Inventive = Unique features

- How is “uniqueness” determined?
 - by comparing the inventive features of an invention with the “prior art”
- What is the “prior art”?
 - ALL patent and any other publicly-available “publication” that is similar to the invention

Inventiveness is Critical for two Basic Reasons

- Inventiveness is a requirement for patentability and, even more importantly....
- It underlies an invention's market relevance and Value Proposition

Inventiveness is the basis of patentability

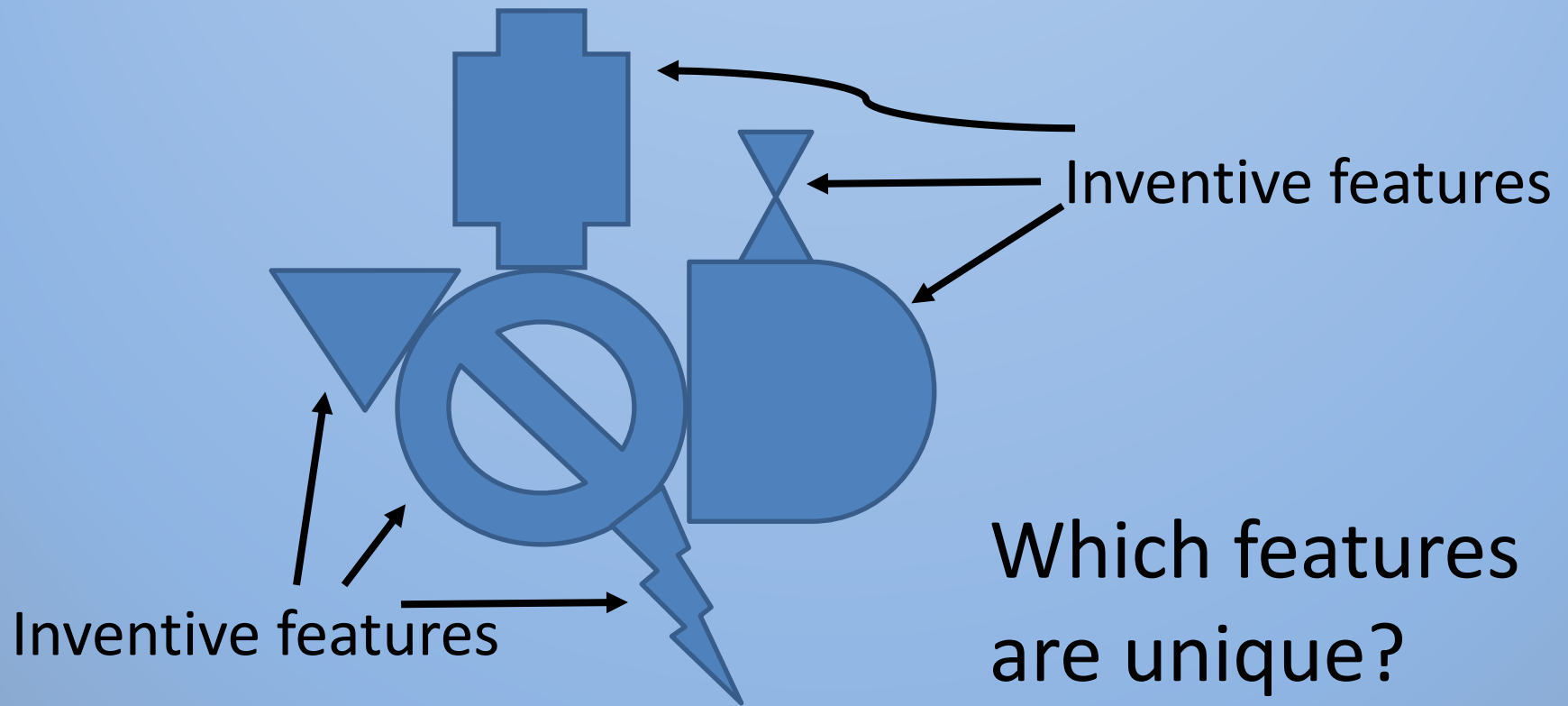
- Inventiveness has “boundaries”
- Inventiveness boundaries depend on, and are configured by the prior art
- The prior art shapes the inventiveness boundary of an invention
- This boundary of inventiveness eventually becomes the patent claim scope

