

# Creating value with IP - case Neste

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Roberto Castagno - Head of IPR, NESTE

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# Introductions - your speaker today: Roberto Castagno

- Lived in Torino, Trieste, Roma, Lausanne, Tampere.
- Master degree in Electronics Engineering, University of Trieste, Italy, 1993
- PhD in Telecommunications (video signal processing), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, 1998
- Joined Nokia Tampere in 1999
  - 1999-2006: R&D, (multimedia) technology management, business development
  - 2007 - 2020: IPR strategy, IP business development, M&A, technology asset management
- Since April 1<sup>st</sup>, 2020: Head of IPR, Neste.
- 2017- 2023 Lecturer at the TUT Faculty of Industrial Management “Technology and Intellectual Asset Management”
- NEW: consulting / advisory activity
- Hobbies: Railways, running, skiing, languages (you can use  with me)

# Agenda

- How does IPR create value for NESTE
- IP Strategy: the Logistics of Ideas
- Technology-focused IP
  - Portfolio development
  - Risk management





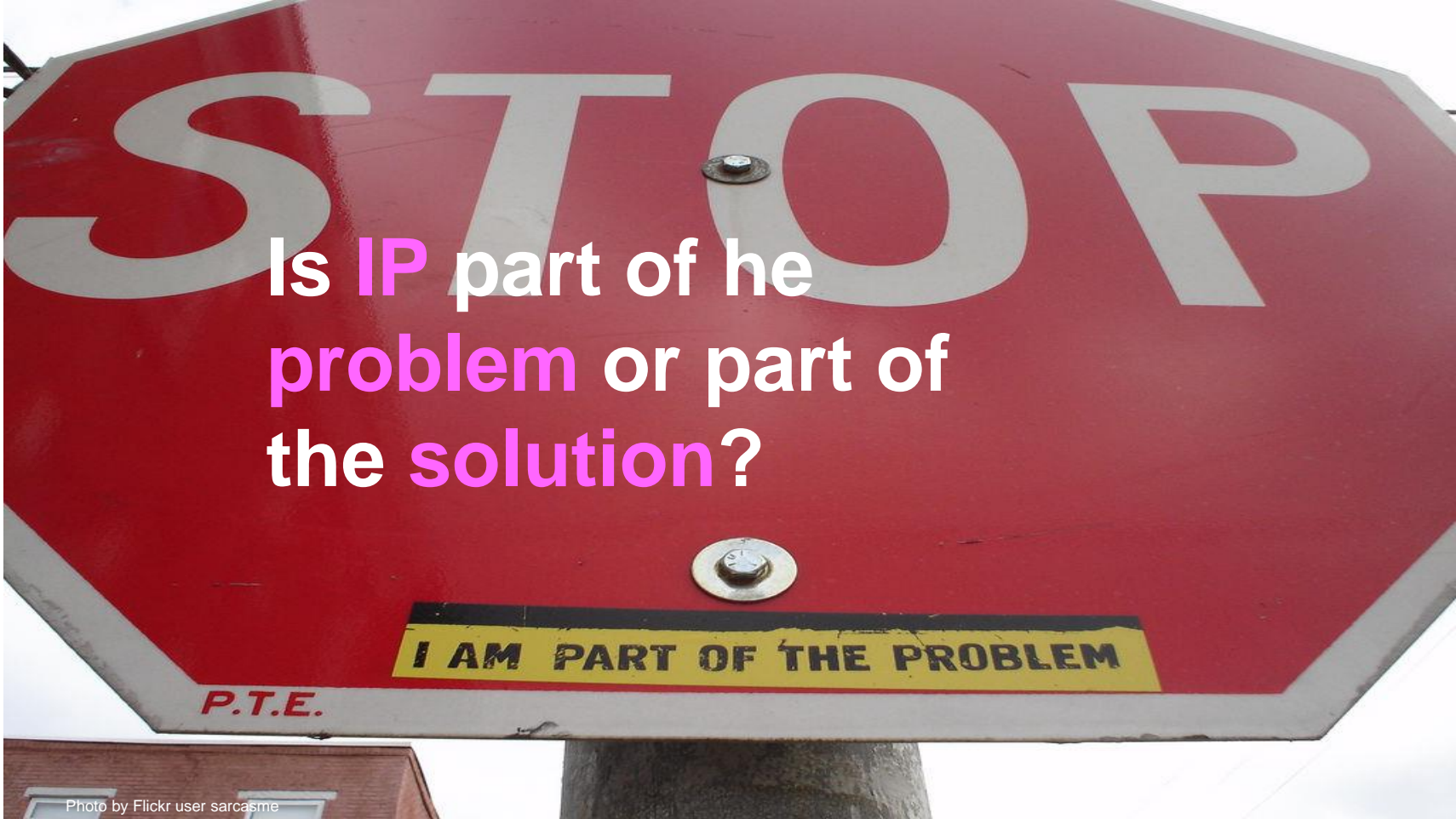
“Protect  
our

“Check that we are inventions”  
covered and safe”

Do we have enough  
inventions?

“Sustainable IPR  
position”

Flickr user Hans Splinter - CC-BY-ND 2.0 <https://www.flickr.com/photos/archeon/1083226037/>

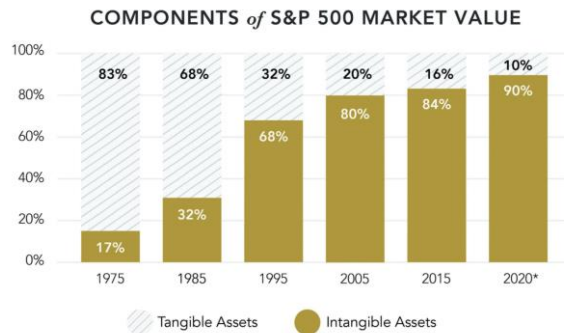


Is **IP** part of the  
problem or part of  
the solution?

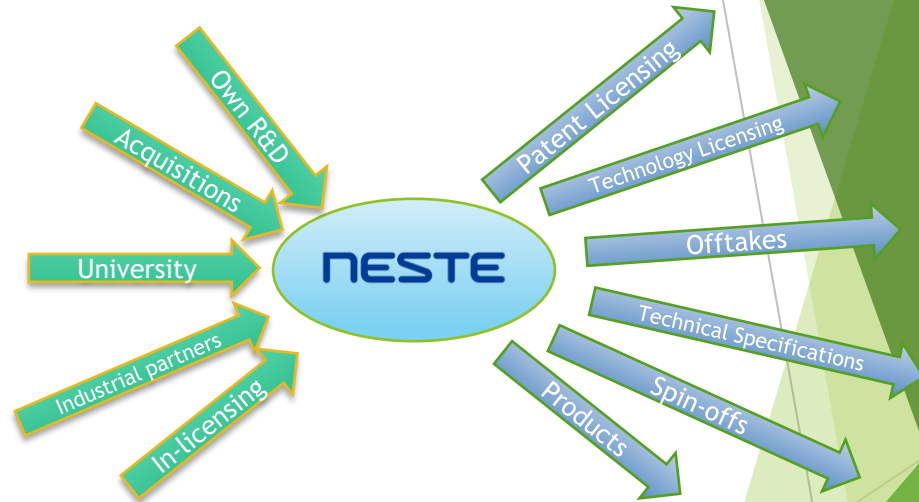
P.T.E.

Photo by Flickr user sarcasme

# IP secures Freedom to Operate in an increasingly complex and hybrid value chain



SOURCE: OCEAN TOMO, LLC INTANGIBLE ASSET MARKET VALUE STUDY, 2020  
\*INTERIM STUDY UPDATE AS OF 7/1/2020



**Freedom to Operate** is not just about “staying out of trouble”. It’s about opening up a broader range of opportunities to realize the value of NESTE’s technology assets.





