Patent Strategies

What are the main strategies to manage a patents portfolio?

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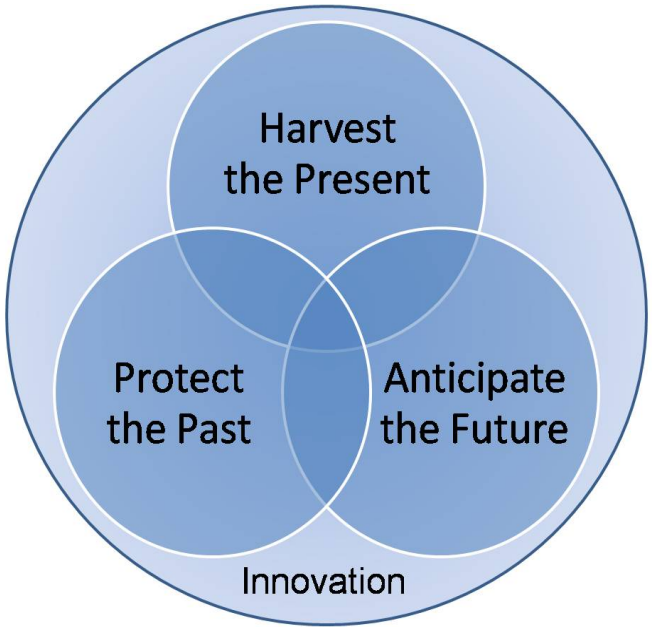
Patent Strategy



Align Patent strategy with business goals by ensuring the protection, harvesting and anticipation of Patents achieves the highest value returns.

- Protect the Past
  - Patents that protects historical products & services.
- Harvest the Present
  - Patents that generates license revenues and differentiates existing products & services.
- Anticipate the Future
  - Patents that will have value in future.

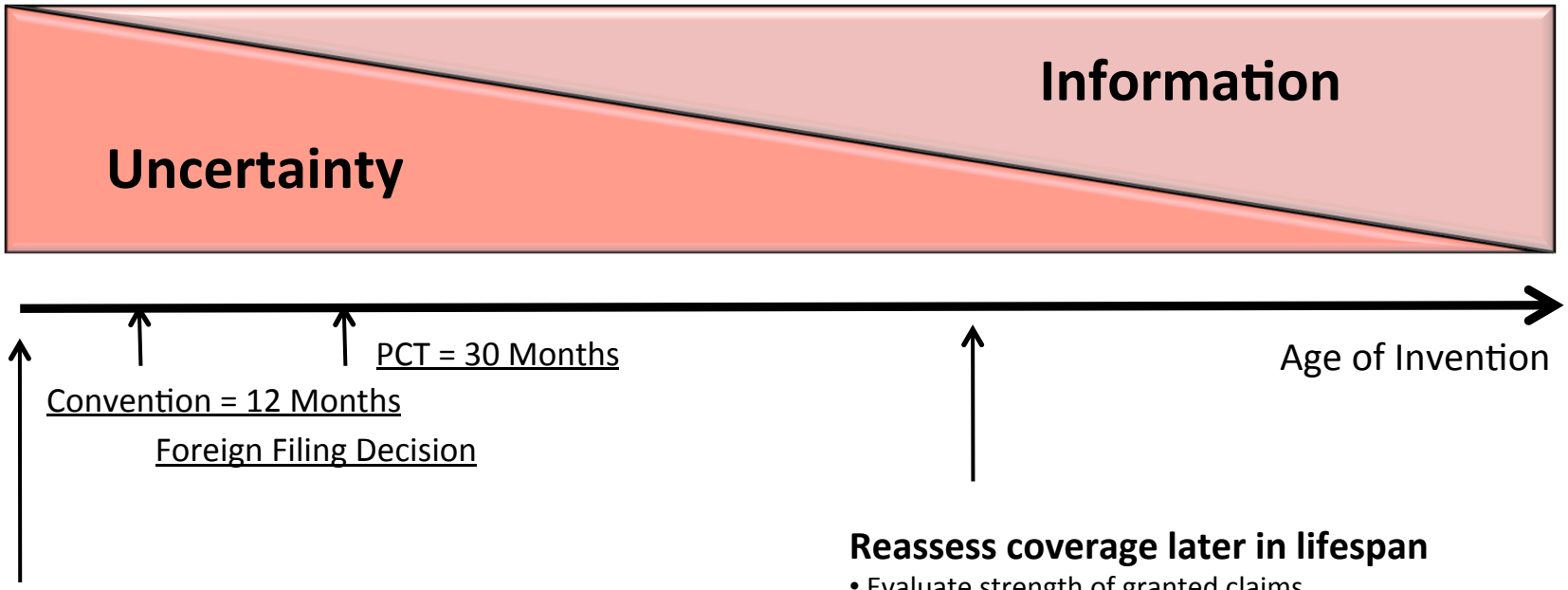
A Tradeoff Between Uncertainty and Knowledge