The Boundary of Inventiveness, is shaped by the prior art,

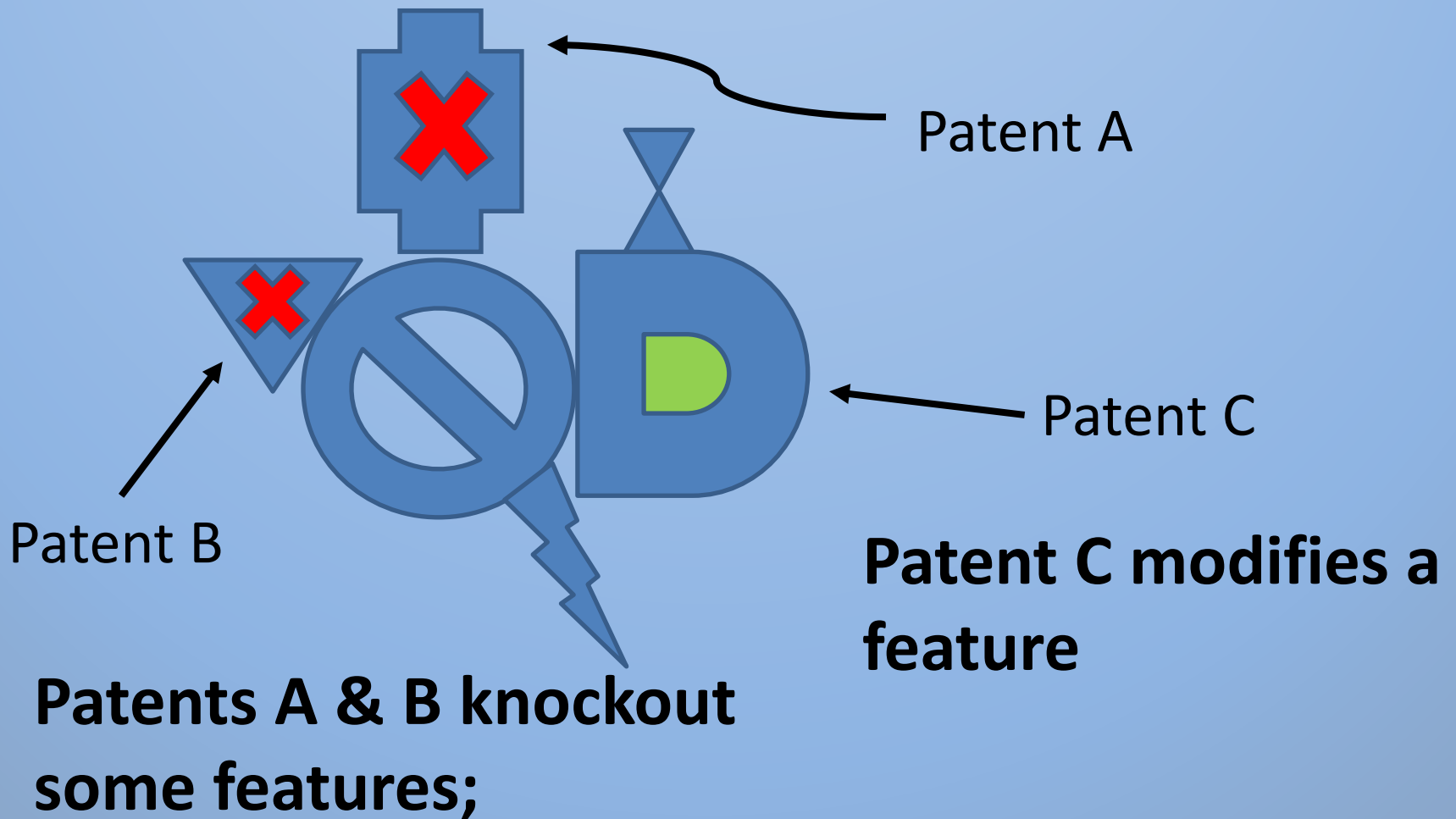
- Comparing the apparent inventive features of an invention with the prior art....
- shapes the inventiveness boundary of the invention.....
- by limiting, eliminating, and uncovering those features of an invention that are inventive

Remember: Inventive = unique

& superior/has advantages



**The Invention as originally
invented and described**



**The Invention as originally
invented and described**



Of the unique features,

Which don't confer some advantage
or superiority over existing?

