

# OECD Expert Workshop on Patent Practice and Innovation

## *Valuing patents and IP portfolios: a business perspective*

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# IP portfolio composition

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- IP: collective name given to:
  - Trademarks
  - Designs
  - Copyrights
  - Know-how
  - **Patents**
- IP can be bought, sold or leased.
- Patents are:
  - A right, granted under government law (in the U.S., the Constitution).
  - To prevent others from making, using, or selling, or offering to sell the patent owner's invention.
  - An exclusionary right.
- Patents are a **contract** with the government
  - The patent owner publicly discloses a new invention.
  - The government grants the patent owner a limited monopoly (the right to prevent others from making, using, selling...).

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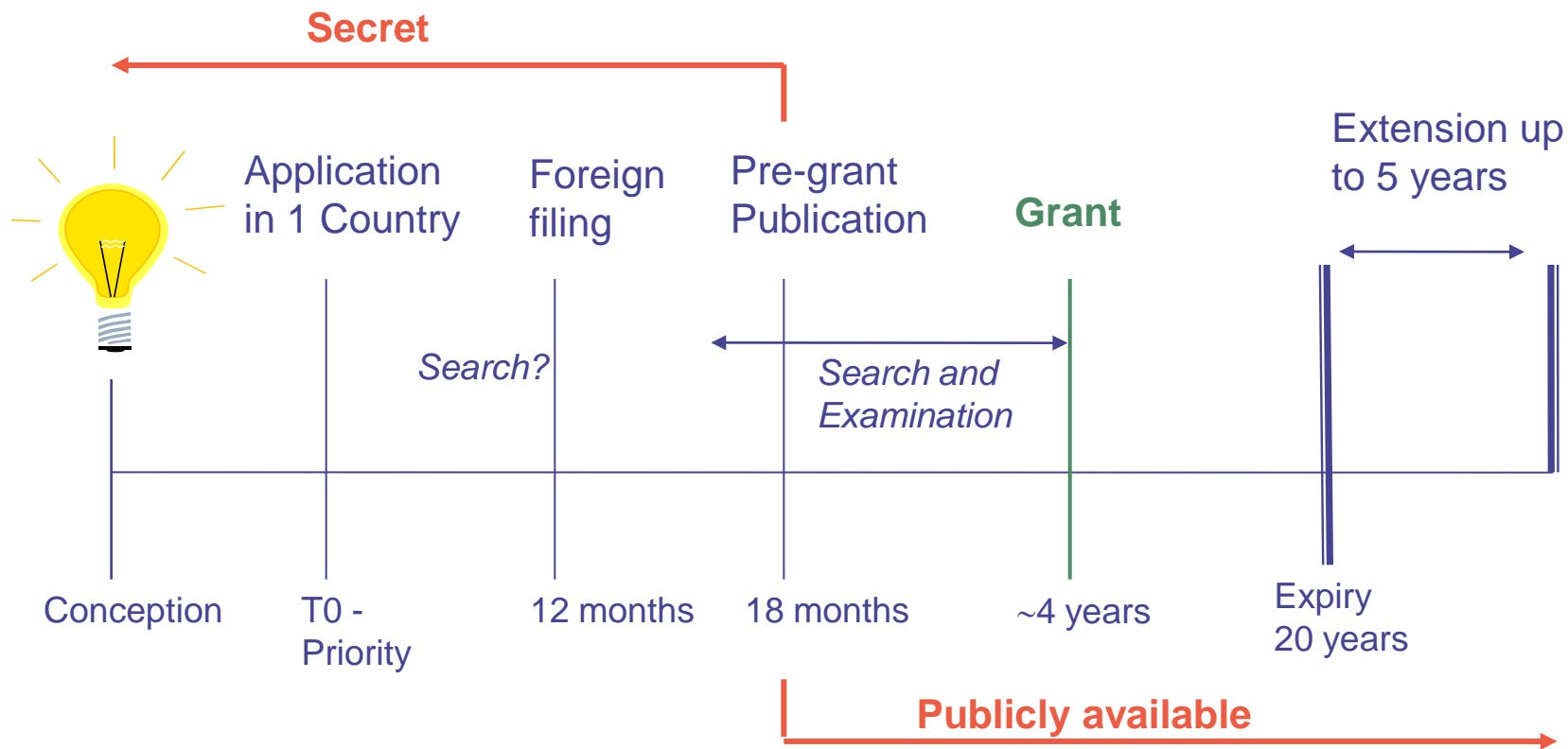
# Why Patent?