- Patent applications must be filed before the invention is
  - Disclosed or
  - Tested in the market
- Patent filing decisions are therefore made at the time of
  - Greatest uncertainty
  - Least information

A Tradeoff Between Uncertainty and Knowledge

- Knowledge increases with information over time
  - Official search and examination results (patentability)
  - Implementation of the invention in commercial products
  - Adoption of invention by
    - Standard Setting Organizations and/or
    - Customers
  - Commercial success of products implementing the invention
- Uncertainty decreases as knowledge increases.

A Tradeoff Between Uncertainty and Knowledge



Early in the life of an invention little is known

- What ideas will make it into standards?
- How future products will be implemented?
- Strength of claims that will be granted?

Reassess coverage later in lifespan

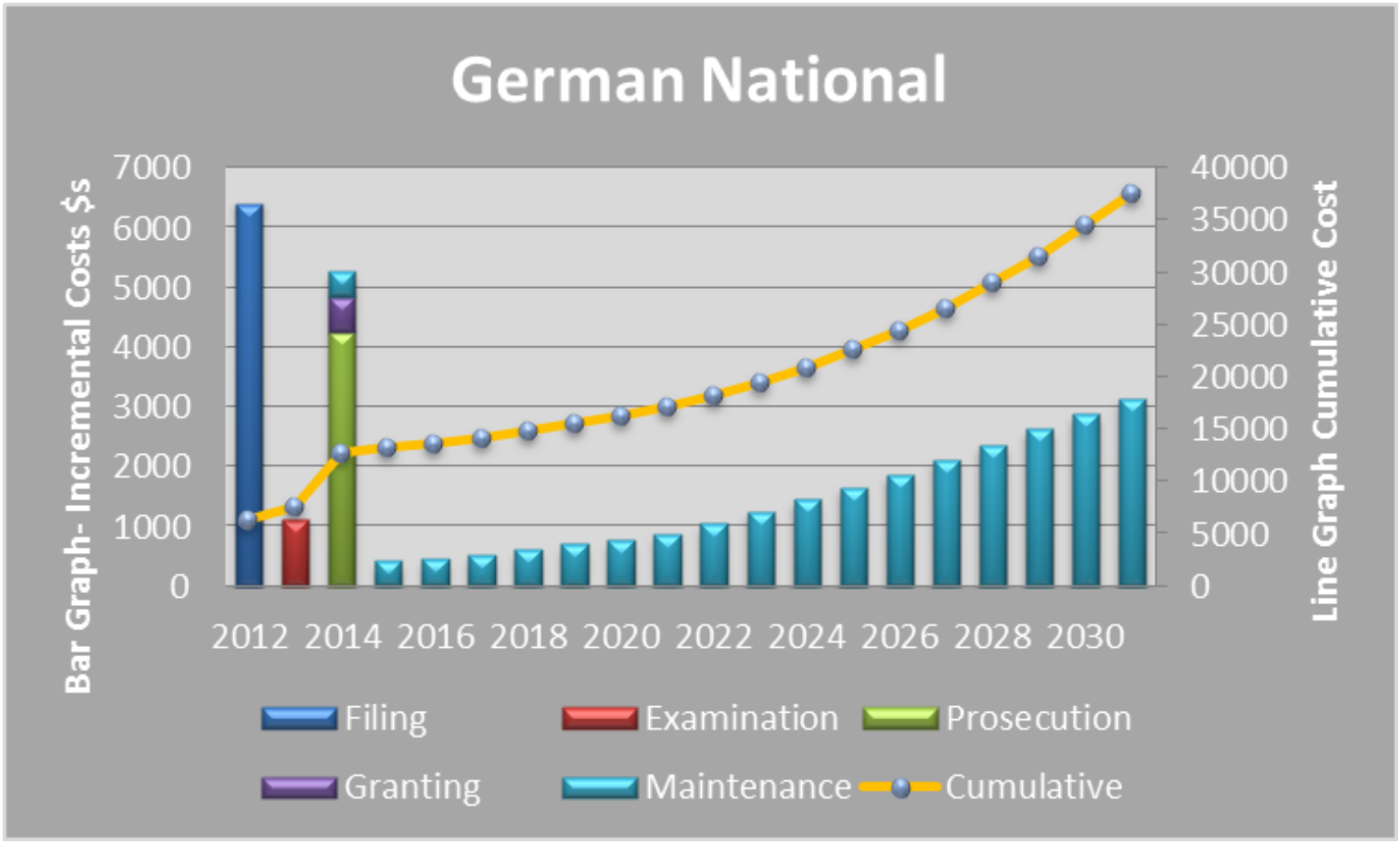
- Evaluate strength of granted claims
- Validation 4-6 Years
- Determine whether products are made, used or sold in the selected countries
- Re-evaluate at 10 and 15 years to see if invention is still relevant to implemented standards and products

