

Timing is Everything: When to File a Patent Application

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Generally – The Sooner the Better

- A patent application should be filed promptly after the inventor has determined how to achieve the results desired
 - Avoid someone from beating you to it
 - Avoid intervening prior art
 - Avoid issues with foreign “first to file” system

Commercial Embodiment

- Not necessary to wait for construction of a working or commercial embodiment to patent
- How far from the commercial embodiment is the research?
 - What type of invention is it?
 - Breakthrough technology or an improvement
 - Impact on timeframe to working embodiment
- Effect of publication on later commercialization / improvement filings

Impact of Prior Art

35 U.S.C. § 102(a) – Novelty

- A person shall be entitled to a patent unless, **before the date of the invention**, the invention was:
 - known or used **by others in this country**, or
 - patented or described in a printed publication **anywhere**.
- Can “swear behind” prior art date to the date of conception
- Can assert not “by others”

35 U.S.C. § 102(e) Secret Prior Art

- A person shall be entitled to a patent unless the invention was described in –
 - (1) a [published] application for patent... **by another** filed in the United States before the invention by the applicant for patent or
 - (2) a patent granted on an application for patent **by another** filed in the United States before the invention by the applicant for patent...
- Gives U.S. patents and publications prior art effect **as of their filing date**
- Provides motivation for early filing

35 U.S.C. § 102(e) Secret Prior Art

- Ways to get around 102(e) art
 - Can "swear behind«
 - Can assert not "by another«
 - 102(e) art cannot be used in an obviousness rejection if the prior art and application share a common assignee

35 U.S.C. § 102(b) Statutory Bar

- A person shall be entitled to a patent unless:
 - the invention was patented or described in a printed publication **anywhere**, or
 - in public use or on sale **in this country**
 - **more than one year prior to the application for patent** in the US.
- No options for swearing behind, evidence of own invention, use of foreign priority dates
- **UNLESS** the public use was your own and was experimental use necessary to invention's reduction to practice

Potential Disadvantage of Early Filing

- Early-filed patent applications, once published become prior art for your later-filed improvements
 - Can severely affect ability to protect commercial embodiments
 - Even if early filing does not enable the commercial embodiment, it can still be used alone, or especially in combination with another reference, to destroy patentability of second application
 - Even worse, early filing may not meet written description or enablement requirements
- If no foreign protection is desired, potential for non-publication request to delay ability to be cited as prior art

Requirement that the Invention be Fully Disclosed and Enabled

The Written Description Requirement

- Requires an inventor to demonstrate “possession of the claimed subject matter as of the filing date”
 - Knowledge of the structure
 - NOT functional description of what it does (unless known correlation between function and structure)
 - Varies by the nature and scope of claims and complexity and predictability of relevant technology
- To prevent claims from reaching into after-arising technology

The Written Description Requirement

- In order to adequately support a claim to a genus, must disclose either a representative number of species falling within the scope of the genus or structural features of the genus so that one of ordinary skill in the art can “visualize or recognize” the members of the genus.
- Generic claim language appearing as such in specification will not satisfy written description if it fails to support the scope of the genus claimed

The Enablement Requirement

- Requires inventor to teach a person having ordinary skill in the art at the time of filing how to make and use the claimed invention
- Also prevents the reach of claim scope into after-arising technology

Recent Federal Circuit Review

- "Patents are not awarded for academic theories, no matter how groundbreaking or necessary to the later patentable inventions of others."
- "[C]laims to research plans also impose costs on downstream research, discouraging later invention."
 - Broad, yet not enabled, claims to basic research can result in being an hindrance to later efforts to commercialize / realize a working invention.

Recent Federal Circuit Review

- “Basic scientific principles are not the subject matter of patents, while their application is the focus of this law of commercial incentive. The role of the patent system is to encourage and enable the practical applications of scientific advances, through investment and commerce.”
- “[T]he patentee is obliged to describe and enable the subject matter commensurate with the scope of the exclusionary right.”

Effect of Ariad

- Written description requirement presents hurdle to those in their pursuit of patents covering basic inventions in new technologies
 - When claiming a genus, must identify examples to describe genus
- Particularly difficult for smaller companies, as well as academic institutions
 - Limited resources
 - Subject to pressures to expose technology for academic or commercial reasons (e.g., obtaining funding)

Impact of Desire for Foreign Patent Protection

Is Foreign Protection Desired?

