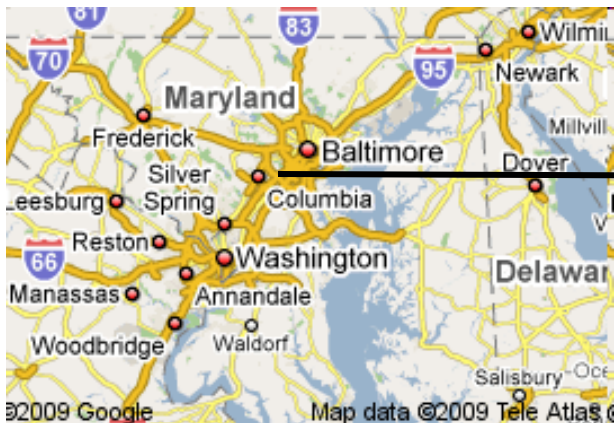


Building and Managing IP Portfolio

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Advanced Fluidics LLC &
ET Cube International

WIPO EIE Workshop II
Colombo, Sri Lanka
Sept. 17-21, 2018



OUTLINE

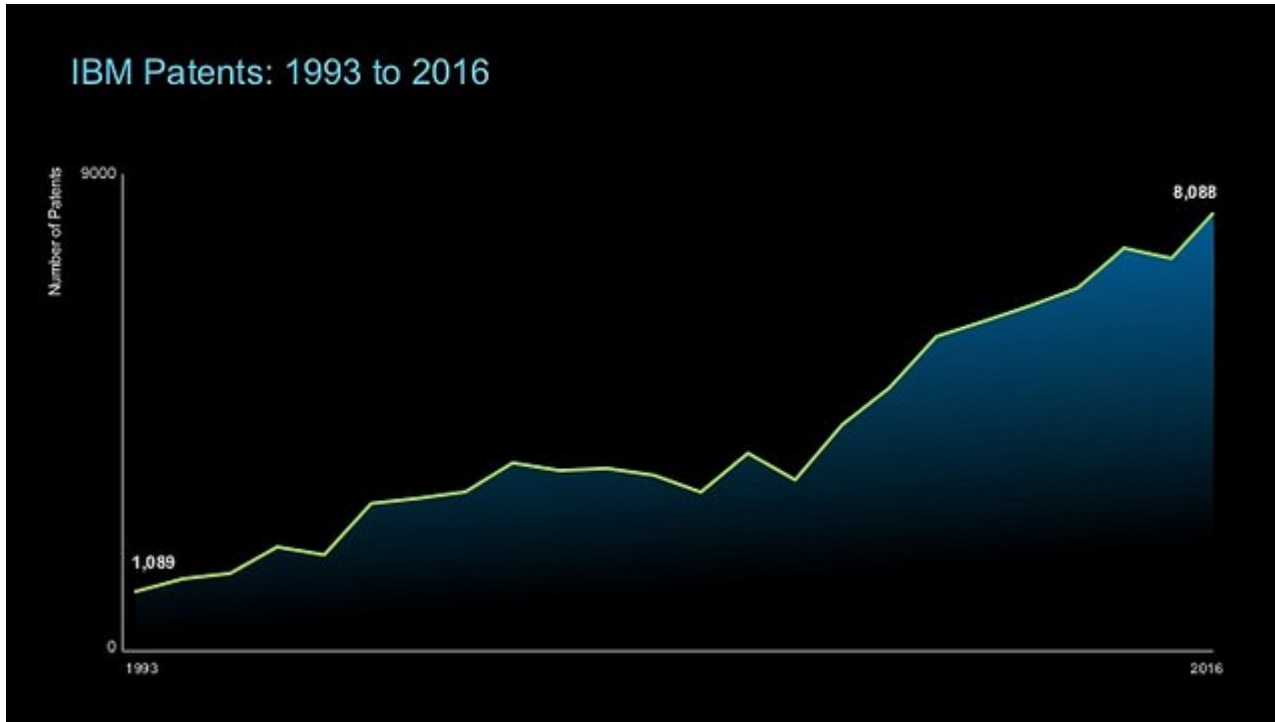
Creating Exploitable IP

PatentScape and TechScape

Managing Risks

Discussion and Conclusion

Yearly Patents for Large Industry



<https://medium.com/@IBMResearch/why-we-patent-66ce5a986331>

Creating Exploitable IP

Industry Patent strategies: Offensive and Defensive

Offensive	Defensive
Block competitors from gaining entry into your technology and business sector	Only defend your business area
File patents for all reasonable inventions in that field of technology	File for patents only necessary for your business
Create aggregated patent portfolio for licensing or sale	Not interested in selling patents
Patent trolls??	