Best Prosecution Practice: File broadly, cull heavily

Ensures enough quality patents will have broad coverage and provides cost savings opportunity as you prune in later years

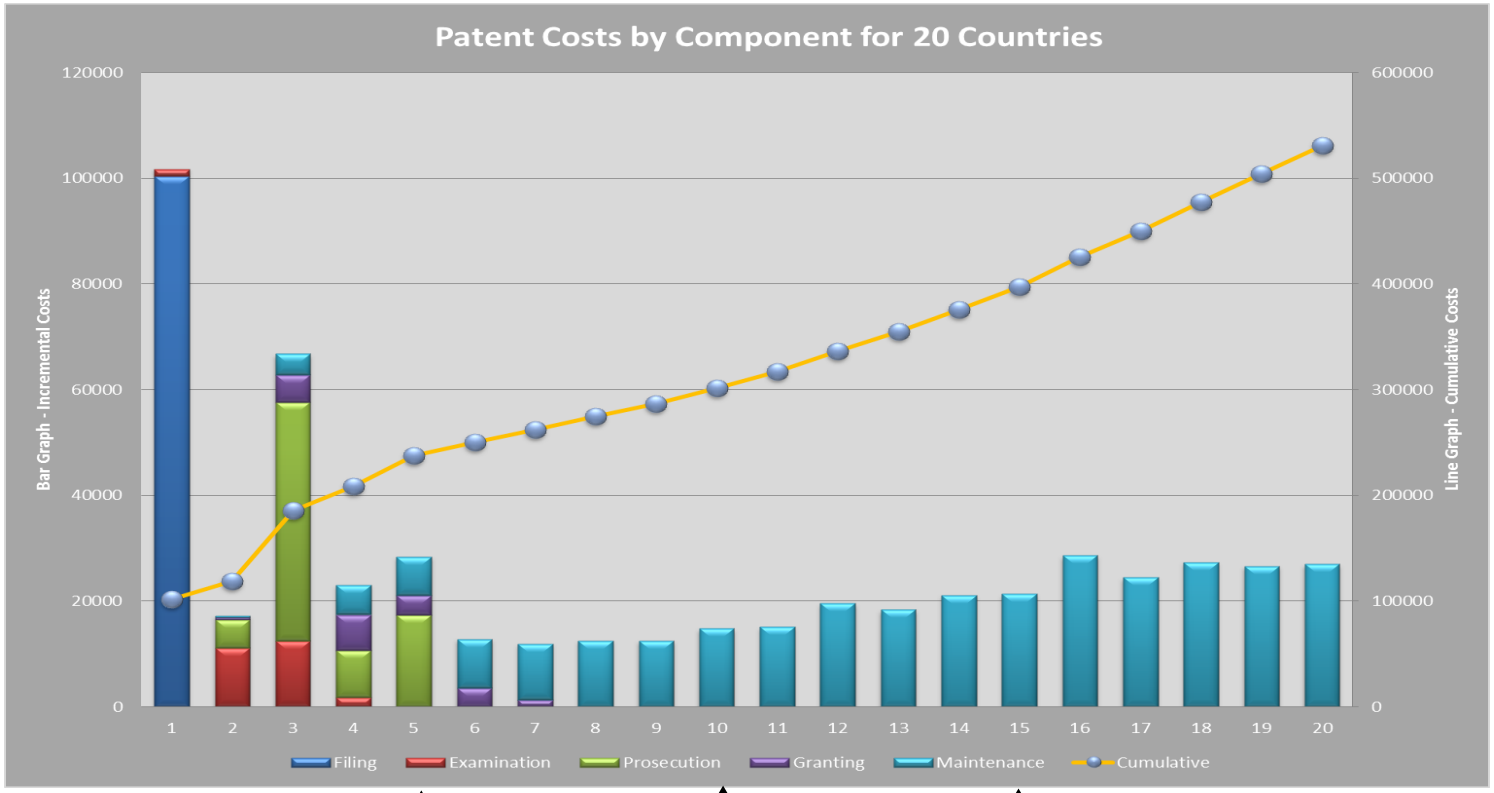
The cost of patents

- Patent costs grow over time



The cost of patents

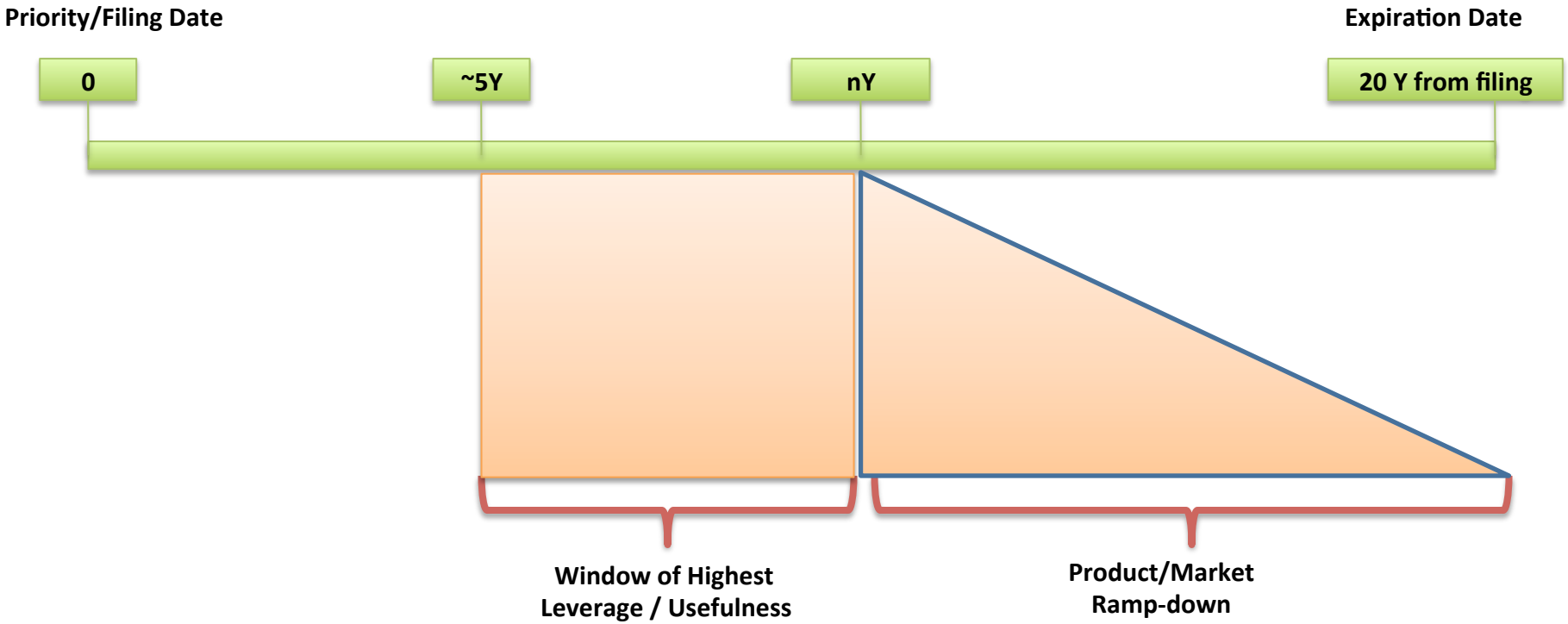
- And as the number of countries increase