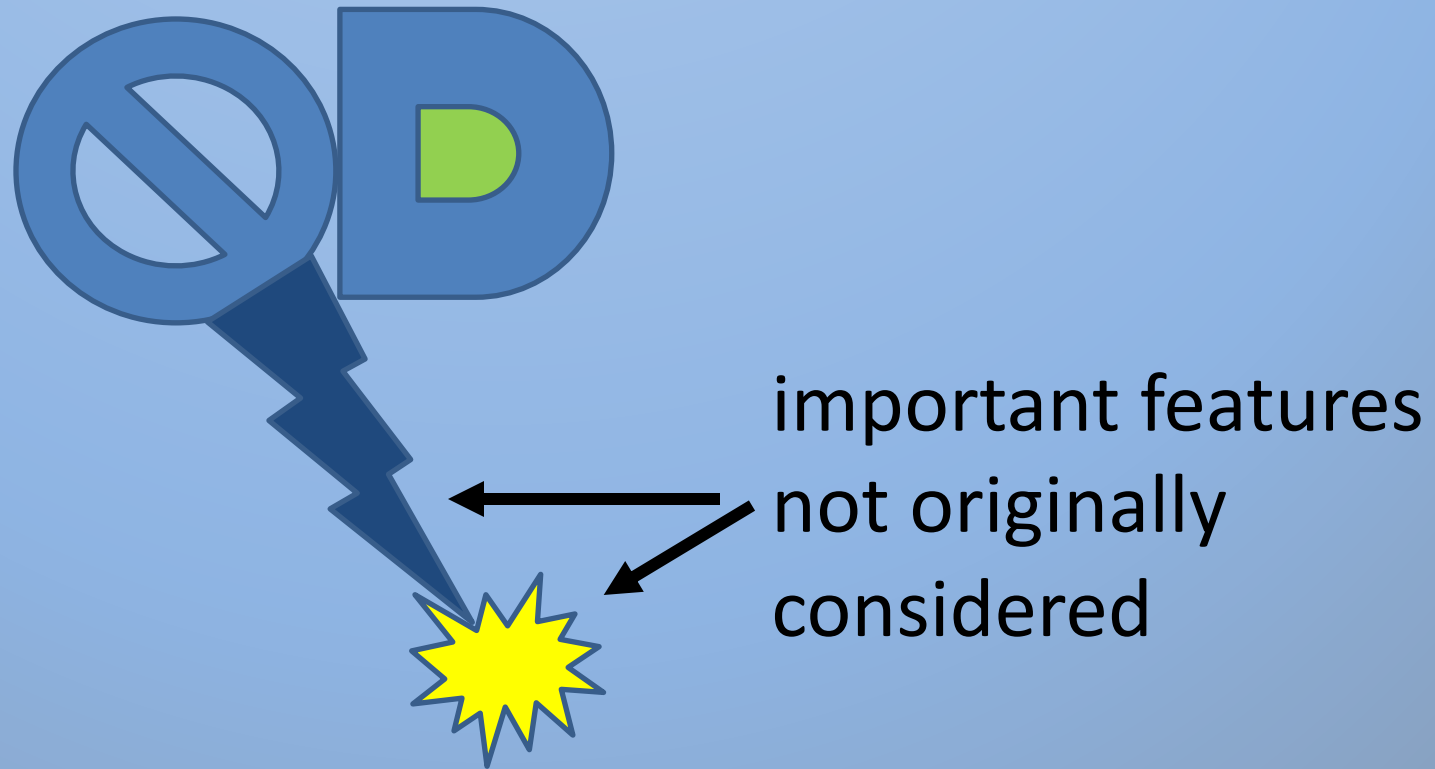
These features are inventive
(unique with advantages)



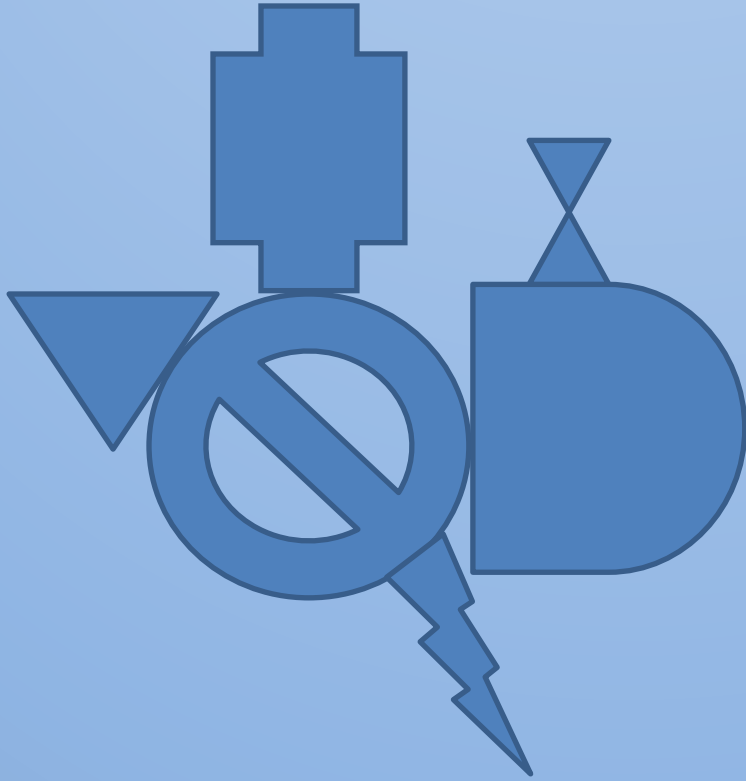
However....