- Know that the United States and foreign countries have different laws on:
 - If a patent can be filed after disclosure events
 - First to invent vs. first to file (race to the patent office)

U.S. vs. Foreign Patent Systems

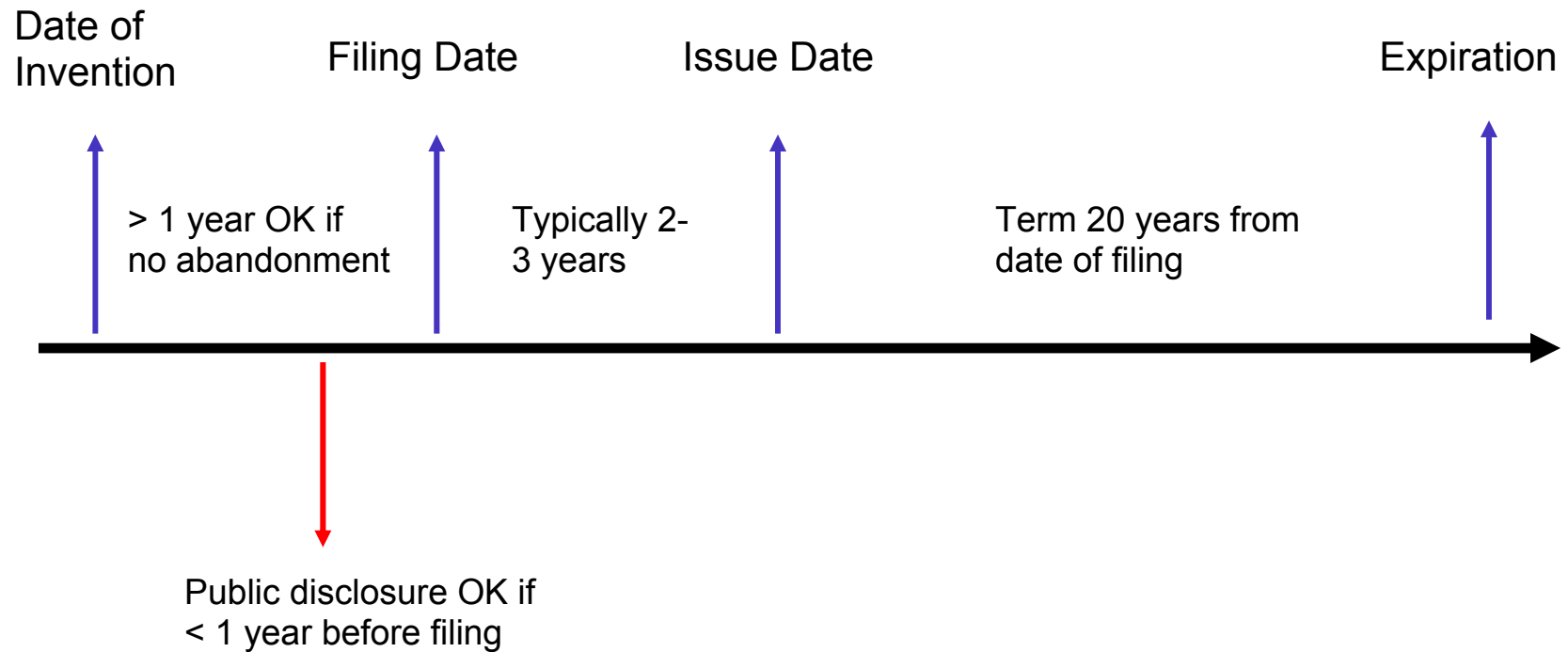
- U.S. is a “first to invent” system
- Rest of the world is a “first to file” system

- Effect of these systems on disclosure events
 - US: 12 month grace period and ability to swear behind to invention date
 - Res of the world: most public disclosures destroy novelty

U.S. System – Filing and Bar Dates

- “Priority” given as of date of invention
 - Patent application may be later filed so long as invention not abandoned
- Public disclosure, sale, or offer to sale starts one-year clock ticking
 - If patent application not filed within one year, rights are lost

