

Guidebook of IP/Technology Transfer

Track 1

Entry-level Tech Transfer Professional

Topic 1.4.5

Prior Art, Inventiveness, & Market Relevance

It is essential that Inventors understand these factors:

- IP (primarily patents) are key to the future development and dissemination of their invention
- The “inventiveness” of the invention is key to patentability
AND
to market relevance
- Market relevance is key to technology transfer to a commercialization partner
- Inventors play the essential role in the understanding of the scope of patentability of their invention

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 solutions

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 an invention

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

Patentability Scope Analysis:

Understanding Inventiveness

The Approach:

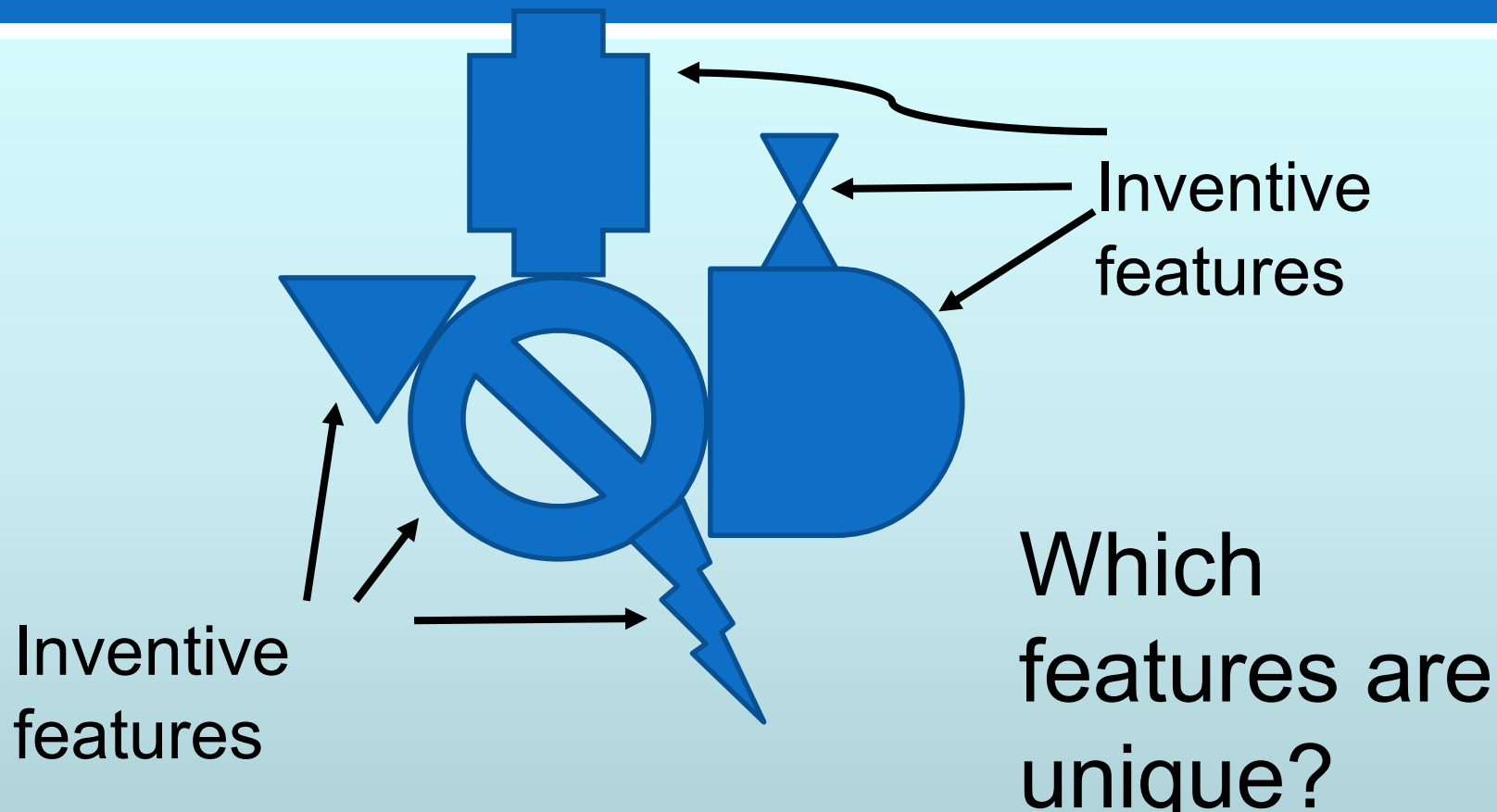
- Understanding/describing the invention precisely
- Finding the closest (most similar) “prior art”
- Detailed comparison of the prior art vs. the invention
- Inventiveness evolves through this comparison
- The prior art configures the inventiveness of the invention