Decision Points.: 4-6 Years – allowance, 10 & 15 Years
Criteria: liklihood of implementation, breadth of granted claims, depth of portfolio in technology area

Patent Usefulness

- Patent lifespan is 20 years
- On average patents take 4-6 years to issue
- Useful life is less than 20 years
- Usefulness may reduce toward the end



Evaluate Over Patent Lifespan

- Evaluate based on:
  - project
  - technology
  - product or
  - vertical market

  Depending on focus of company

- Balancing Value & Cost
  - Early in Lifespan emphasis on preserving Value
  - Later in Lifespan emphasis on managing Costs

- The following assumes a focus on projects.

Evaluate Over Patent Lifespan

- Continuous (re)evaluation
  - From inception of R&D projects
  - Through invention reviews and patent filing decisions
  - Through patent prosecution and grant
  - To maintenance and expiration of patent.

Evaluate Over Patent Lifespan

1. Focus on projects based on likelihood of generating Impactful Patents
   - Prioritize Inventions that result from projects
2. Review Inventions and make file/no file decision
   - Prioritize Inventions that are given a file decision
3. Continuously evaluate invention/patent with available information
   - Decide on foreign filing based on valuation
   - Actively cull portfolio based on valuation

Evaluate Over Patent Lifespan

1. Focus on projects based on likelihood to generate Impactful Patents

- Focus considerations:
  - Core problems project is addressing
    - Solving core problems = higher rating
  - Maturity or crowdedness of space
    - Less mature and less crowded space = higher rating
  - Likelihood that others will use Patents generated by this project
    - Higher likelihood = higher rating
  - Likelihood that solutions will be developed for adoption by standards
    - higher likelihood = higher rating

Evaluate Over Patent Lifespan

1. Focus on projects based on likelihood to generate Impactful Patents
   - Prioritize Inventions that result from projects
- Prioritization considerations:
  - Enforcement
  - Standards applicability
  - Detectability
  - Breadth of filings in the field of the invention

Evaluate Over Patent Lifespan

1. Focus on projects based on likelihood to generate Impactful Patents
   - Prioritize Inventions that result from projects

- Impact
  - Business context
    - Business or competitive landscape
  - Strategic filing area
    - On forefront or late
  - Implementation scope
    - e.g. handset v. base station v. network
  - Problem solved

Evaluate Over Patent Lifespan

1. Focus on projects based on likelihood to generate Impactful Patents
   - Prioritize Inventions that result from projects
- Infringement
  - Potential implementation by others
  - Technical advantages
    - e.g. improved sensitivity/performance
  - Ease of design around
  - Implementation in QC product
  - Novelty
  - Operability

Evaluate Over Patent Lifespan

2. Review Inventions and make file/no file decision
   - Prioritize Inventions that are given a file decision
- Prioritization considerations – Enforcement
  - What is the likelihood of successful enforcement?
    - How difficult would it be to prove infringement?
      - Detect-ability
      - Ease of explanation
      - Enforcement landscape

Evaluate Over Patent Lifespan

2. Review Inventions and make file/no file decision
   - Prioritize Inventions that are given a file decision
- Prioritization considerations – Enforcement
- What is the likelihood that this patent would be found valid?
  - How easy is it to find prior art?
  - How distinguishable is the prior art?
- What legal encumbrances exist for this patent?
  - Standards commitments
    - FRAND
    - Royalty Free

Evaluate Over Patent Lifespan

2. Review Inventions and make file/no file decision
   - Prioritize Inventions that are given a file decision

- Prioritization considerations – Enforcement
- What is the impact of owning this patent?
  - What is the business impact to a potential infringer?
    - Magnitude of exposure
  - What is the business impact to the patent owner?
    - Licensing
    - Deterrence
    - Availability of alternate IP protection (trade secret)