University Strategy

Exploitable IP

- We cannot afford industry-style offensive or defensive strategies
- Changing IP trends: It is not only patents but also copyrights (software + others), designs, innovations, Apps, Clinical testing, Educational methods and Training tools.

University Strategy

Inventions: Develop a strategy for marketing highest value-added IP

Invention should have (near-term) application (in sight)

Higher TRL for a strong patent

Market size

Potential licensing path – contacts and relationships with the right industry

Creating a IP Portfolio

Creating a **portfolio of related patents and other IP** will provide a better package for marketing

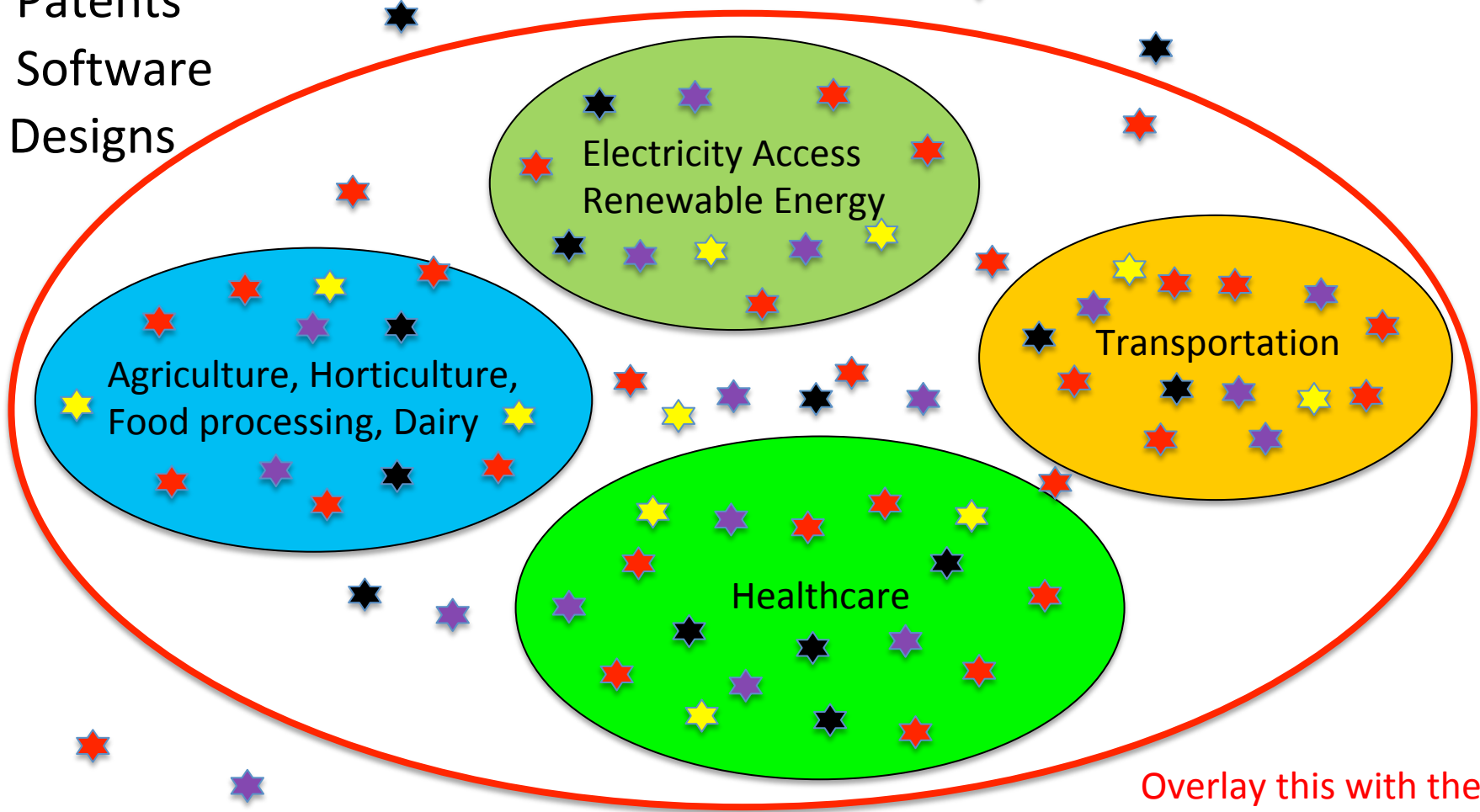
Example: Chemical compound + method of extraction + optimized processing technology + process control methods + possible reactions + catalysts + applications + software algorithms (?) + designs