... in analyzing inventiveness of ALL features
of the invention, we discover some
important features not originally considered

These features are inventive
(unique with advantages)



**The Invention after patentability
scope/inventiveness analysis**



**The Invention as originally
invented and described**



**The Invention after patentability
scope/inventiveness analysis**

The Boundary of Inventiveness, established by the prior art, develops into the scope of patentability

- by limiting and eliminating those features of an invention that the prior art renders not-inventive.....
- While, at the same time.... expanding/uncovering those features of an invention that are inventive because they're not in the prior art.
- The Boundary of Inventiveness is circumscribed...
-which is the foundation of the scope of claims

What is “patentability scope analysis”? and why is it so important?

Patentability of an invention requires:

Novelty

Utility

Inventiveness

(and a few other, minor criteria)

Patentability analysis is a pre-requisite to obtaining a patent .. with all the benefits that come with it

But, it is also essential for defining an invention
and its advantages/superiority over existing

Defining an invention.....

exactly what it is, how it works

why it is unique

how it is superior

Is the single most important step in the
process of commercializing a new
technology

Unique

and

Superior

= “Inventive”

The Importance of Inventiveness

- Inventiveness is the cornerstone of patentability
and.....
- essential to commercializing new technology
- Inventiveness = unique + superiority/advantages
Unique (compared to what?)
Superiority/advantages of the unique features
- Defining Inventiveness of a new technology
carves out the scope of patentability,
which produces market relevance,
and establishes the value proposition

Inventiveness, Patents, and the Property Control Position

- Inventiveness is the foundation of a patent on an invention
- A patent is one of several types of intellectual properties that can protect an invention

(IP is “intangible property”, examples include stock certificates, savings accounts, life insurance policies, partnership contracts, currency etc.)
- Biological material is “tangible” personal property
- Inventions typically covered by a “suite” of property types

The “Property Control Position”?

- The combination of different types of intellectual property and biological property that embodies an invention
- Typically a combination of :
 - patent
 - trade secret
 - copyright
 - trademark
 - industrial design
 - bioproperty

Patentability Scope Analysis:

Understanding Inventiveness

The Approach:

- Understanding/describing your invention precisely
- Finding the closest (most similar) “prior art”
- Detailed comparison of the prior art and the invention
- Inventiveness evolves through this comparison
- The prior art configures the inventiveness of the invention

Patentability Scope Analysis:

Understanding Inventiveness

The prior art configures the inventiveness
of an invention

Patentability scope analysis and the PCP

Understanding the differences between the prior art
and an invention configures inventiveness of
an invention
and its potential patentability

Procedure for a patentability scope analysis

1. Understand & define the invention precisely.
2. Conduct keyword-based, prior art search of patent databases & technical literature.
3. Locate the closest (most similar) patents/articles
4. Carefully compare the independent claims of the closest patents to your invention
5. Determine initial scope of patentability (if any)
6. Reconsider the invention and ALL its aspects after analyzing the prior art
7. Refine understanding and definition of the invention and scope of patentability

Patentability Analysis & the Property Control Position

- Not all inventions are patentable; there are other forms of IP & bioproperty
- But, an initial prior art search & patentability analysis is the best way to begin to define an invention
- Defining an invention is essential to establish the Property Control Position (PCP) and...
.... market relevance
- The PCP is the basis for commercialization and value capture

Patentability scope analysis and the Value Proposition

- Inventiveness = unique features; those unique features confer some advantage or superior performance.
- Inventiveness produces patentability scope
AND
some competitive advantage(s)
- The competitive advantage(s) establish the basis for a Unique Value Proposition (UVP)

Patentability scope analysis and the Value Proposition

- The UVP = Unique Benefits (compared to existing products/solutions)
 - Costs of the Inventive features
- Therefore:

Inventiveness interconnected to PCP and the UVP

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Thank you