## Patent Value follows Patent life Events

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- Why?
  - Deter
    - Maintain exclusive control over the patented invention.
    - Prevent market entry by competitors.
  - Defend
    - Disclose technology publicly to prevent competitors from patenting it.
  - Commercialize
    - License for a fee.
- Several key decision points for the Industrial Applicant ★
- Will affect patent value as nature of patent rights changes at each stage
- Strategy-Driven Budget Vs. Budget-Limited filing strategy

# Major Patent Life Events



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# Pending Patent Application Value

## - *Prior to publication*

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- Patent application and disclosure remains secret
- For the Applicant, patent value includes
  - Ability to maintain secrecy
    - Risk is that a third party files on same invention (first to file)
  - Not waiving patent rights by withdrawing application before publication
  - Possibility to delay patent costs by 1-year by filing provisional/priority application
- For Competitors
  - Uncertainty about the existence of your rights
  - *A fortiori*: Content of the disclosure unknown
  - *A fortiori*: Scope of claims unknown
  - *A fortiori*: Design around strategies impossible at that stage
  - 3rd Party Patent Application may ultimately represent hurdles against their activities

# Pending Patent Application Value

## - *After publication but before grant*

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- Patent application and disclosure no longer secret
- For the Applicant, patent value includes ability to
  - Rely on provisional patent protection
    - Possible court enforcement of payment of a reasonable royalty rate as from the publication date – however lengthy process including post grant court challenges
    - Depends on published Vs. issued claims
  - Start an out-licensing program
  - Evaluate whether to accelerate prosecution to reach issuance asap
- For Competitors
  - Content of the disclosure known – boundaries of the invention known
  - Scope of claims not yet final
  - FTO strategies
    - Validity assessment of 3rd Party patent rights can be started (assumptions needed)
    - Design around strategies possible at that stage although obviously based on assumptions of what the granted claims will look like
  - Start in-licensing discussions – royalties/upfront fees/milestones payments to ensure legal certainty

# Granted/Issued Patent Value

## - *Excluding competitors*

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- Exclusive right - to prevent others from making, using, or selling, or offering to sell the patent owner's invention.
- For the Applicant, patent value includes ability to
  - Enforce patent rights
    - Cost of a lawsuit on infringement (and validity)
  - Start out-licensing program
- For Competitors
  - Scope of claims final
  - Continue in-licensing discussions – at a price!
    - Royalties/upfront fees/milestones payments usually higher as patent right presumed to be valid until revoked
  - Non-infringement strategies and/or Design around strategies essential at that stage as part of a global FTO strategy

# What makes a Patent Valuable?

## - *A strategy related to commercial reality*

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- Definitive valuation impossible, partly subjective
  - Risk and asset analysis, risk mitigation
- Quality of basic patent disclosure (PCT), search, examination, **claims**
- Anticipated licensing revenue (NPV of royalties)
- Remaining patent term
  - Ideally after sustained challenge, not too close to patent term
- Geographical breath of filing
  - Revenues directly linked to number of markets, is higher with new markets
- Stage of development of product/technology
  - The licensing value of a Patent usually follows the commercialisation stage
- **Size of portfolio**
- Ability to directly affect sales
  - Pharma: when patent is the product (primary COM patent)
  - IT: new semiconductors, softwares ...
  - Cutting edge technologies embedded in products
    - Sale of product will generate add-on sales of cutting edge technologies



