

How to conduct a casual patent search

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Content

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- **The Priority Date**
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Patent Protection

- Patent Application vs Granted Patent
- Patent right is granted by the government to an inventor to **exclude** others from making, using, selling, importing, or offering an invention for sale for a *fixed* period of time.
- Allow inventors to maximally profit from their inventions.
- Patents provide the public disclosure of inventions, which allows others to further innovate based on those disclosures.
- Patents are only enforceable in the country or governmental region in which they were granted.

Prior Art

- Any **published** information, from anywhere in the world, before filing date of a patent is considered prior art.
 - Journal
 - Patent
 - Books
 - Website
 - Master and PhD thesis etc
- **Prior art** would affect the **patentability** of an invention.

When is a patent search needed?

- **Patentability** of an invention:

- utility

- novelty

- at least some aspect of it must be new



- non-obviousness

- a non-obvious improvement over the prior art



When is a patent search needed?

- ***Patentability***
- ***Research and Development:*** Evaluate, develop new or improve a technology upon existing products and processes.
- ***Product development:*** Solve specific problems, locate sources of expertise, and identify alternate technology.
- ***Product clearance:*** Survey markets, monitor and forecast activities of competitors or industries.
- ***Legal:*** Conduct infringement or identify licensing opportunities.

The Priority Date

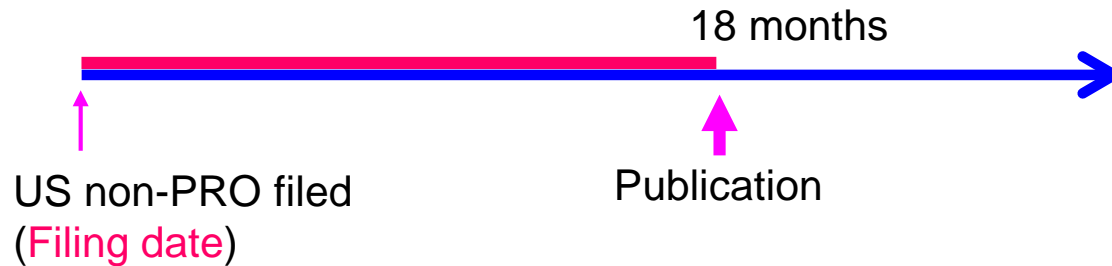
- The concept of *priority* is fundamentally tied to patentability.
- “Priority date” is defined by the **earliest filing date**.
- If a patent application has been filed, only prior art published before the effective filing date would need to be searched and/or reviewed.



The Priority Date

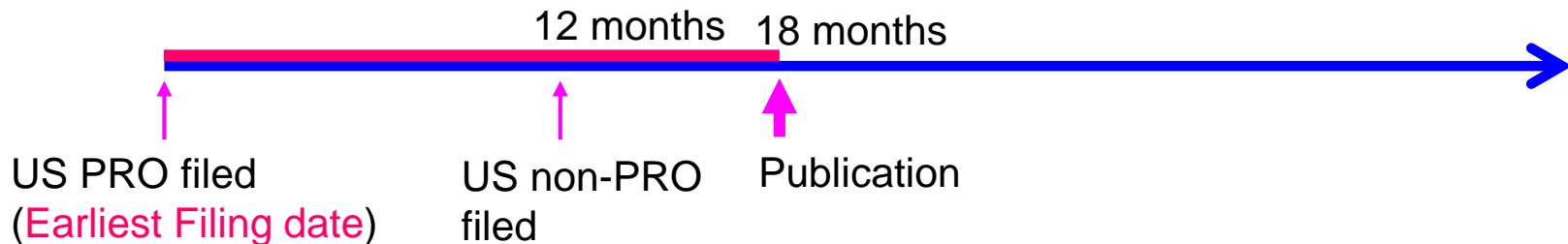
- **Case 1: US non-Provisional application**

