



INTELLECTUAL PROPERTY EXPERTS





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EPec INTELLECTUAL PROPERTY EXPERTS



Freedom to Operate the Flipside of Patents



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FREEDOM TO OPERATE

- What is it
- How to do it
- When to do it
- Start
- Scope & intensity
- Analysis
- Result

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- What to do with the result
- Dealing with 3rd party IP

WHAT IS IT?



• Freedom to Operate:

"The ability to proceed with the research, development, commercial production of a new product/process with a **minimal risk** of infringing third party IP"

Infringing:

"make, offer, use or sell"



- Goal: minimise risk of infringement
- Side effect: Identify partners/licensors/licensees/competition

HOW TO DO IT?



 Deconstruct the process/product (it is a bit like making apple pie) Ingredients Tools 6

HOW TO DO IT?



Deconstruct the process/product

- Gene
- Target
- Lead
 - Small molecule, protein, antibody
- Screening tools
 - Libraries, assays, platforms,
- Technologies
 - Processes, methods (chemistry, biotech)
 - Ingredients
- Derivatization
 - Antibody-drug conjugates, delivery vehicles, linkers, pegylation, ...
- Formulation/application
 - Excipients, adjuvants, linkers,....
- Clinical indication

Start selecting the essential elements

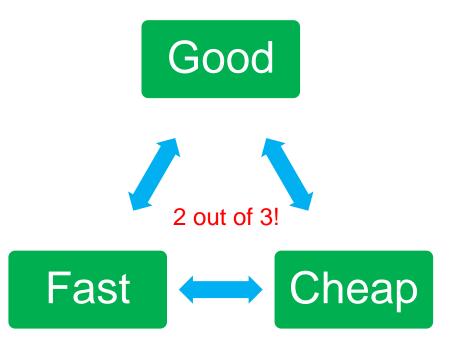
"make, offer, use or sell"



WHEN IN TIME?

Before:

- Investment rounds
- Market entry
- 3-6 mo. prior to closure





WHEN IN DEVELOPMENT?

Lead **Confirmed Lead** Preclinical dev. Clinical dev. scope Intensity

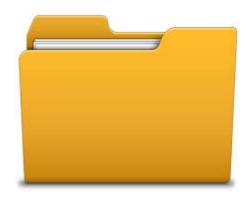


START

Intelligence Collection

- Business Intelligence
 - companies, startups, universities, conferences
 - authors, inventors, applicants
- IP Intelligence
 - Technology landscaping
 - Cited references
 - Citing references

From day 1.



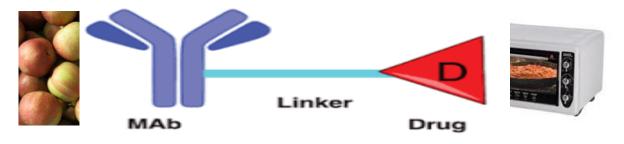
START FOR REAL



Collect initial intelligence



Define the essential elements



- Create/test search profiles for each element
 - Technology/keywords
 - Business/people based

"make, offer, use or sell ..."

SCOPE & INTENSITY



Define Geography & Status

- 1. EP, US, WO: Granted & Applications
- 2. EP, US, WO, JP, CN: Granted & Applications
- 3. EP (DE, GB, FR, NL...) US, WO, JP, CN, KR: Granted & Applications
- 4. EP (DE, GB, FR, NL...) US, WO, JP, CN, KR: Granted & Applications + actual register status

5.

WHERE do you plan to *"make,* offer, use or sell ..."?

ANALYSIS

Selection criteria

- Assume validity of claims
- Interpret claims in the broadest way possible
- When in doubt: keep it in

Define ranking criteria

- Relevant
 - Essential elements are within scope of claim
- Moderately relevant
 - Essential elements are within scope of claim, but claim is broad and may change (application)
- Not relevant
 - Essential element is outside scope of claim or claim contains limitation

What do you plan to *"make, offer,* use or sell …"?





RESULT

Schematic representation of results







Country	EP	US	CN	JP	KR
Essential El	ement 1		•	•	
Family 11	EP\$\$\$\$\$A\$	US\$\$\$\$\$\$\$\$\$			
-		US\$\$\$\$\$B\$			
Essential El	ement 2				
Family 1	EP\$\$\$\$\$B\$	US\$\$\$\$\$B\$		JP\$\$\$\$\$\$B\$	
-	EP\$\$\$\$\$B\$	US\$\$\$\$\$\$\$\$\$		JP\$\$\$\$\$\$\$\$	
	EP\$\$\$\$\$A\$	US\$\$\$\$\$\$\$\$\$		JP\$\$\$\$\$\$\$	
	EP\$\$\$\$\$A\$	US\$\$\$\$\$\$\$\$\$		JP\$\$\$\$\$\$\$	
		US\$\$\$\$\$B\$			
		US\$\$\$\$\$B\$			
		US\$\$\$\$\$B\$		TD400000000	
Family 8	EP\$\$\$\$\$B\$	US\$\$\$\$\$\$\$\$\$		JP\$\$\$\$\$\$\$	
Family 9	EP\$\$\$\$\$A\$	US\$\$\$\$\$\$\$\$A\$		Legend	
Family 17	WO\$\$\$\$\$\$\$A\$			Granted Patent	Patent Application
Family 18	WO\$\$\$\$\$\$\$\$A\$			Relevant	Relevant
Family 26			CN\$\$\$\$\$\$	Moderately relevant	Moderately relevant
Family 45		US\$\$\$\$\$\$\$\$		Not relevant	Not relevant
Family 46		US\$\$\$\$\$\$\$\$		No patent identified	No application identified
Essential El	ement 3			2	
Family 8	EP\$\$\$\$\$A\$	US\$\$\$\$\$\$\$\$			
Family 14		US\$\$\$\$\$\$\$			



NOW WHAT?

- Not relevant \rightarrow Ignore
- Moderately relevant → Monitor the patent (every 6 months)

• Relevant \rightarrow





WHAT TO DO?

- Detailed reanalysis
- Validity check
- If problem persists:
- Avoid the patent
- Find alternatives
- Design around







- Negotiate (cross)license
- Buy
- Opposition
- Third party observations
- Litigation



Thank You

Questions?



The EP&C team