# What makes a Patent Valuable?

## - *Getting the Most Value from Patent Claims*

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- **Role of patent claims**

- **Define scope of protection & determine eventually patent validity**
  - Invalidation arguments can drive cost down in in-licensing discussions
- **Directly impact on commercial value of patent – exclusive right**
  - Avoid pitfalls
  - Characterise the invention in a way that distinguishes the invention from the prior art while → no invention if essential elements are missing
  - Yet covering activities of would-be/future infringers → design around the patent easy if unnecessary elements are included
  - You must know the target of the patent: competitors, business partners, potential licensees – and focus on that target
    - Product claims, methods of making (beware: all steps), use (beware: label, package insert)
    - Negotiations are easier if you have something to offer in return
- **Do you want to leave anything open to interpretation?**

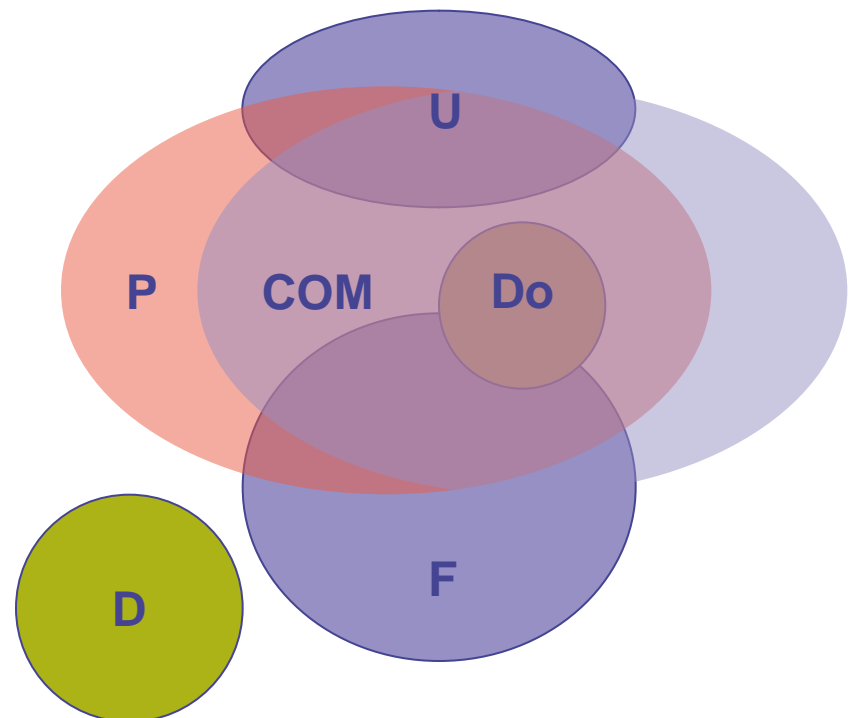
# What makes a Patent Valuable?

## - *Size of the Portfolio*

- Operating model in the Pharma Industry is changing
  - Small is beautiful?
- Biopharmaceutical business
  - Multiple layers of patents/patent applications with a different term & a different scope of protection

= onion-skin approach

  - Reflecting all stages of product development and all components of a product
  - Driver is to minimise loss of exclusivity



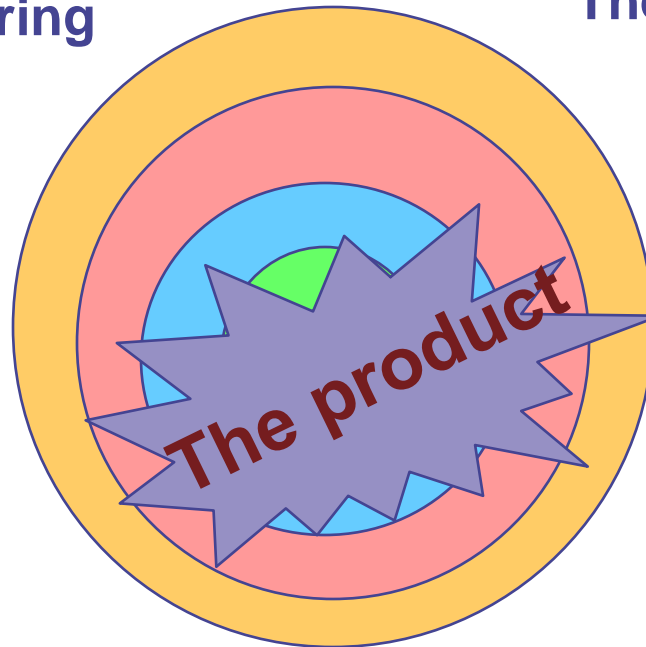
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# The onion-skin approach