- will be published 18 months after filing



- **Case 2: US Provisional application**

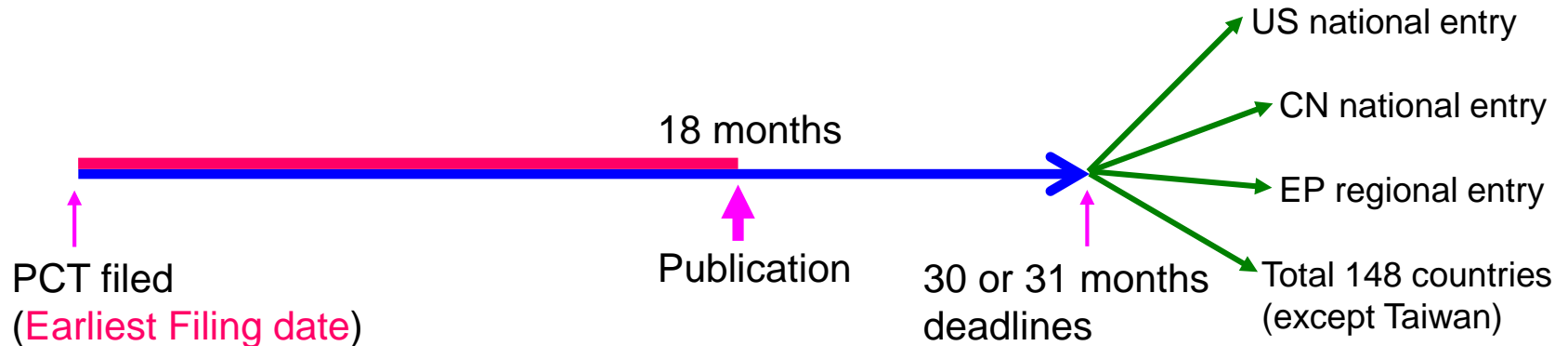
- will not be published
- It is never examined and it expires one year from its filing date.
- non-provisional application can be filed within 12 months



The Priority Date

- **Case 3: PCT filing**

- PCT application will be published 18 months after filing



Database

Free

- Google Patent Search
- Free Patents Online
- SureChem

- Patent Office
 - USPTO
 - WIPO
 - EPO

Paid

- Delphion
- Lexis
- Westlaw's Patent Database

Database

- Google Patent Search
(www.google.com/patents or www.google.com/advanced_patent_search)
- Free Patents Online
(www.freepatentsonline.com/search.html)
 - Documents can be downloaded
 - Contain keyword search
 - Require system update for most recent patent
- SureChem.com
 - Keywords and chemical structure search

Database

- **WIPO** World Intellectual Property Organization (<http://www.wipo.int/patentscope/en/>)
 - International applications
- **USPTO** United States Patent and Trademark Office (Department of Commerce) (<http://www.uspto.gov>)
 - Issued Patents dating back to 1976
 - Applications published since March 2001
- **EPO** European Patent Office (http://worldwide.espacenet.com/?locale=en_EP)
 - Search for patent family (a set of patent applications taken in multiple countries to protect a single invention by a common inventor)
 - Only “search words in title or abstract” is available



Search Strategy

- **Review closely related patents**
- **Citation search**
- **Full text search**

Review closely related patents

- Brainstorm initial keywords and terms.
 - Start with keywords you familiar with, even it may be a narrow term.
- Search the name of inventor/ institute/ company that have been working on or likely to work on that particular invention.
- Seek out the most recently granted patents possible.
- Next, include *synonyms* and *equivalents* that can be associated with each part of the invention.

Citation search

- Backward citations and Forward citations
- Enhancing your understanding of the field of the invention
- Visualize the evolution of the technology
- Citation searching often uncovers a tapestry of interwoven patents that gradually approach your desired result

Full text search

Sections of a Patent

- **Title**
 - can be searched quickly
 - least reliable
- **Abstract**
 - brief summary of the invention
 - help to identify *potentially* relevant documents
- **Specification**
 - lengthy written description of the invention
- **Claims**
 - most important part of patent
 - define the scope of protection

Common Fields

All	<input type="text"/>	(e.g. Metal) ?
Title	<input type="text"/>	(e.g. "metal detector") ?
Abstract	<input type="text"/>	(e.g. television) ?
Claim(s)	<input type="text"/>	(e.g. system) ?
Description/Specification	<input type="text"/>	(e.g. "hand-held telephone") ?