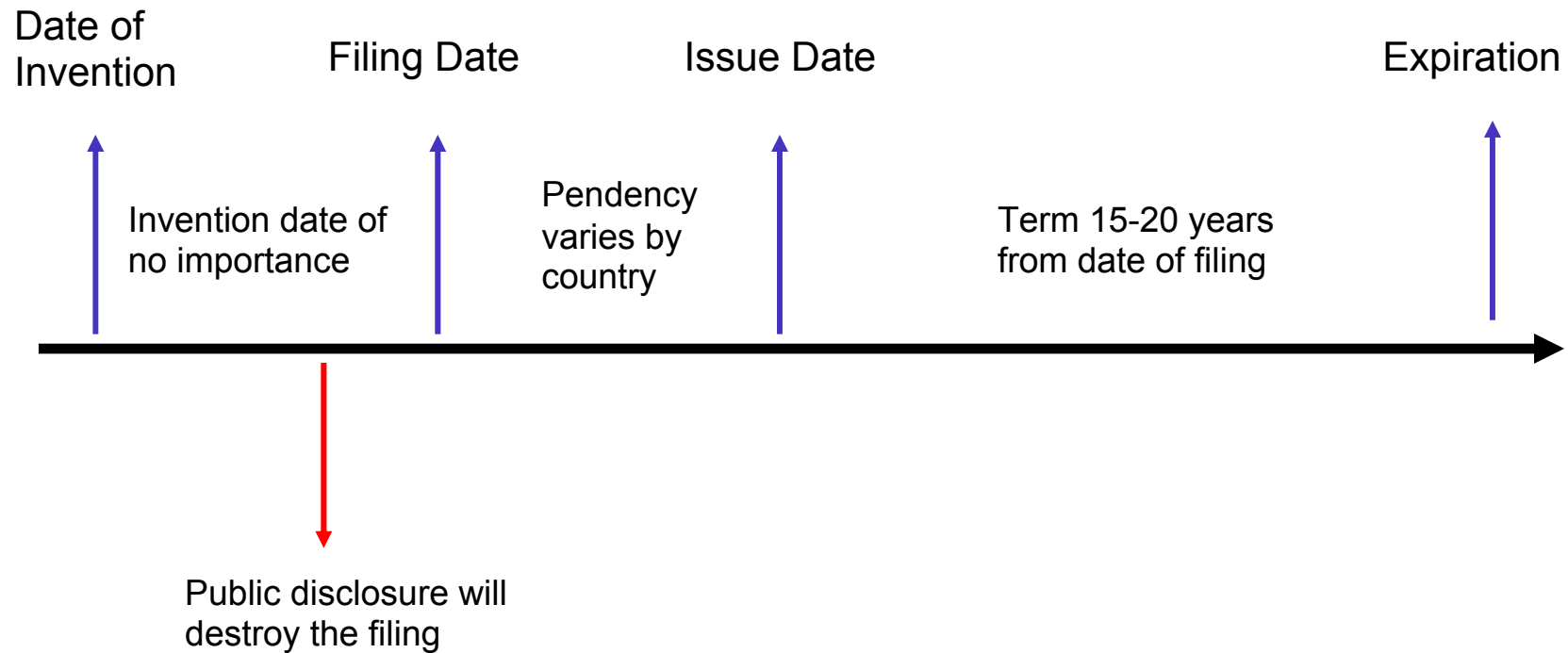
U.S. System – Filing and Bar Dates



Outside the U.S.

- No “grace period”
 - Public disclosure forfeits rights in most cases
- Priority based on date of filing application
- Date of invention irrelevant

Outside the U.S.



The Provisional Patent Application

Types of Patent Applications

- Provisional
 - “Foot-in-the-door” application
 - Minimal formal requirements
 - Low cost
 - Preserves filing date
 - Not examined
 - Can be “updated”
 - Expires 12 months from filing
- Utility
 - “Real” patent application
 - Must meet all formal requirements
 - Proceeds to examination/issuance

Provisional Patent Applications

- Can file multiple provisional applications
 - Claim priority to multiple provisional filings
 - Update with new data, new embodiments as invention is further developed
 - Low cost to update
 - Confirms additional priority date to minimize support issues

