



Loughborough
University

Teaching IP to STEM students
Taking the '*valuable resource*' approach

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Context

- Microbiologist – vaccine delivery research
- Been involved in University/NHS and private sector IP creation/management
- Developed courses on IP aimed at all students
 - STEM undergraduates & postgraduates (researchers)



EXPENSIVE
DANGER
FAILURE
THREAT



OPPORTUNITY?

CREATING VALUE / COMPETITIVE ADVANTAGE

Don't just teach what IP is.....

Teach how it can be used to

- add value
- gain a competitive advantage



Type of IP	Some observation when putting together/delivering IP courses for STEM students/researchers
Patents	A word commonly used to describe all type of IP Many engineering, science & tech companies are built on patents
Design rights	Often forgotten – misunderstood Alternative protection for designers/design engineers Typical examples work – we have a Design School with plenty of examples
Copyright	Poorly understood Typical examples that work with STEM students – Code and programming / examples of infringement cases
Trademarks	Student entrepreneurs jump on this before anything else Typical examples that work for STEM students – e.g. Dynamic trademarks featuring motion, multimedia elements, holograms or 3D elements. Example - Sniper Elite computer game

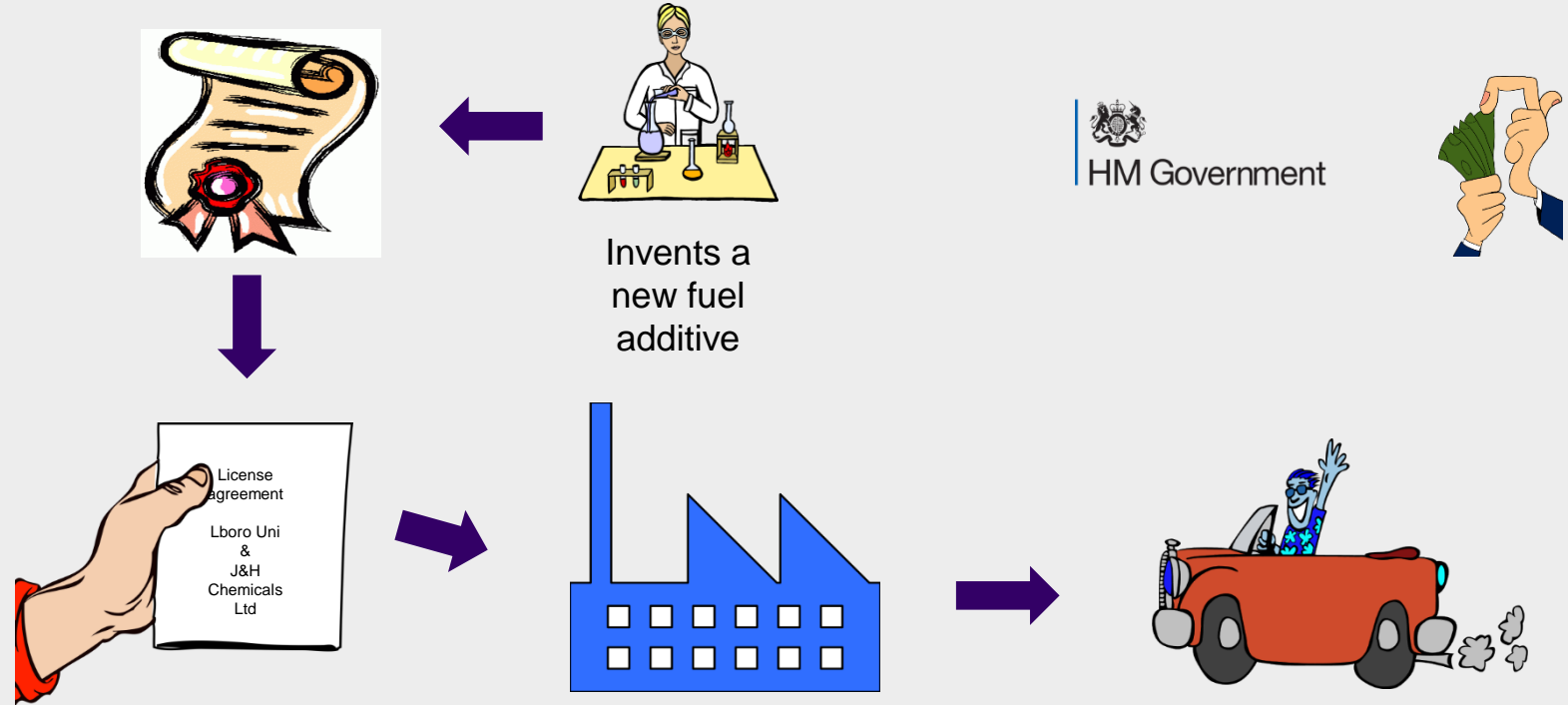
Teaching with props & examples

- Real or fake?
- IP infringement - who is affected and why?
- Searching exercises

Real or fake?



IP infringement - who is affected and why?

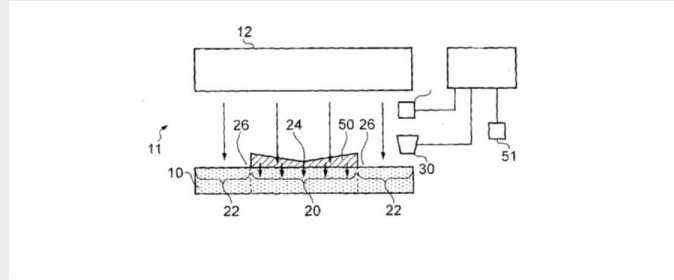


Searching

- Interactive
 - Databases readily accessible
- Works really well for online learning
- Relate to literature searching
- IP searching is especially useful for STEM researchers
 - As not all researchers in HE and industry publish in academic journals

Example searching exercise

- Find Loughborough University's patents
 - how many, stage, what territories do they cover?
- Example - Method and apparatus for combining particulate material
 - 3D printing



Student entrepreneurs

- Tendency to want to protect trademark before anything else
 - Protecting the invention or design is often a second thought!
- Searches must be carried out before we refer students to IP services

Summary

- IP seen as a valuable resource not just a problem (expensive, defensive) – focus on creating value / competitive advantage
- Bring to life with props
 - Using your own university's IP tends to work well
- Searching exercises
 - Direct students to useful websites – e.g. IPO, British Library