Patentability Scope Analysis:

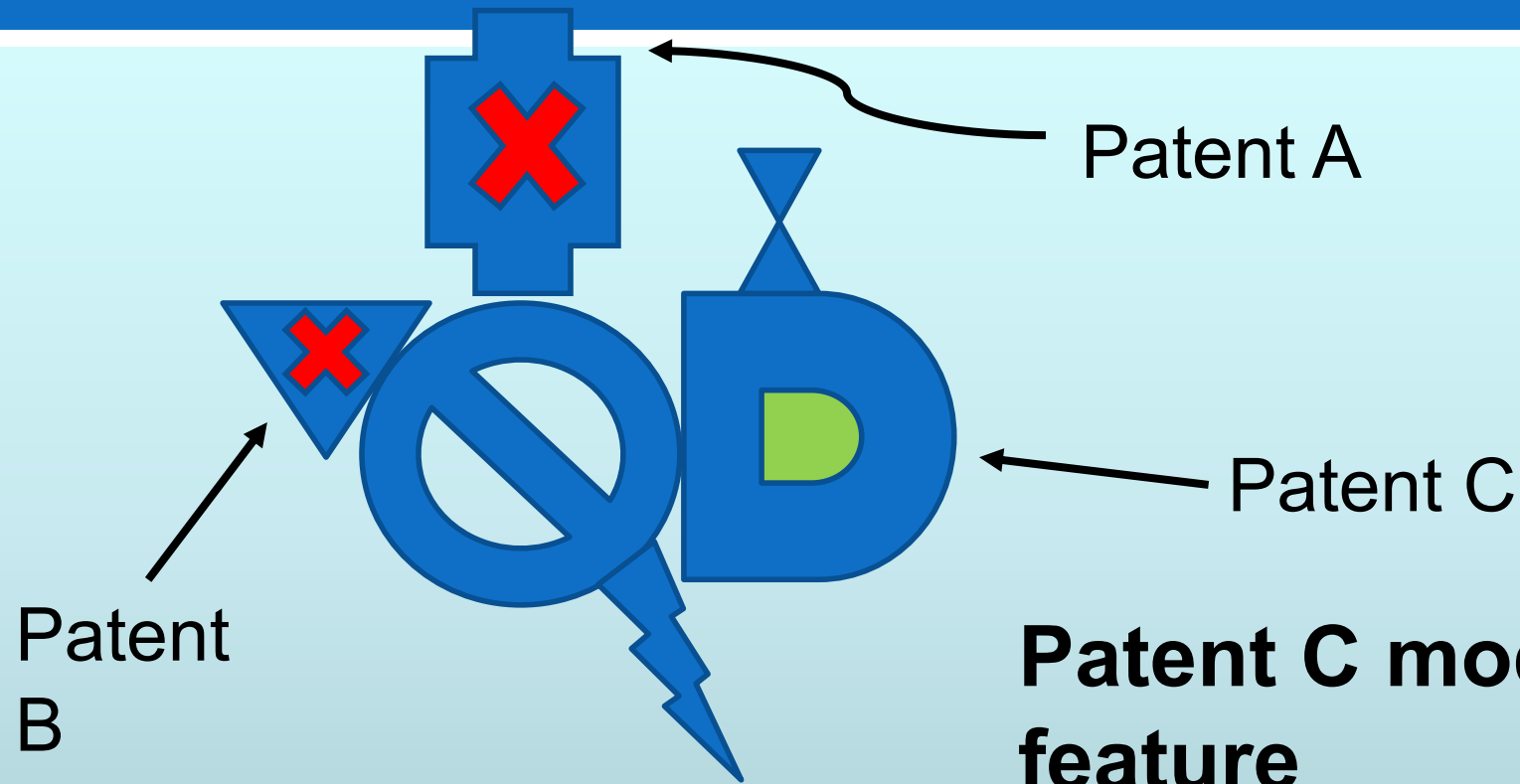
Understanding Inventiveness

This is a critical point:

The prior art configures inventiveness
of an invention



**The Invention as originally
invented and described**



Patent
B

Patent A

Patent C

**Patent C modifies a
feature**

**Patents A & B knockout
some features;**

**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..

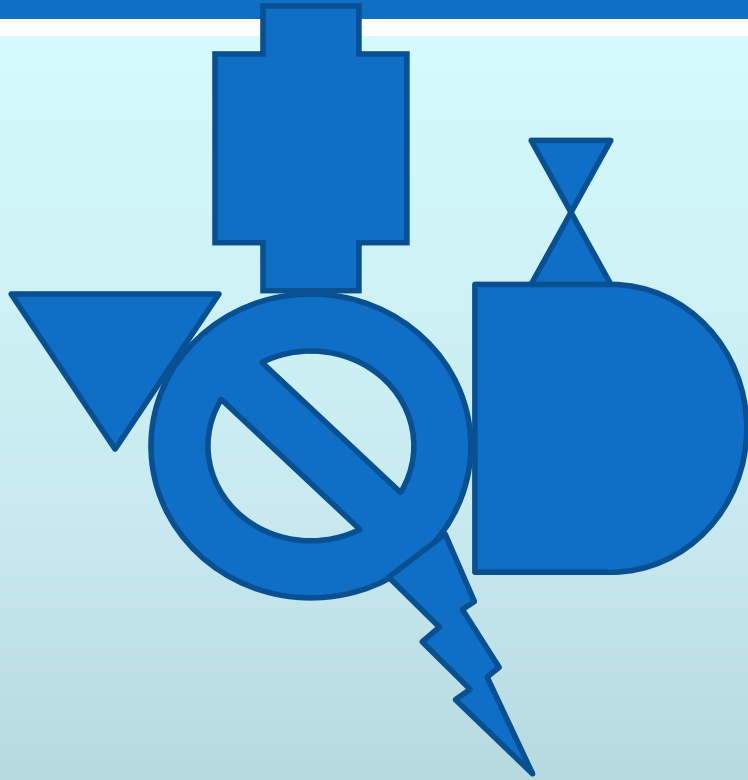
....in analyzing inventiveness of ALL
features of the invention, we discover
some important features not originally
considered

These features are
inventive
(unique with advantages)



important features
not originally
considered

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



**The Invention as originally
invented and described**



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

Patentability scope analysis and

the Property Control Position (PCP)