Evaluate Over Patent Lifespan

2. Review Inventions and make file/no file decision
   - Prioritize Inventions that are given a file decision

Prioritization considerations – Infringement

- What is the likelihood the patent will be infringed by others?
  - How technically compelling is the invention?
    - Performance gain
    - Product differentiation

Evaluate Over Patent Lifespan

2. Review Inventions and make file/no file decision
   - Prioritize Inventions that are given a file decision

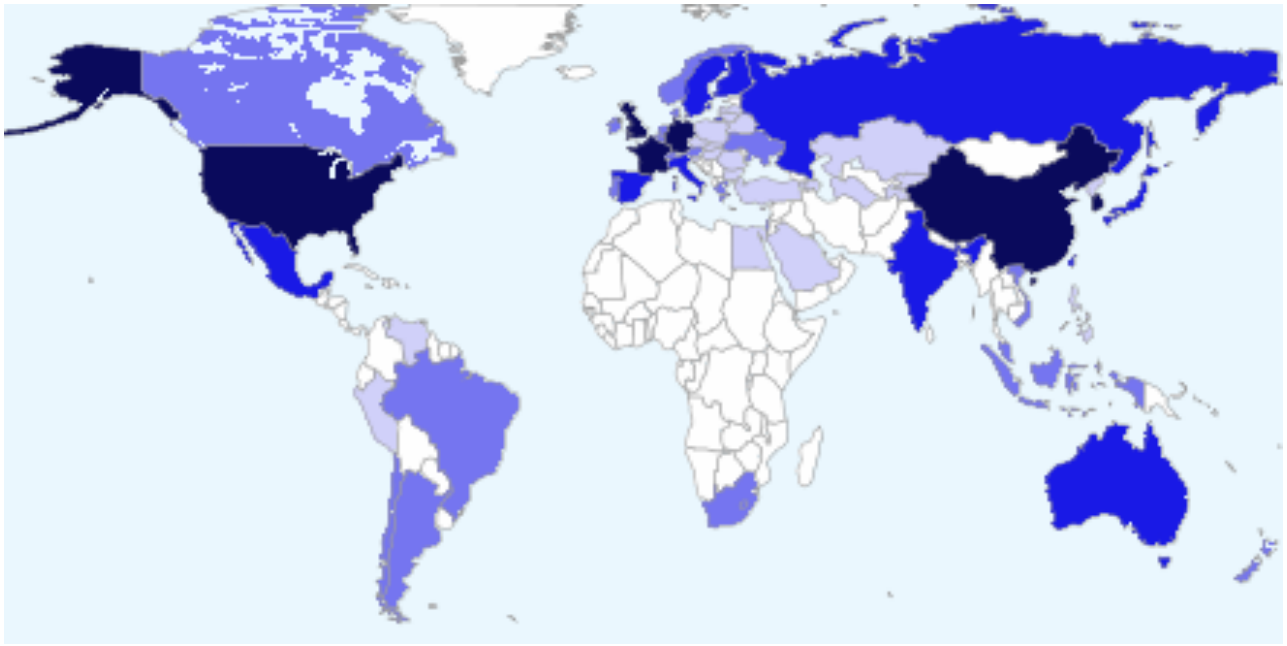
Prioritization considerations – Infringement

- Competitive advantage
  - How easy would it be to design around this patent?
    - Availability and cost of substitutes, including prior art, standards
    - Cost of substitutes, disruption, design delays

Evaluate Over Patent Lifespan

3. Continuously evaluate invention/patent with available information

- Decide on foreign filing based on valuation



Evaluate Over Patent Lifespan

3. Continuously evaluate invention/patent with available information

- Decide on foreign filing based on valuation

- Deterrence:
  - Patents in countries where others make, use and sell their own products
- Offensive:
  - Patents in countries where licensees make, use and sell their own products

Evaluate Over Patent Lifespan

3. Continuously evaluate invention/patent with available information

- Actively cull portfolio based on valuation
- Scope of patent narrower than expected
- Invention has reached the end of its useful life
  - Technology has become redundant
  - Invention was not adopted
  - Invention not being made, used or sold in a given country

Questions Set By Conference Administrator

- How patents are taking place in the global R&D networks international division of innovation processes?
- What are the main strategies to manage the patents portfolio?
- How to they vary according to the core business, the size and age of the company?

Qualcomm's Business Model