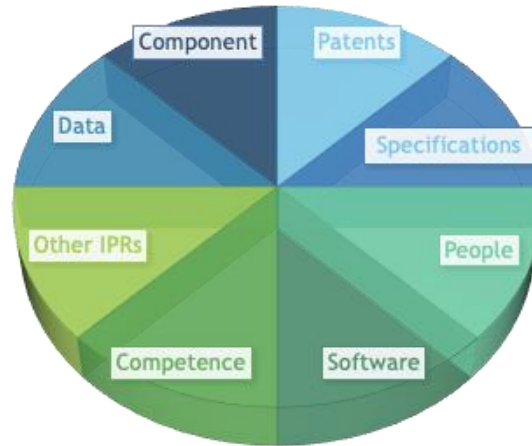
Increasingly complex,  
hybrid value chains





**IPR: from protection to control**

# Technology Asset

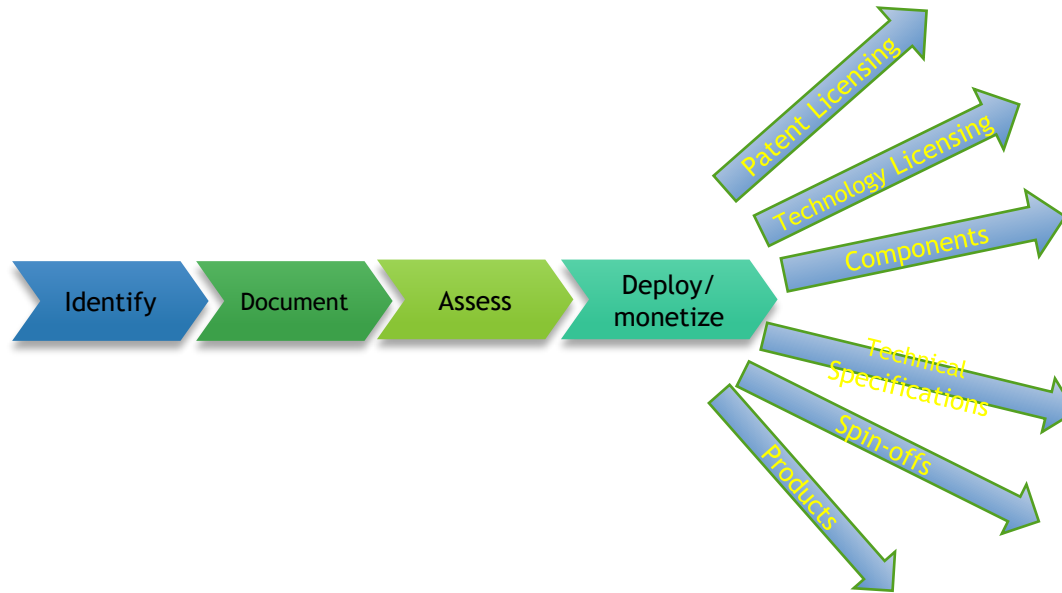


# Technology assets

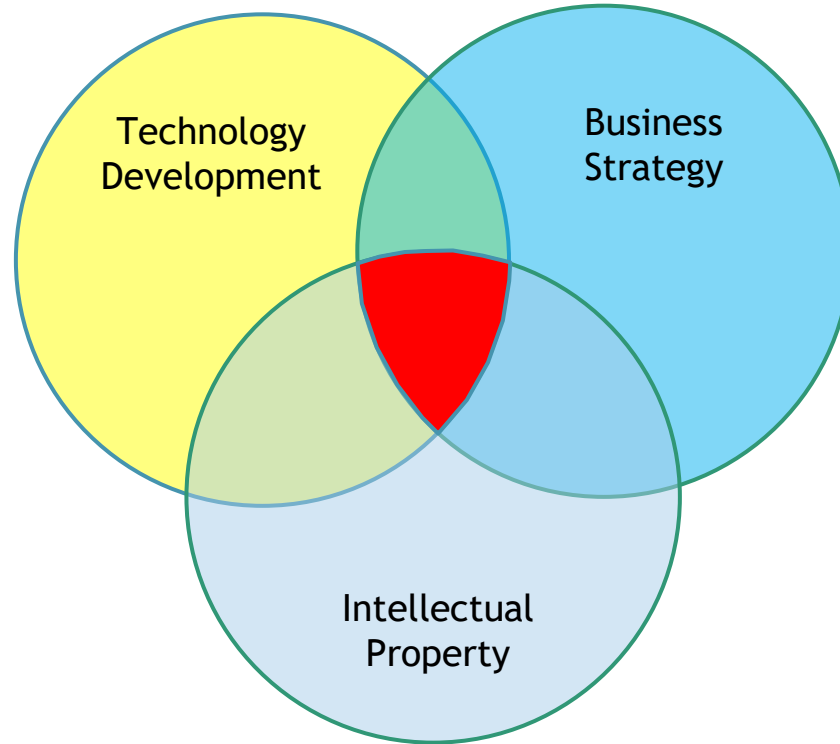
A Technology Asset is an abstraction that regroups the many instantiations of “technology”:

- Data (e.g. sensor data, medical records etc)
- Software that implements it
- Patents and other IPR that describe it and establish ownership
- Competence and know-how
- People
- Specifications and documentation

# Technology Asset Management Lifecycle



Patents describe and establish legal **control** on technology assets



## 15



A brown Crocs clog shoe with a strap and multiple ventilation holes. The shoe is shown from a side profile, highlighting its classic design and the textured sole.





# The IP function is Neste's “Logistics of Innovation”



We provide **access** and establish legal **control** on the key **technology assets** that NESTE needs in order to achieve the desired **strategic positioning**.

# Neste's IPR Strategy is business-driven

- Assess how IPR can help BU's and BP's achieve their desired **strategic positioning** for their own business priorities
  - Exclusivity
  - Collaboration
  - Sharing/market building
  - Possible “standardization” and patent pooling.
- Identify **core technology assets** that need to be acquired, developed and controlled in order to achieve that positioning.
- Formulate and implement a **IPR patent filing strategy** that captures the newly developed core technology assets
  - Patent filing as a continuous “diary of the innovation journey”
- Utilize IPR analysis for the **assessment of the business landscape**
  - Competitors
  - Partners
  - Possible M&A targets

# Mastering the Logistics of Ideas



IPR Strategy at Neste: we deploy it by working together on concrete cases and projects.



“We have a strategic plan.  
It’s called *doing things*”

Herb Kelleher,  
Founder and CEO, Southwest Airlines



# What is a patent?

- A patent gives its holder an exclusive right to prevent others from
  - making
  - selling
  - using
- ....the patented invention

A patent is a **NEGATIVE RIGHT**



# A patent is an **offensive** weapon



A patent is not a shield



A patent is a **spear**!

# Preliminary, disappointing conclusions

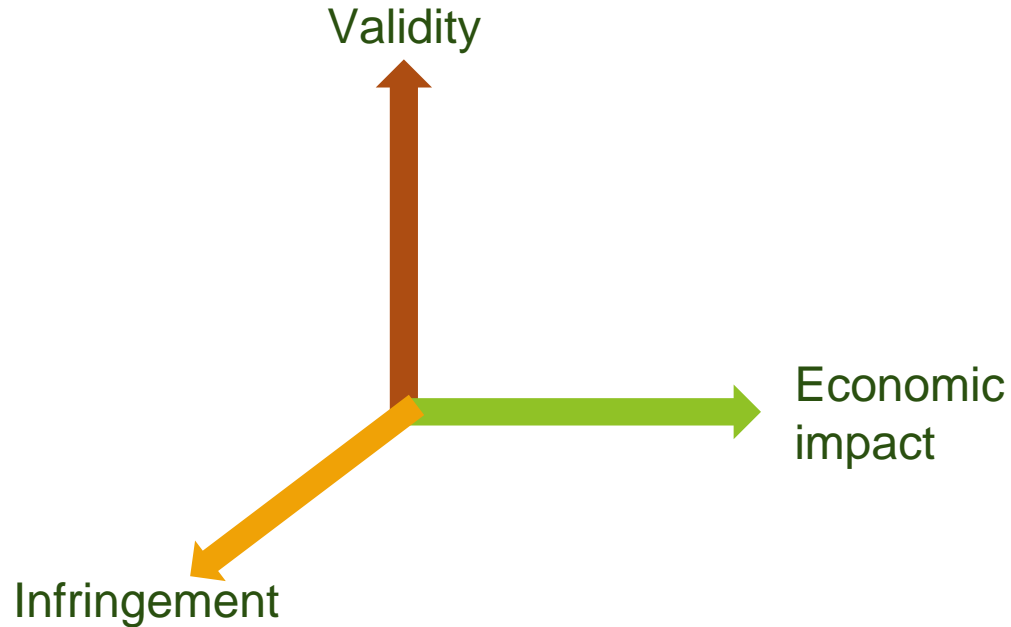
- ▶ A patent is not a defensive weapon.
  - ▶ Remember: “the patent is a sword, not a shield”
- ▶ A patent is not enough to be able to manufacture and sell a product that incorporates your own invention.