Inventor Fields

Inventor	<input type="text"/>	(e.g. Jones Mark)
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Assignee Fields

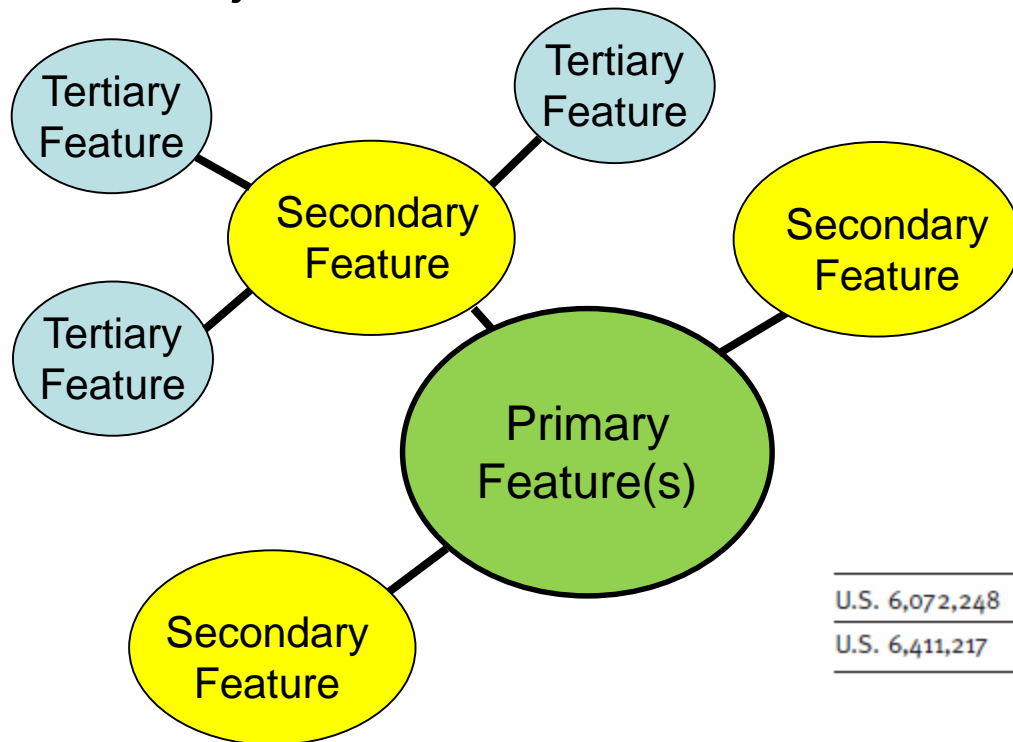
Assignee	<input type="text"/>	(e.g. Sanyo) ?
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- US Patents
- US Patent Applications
- EP documents
- Abstracts of Japan
- WIPO(PCT)
- German Patents (Beta)
- Non-patent Literature

Search

Analysis of patent search

- Determining relevancy according to the invention subject features
- The feature map can be used as a checklist



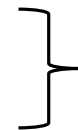
	Remote Vehicle Disablement	For law enforcement	Transmitter in pursuing vehicle	Receiver in getaway vehicle	Control Module in pursuing vehicle	Vehicle ID capability	Ignition cutoff in getaway vehicle	Ignition cutoff: relay or switch	Fuel cutoff in getaway vehicle	Fuel cutoff: valve or restrictor	Fuel cutoff: relay or switch	No. of Subject Features Represented
U.S. 6,072,248	X	X	X	X					X		X	6
U.S. 6,411,217	X	X	X	X	X		X		X	X		8

Analysis of patent search

Your invention	Feature A	Feature B	Feature C	Feature D	Feature E
Patent X	x	x	x	x	x
Patent Y	x	x	x	x	
Patent Z	x	x		x	x



Lack of novelty



- Novel !
- Is it obvious to arrive at the invention in view of these prior art?

Conclusion

- Any relevant written evidence may impact patentability
- If the application has not been filed, any written material published before the filing date should be included.
- Combination of several databases may give a comprehensive result.
- By unveiling the terminology, synonyms, and equivalents of the technology, would allow searcher to adjust his search strategies accordingly.

How to conduct a casual patent search

Thank you!

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