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**The manufacturing process**

**The mAb**



**The use**

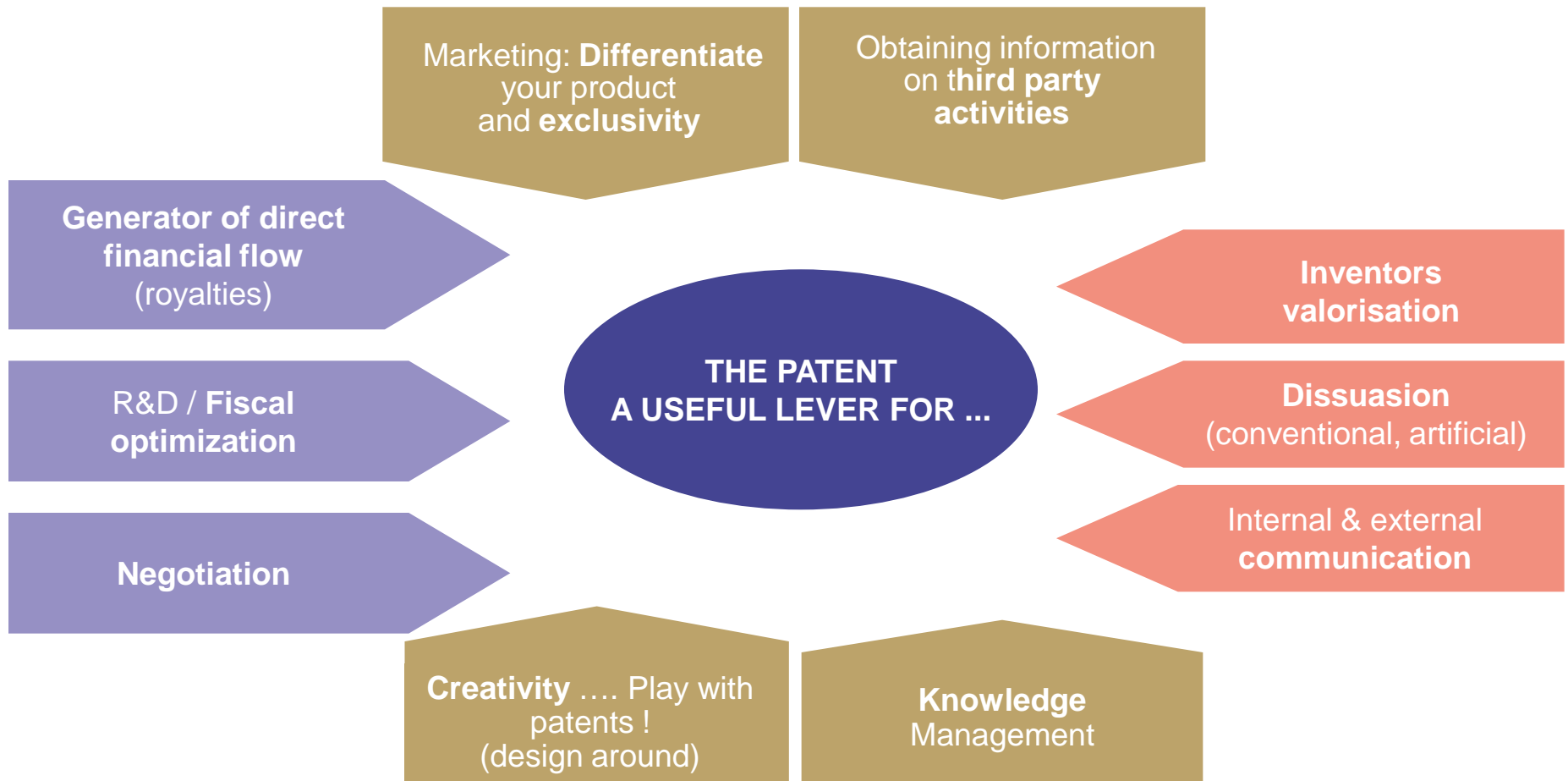
**The formulation**

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# What makes a Patent Valuable?