So: what is a valuable patent, \*really\* ??



# When is a patent valuable?

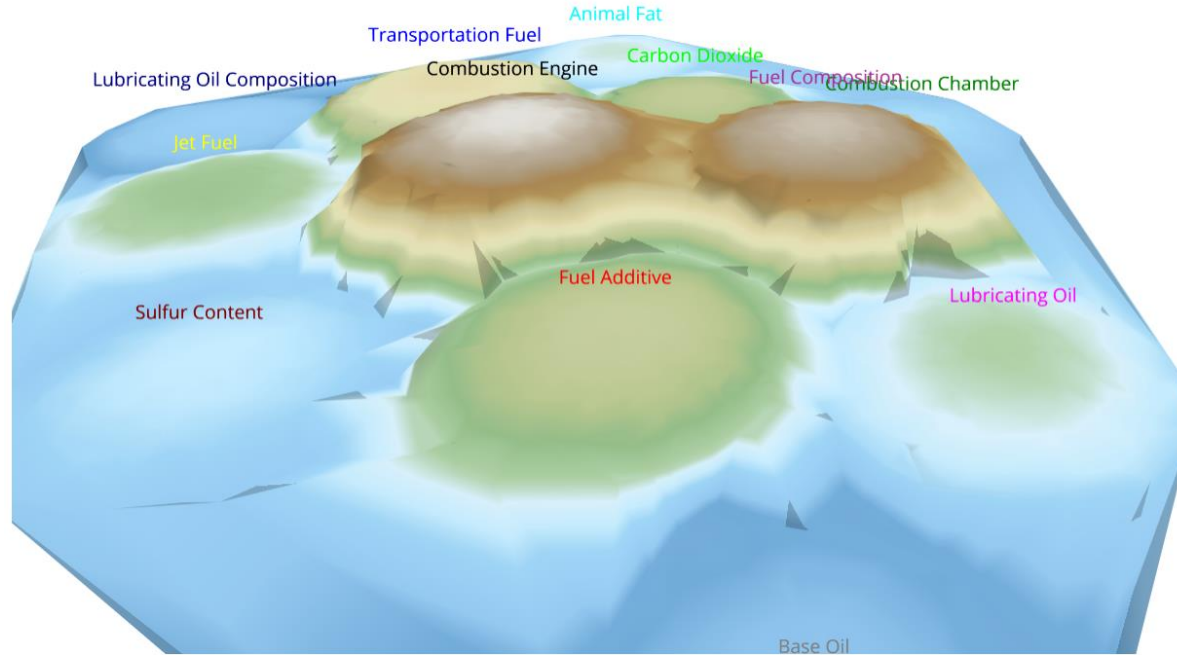


A valuable patent need to “cover” your competitor’s product in a commercially impactful way

**Q:** *How do I know which patent will impact somebody else's future products?*

**A:** *You cannot know, but you can improve your statistical chances, based on your business insight.*

Our technology choices are driven by business intent, not by occupations of empty spaces.



