

■ Topic 11: Importance of Patent Drafting in Innovation and Technology Transfer

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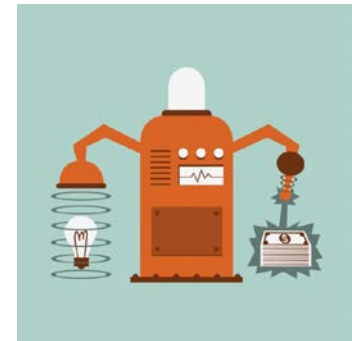
Function of Technology Transfer

- Commercialising technology / IP

- Selling

- Licensing

- Spin-out



- All premised on existence of IP (a monopoly)

Problems

■ Academic mistrust



■ Pressure to publish



■ Lack of funds



■ Lack of commercial interest



■ Insufficient knowledge of prior art

Problems

- Too early in product life-cycle
- Too early in research
 - Later research in priority period often does not add much to that already disclosed



Potential Results

- Desire to patent but hampered by one or more of the problems
- Temptation to self-file or submit cheap (sub-standard) patent application



Pitfalls

- Invalid claims which require extensive amendment
(through expensive prosecution)
- Insufficient disclosure
 - Inability to amend
 - Inutility
- Publication prohibits possibility of re-filing
- Priority application does not support later priority claim
(and publication voids patentability of new features)
 - Problem in EPO especially

Overcoming Pitfalls

- Need a patent specification which has been properly drafted the first time around
- Invention needs to be properly and thoroughly supported by data / research
- Delay filing for as long as possible
- Thoroughly and critically review patent specification

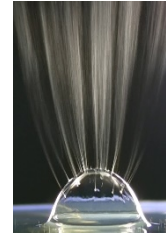


Overcoming Pitfalls

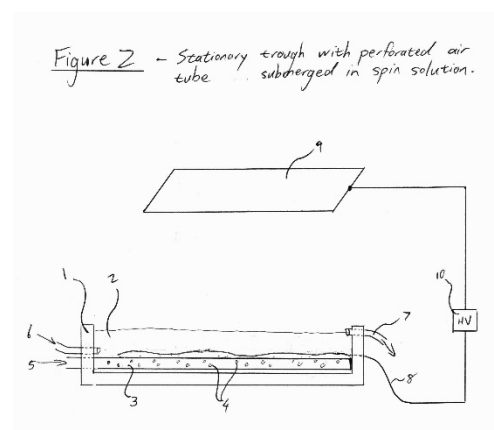
- Try filing priority founding application in examining jurisdiction with a quick and reliable search and examination (UK, US fast-track, IT, NL)
 - Watch out for translation costs
- Can provide reliable idea of patentability
 - Good for potential licensees / purchasers
 - Allows better planning and budgeting

Example

- Doctoral student finds he can electrospin nanofibers from bubbles in a solution rather than using needles.

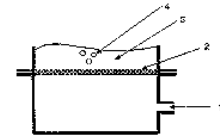


- It's an exciting development so a self-drafted provisional patent application is quickly filed in South Africa
 - The polymer solution used, the bubbling of air to get bubbles, the use of a surfactant to stabilise the bubbles, the electrodes and the electrical potential applied are disclosed



Example

- A subsequent search shows a relevant Japanese patent application filed shortly before the priority date.
- The JP application discloses the same principle but differs in that no surfactant is used to stabilise the bubbles.



- With the PCT deadline looming a specification must be properly prepared which relies on the use of a surfactant but with very little experimental data to show what stabilisation of the bubbles entails and not enough time to do the experiments.
- The result was extended (and expensive) prosecution but fortunately grant in a number of jurisdictions.
- This was also fortunately before the EP tightened up on priority claims.
- Technology superseded shortly thereafter by further development by the same inventor.

Example

- Lessons:
 - Too early in research
 - Not enough data on actual process
 - Process superseded
 - Self-drafting the provisional application meant:
 - a bigger rush to draft the PCT specification with less focus on problem areas than normal; and
 - not being alerted early on to areas needing more supporting data.

Question

- What do you think the process was superseded by?
- How do you make a super stable bubble?

Thank you very much!