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

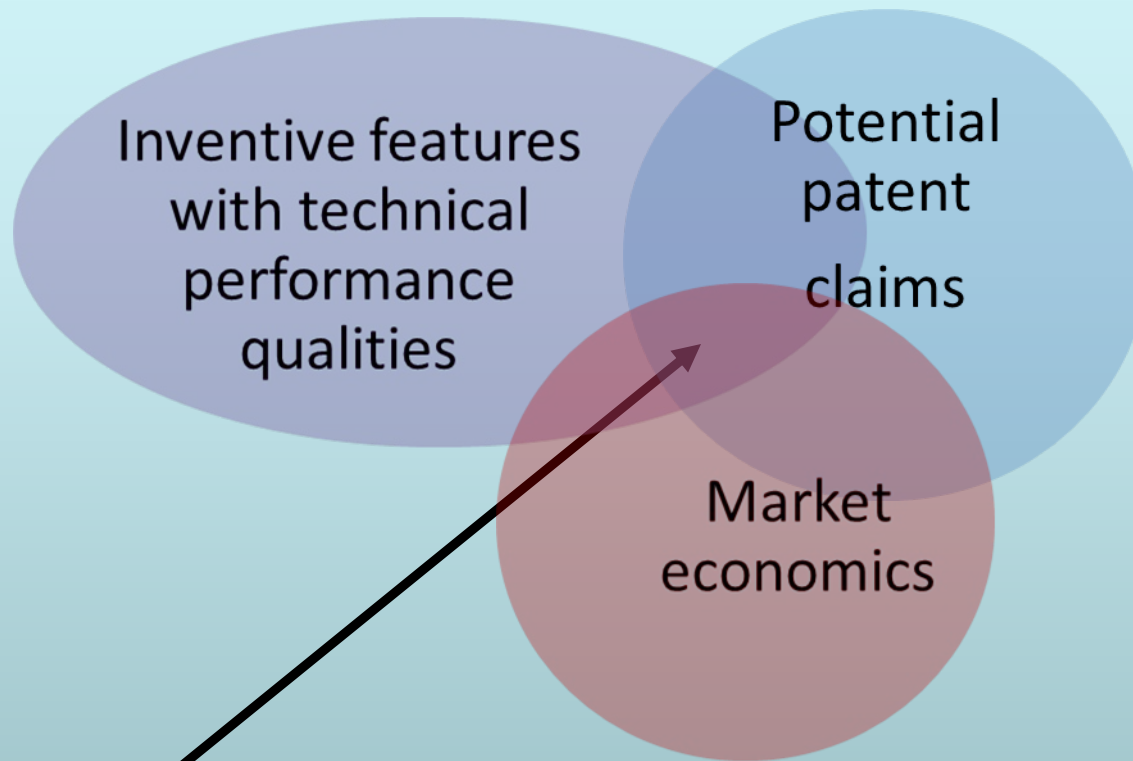
What is a Prior Art Search?

- A systematic search of the Prior Art that is relevant to an invention
- In practice:
 - keyword searching
 - on-line databases
 - Patentscope (WIPO), USPTO,
 - espacenet (EPO), JPO-IPDL,
 - Google-Patent, FPO

What is a Prior Art Search?

- In practice, a well-crafted keyword search of on-line databases:
- Will produce concentric “rings” of larger-to-smaller numbers of relevant patents, patent applications, and articles
- The searcher’s target: identify the “small” number of “closest” prior art patents
- “Small” is relative; usually less than 10 and more than 3
- Art likely from all over the world
- The Goal: find the “closest” prior art!

The Triple Convergence:
Technical Performance,
Inventiveness
&
Market Relevance



Invest in these: inventions with superior performance, market relevant economics, and meaningful patent claims

Patent Scope and Market Value

The Impact of
Patent Claim Scope
on Market Relevance

Scope of Claims

What is claimed is:

1. A writing instrument

that is hand-held, cylindrical, and containing an ink reservoir,
with a ball apparatus at one end of the cylinder that
delivers ink from said reservoir to writing surface only
during the act of writing, and wherein the ink-delivery
emitter device is retractable,
and the cylinder is blue-striped.

16 billion manual writing implements
(all pens, pencils sold per year)

5 billion pens sold per year

4 billion ball-point pens sold per year



10,000 blue stripe, ball point pens
sold per year

Finding the triple convergence: the process

Thoughtful evaluation and this 4-step approach:

1. Define the invention, its inventive features, and their technical performance qualities
2. Determine the Property Control Position (IP & bioproperty) quality and its relation to the performance qualities
3. Link technical performance to market relevance (economics)
4. Connect technical performance,
Property Control Position
market relevance,

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Thank you