# Where do you want to spend a family beach holiday ?



# Identifying a technology asset is like writing a scientific paper

Ask yourself these five key questions

*(courtesy of my PhD advisor Prof Murat Kunt)*

1. What is the problem
2. How have others solved it until now
3. Why the other solutions are not good enough and why is my solution better
4. What my solution exactly is
5. How can my solution be used in practice

# Identifying a technology asset is like writing a scientific paper

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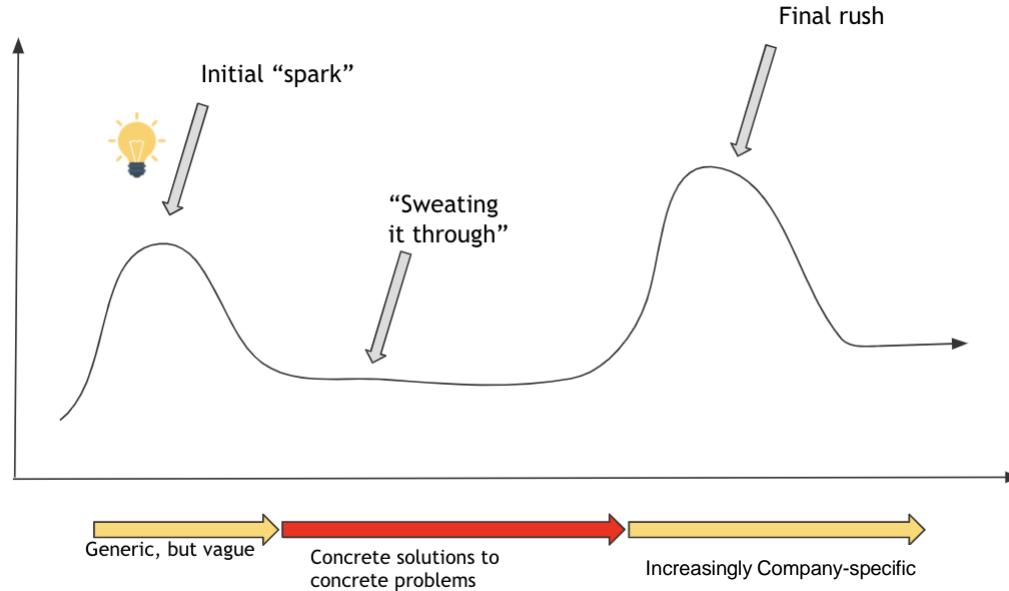
1. What is the problem (**“Field of the invention”**)
2. How have others solved it until now (**“Prior art”**)
3. Why the other solutions are not good enough and why is my solution better (**“Summary of the invention”**)
4. What my solution exactly is (**“Claims”**)
5. How can my solution be used in practice (**“Embodiments”**)

Having credible answers to these question is not a patenting matter.  
It is **THE** business matter

# Patenting: the diary of your innovation journey

- ▶ *“We do not have time to do patenting. We are too busy getting the products out”*
- ▶ Do not delay your filings until the last minute!
  - ▶ Late filings that narrowly cover your final product will likely capture years of your unique constraints
  - ▶ File also the solutions that you do not implement
    - ▶ The one you discard today might become mainstream tomorrow
  - ▶ The technology asset is much more than just the final solution, and your patenting strategy should reflect that
- ▶ When you are a leader, your key advantage is that you are the first to encounter the problem, not just the first to devise the solution.

# The intermediate incubation period is the most prolific for patenting





# Patenting is not just looking forward, but also looking back





# Technology landscaping and risk assessment

- ▶ Q: “Can you please tell me if by entering the market with this product I might infringe some patent?”
- ▶ A: “Yes”.

**You must be diligent:  
understand and respect third party IPR**

# Technology landscaping and risk assessment

- ▶ Think in terms of technology and business landscaping, rather than patent landscaping
- ▶ Patents are a fundamental element, but the analysis is part of the broader business understanding
- ▶ Who are your competitors, how are they positioned and how are you going to be positioned against them
- ▶ What are the key technology control points
- ▶ What are their and your technology asset that bring value to the business, and how are they reflected in the patent portfolio.

# Technology landscaping and risk assessment

- ▶ The patent portfolio analysis can provide:
  - ▶ Support and validation of the business hypothesis (e.g. “main competitors are A,B,C, but C has clearly the most credible portfolio”).
  - ▶ Help spot some “unexpected” player from e.g. parallel industries.
- ▶ The business team should not expect the bulk analysis of 10K’s of patents to tell them who are their competitors.

The starting point of 3<sup>rd</sup> party patent analysis and landscaping should be a fairly solid understanding of the desired technology architecture

IPRs are not just about building fences.  
IPRs are about building bridges.



THANK YOU!