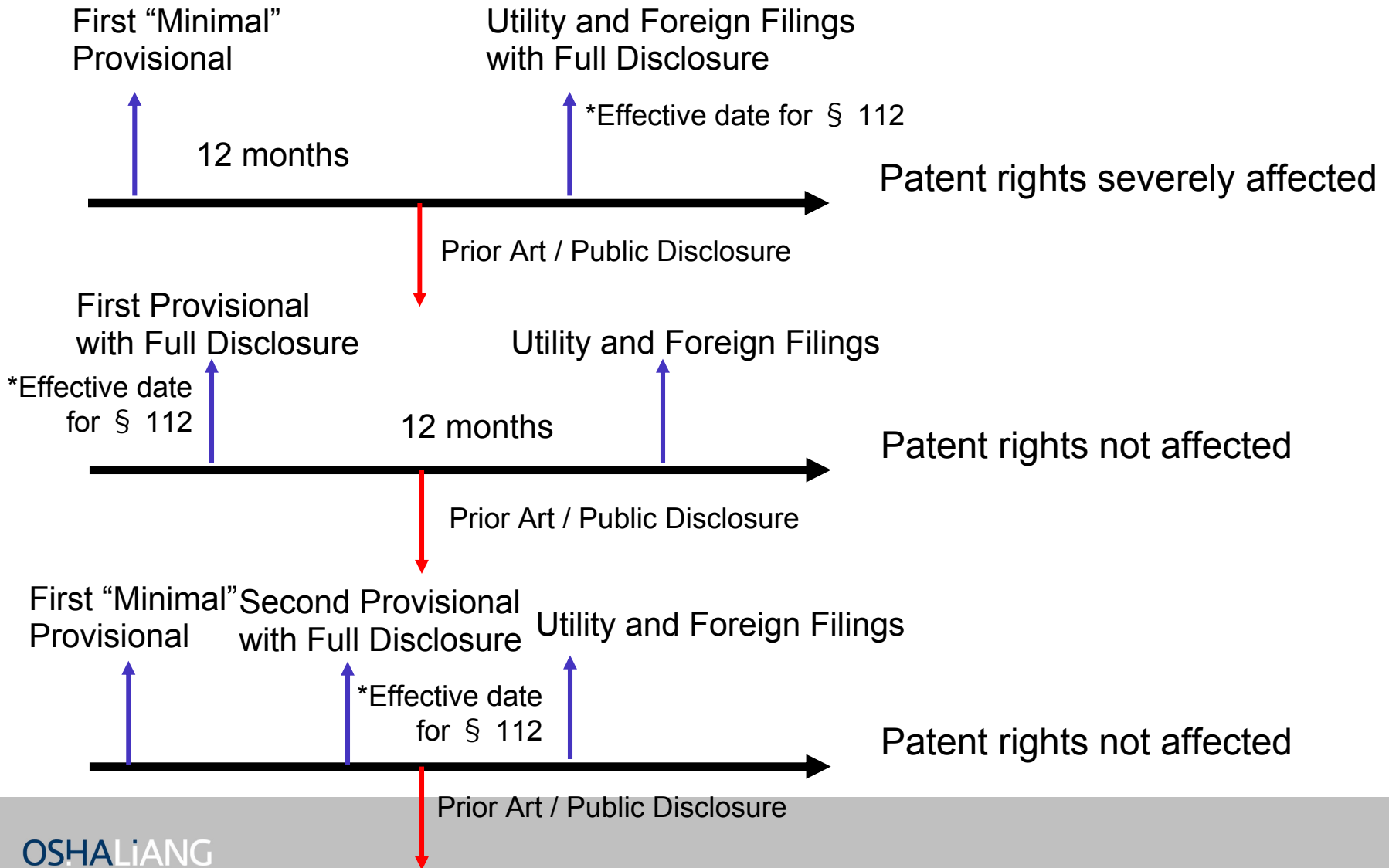
Potential Disadvantages

- If hastily drafted, applications with “fuller” disclosures that are filed between provisional application and utility application can be prior art to the invention if provisional application is deemed insufficient to support the claims of the later filed utility application
- Disclosures by applicant can have same effect in foreign jurisdictions and bar applicant from filing for foreign protection

Sets the Clock

- Utility application and any foreign applications must be filed 12 months from the first provisional application
 - Is invention within 12 months of working or commercial embodiment?
 - Is technology several years from working embodiment?
- Patent timeline should be considered alongside R&D timeline

Possible Scenarios



Conclusions

- Use provisional patent application to gain benefit of “updates” to the application
- Avoid coversheet provisional applications
- When filing early, also consider filing often
- Plan realistic timeline and milestones for R&D and evaluate patent filing based on the timeline and milestones

THANK YOU!

Any Questions?

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