## - Summary

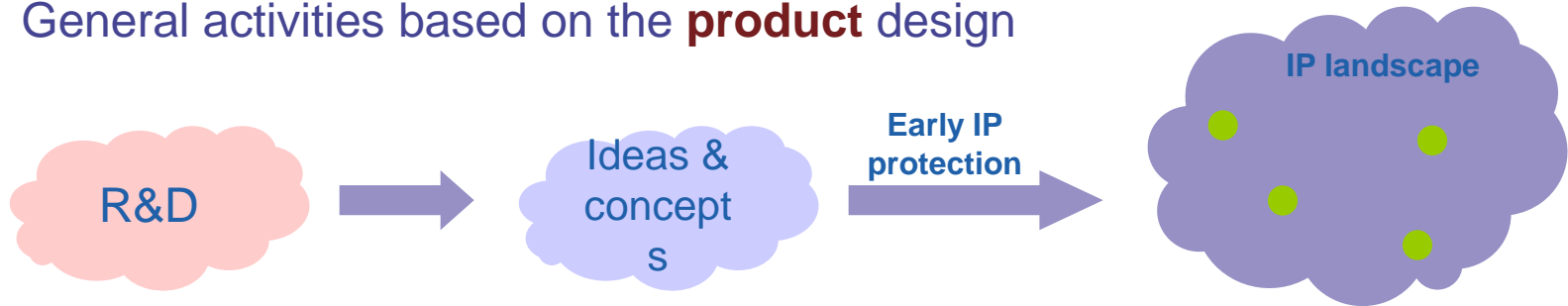


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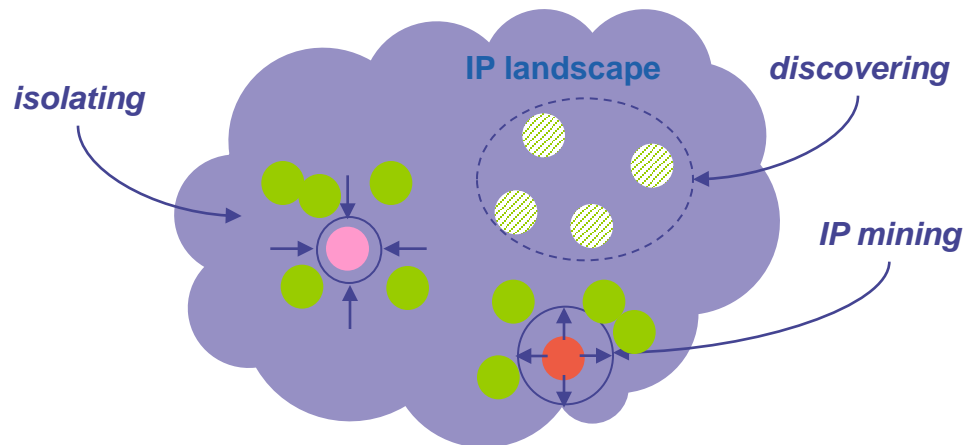
# What makes a Patent Valuable?

- *Defensive/offensive strategies put in context*

- General activities based on the **product** design



- and **strategic** activities based on the IP



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# Getting good value for our Patents

## - *How do we monitor/control?*

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- Patent metrics:
  - **Stop in time and redeploy resources!**
    - Manage value of patent portfolio at different stages from ROI to Granted patent
  - **Avoid excessively costly prosecution, excess claims fees, useless renewals**
- Case reviews: which cases to file, how broad, which cases to keep, abandon, out-license
  - **Define criteria: marketed product? Development compound? Cutting edge technology? Suited for out-licensing strategies?**
- Transactions
  - **In an Open Innovation environment all transactions including IP transactions have a value**
  - **Return on Investment given to the company that helps economic activity**
  - **In-licensing programs**
    - There are no right and wrong strategies if you cross-license with competitors
    - Assess value of third party portfolios through DD

Thank You

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