May need lot of interdisciplinary work

Technology-need mapping

- ★ Patents
- ★ Software
- ★ Designs

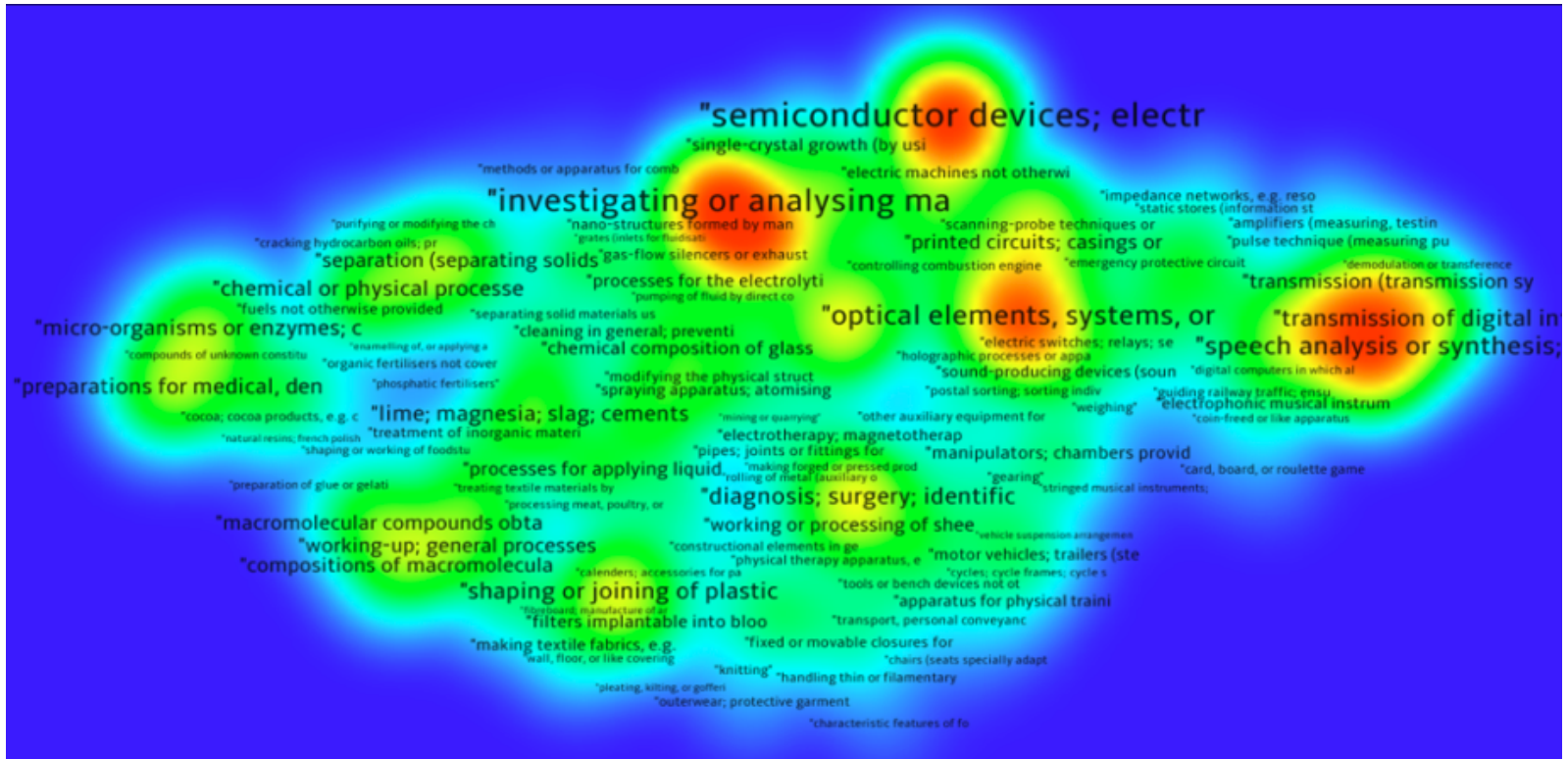
★ Other IP



Note: Possible common IP to different sectors!

Overlay this with the University IP Map

Patent Portfolio Mapping



Patent portfolio map of Franhauffer Institute (<https://heronsscientific.com>)

More continuous spectrum?

Managing IP Costs

Cannot patent all inventions received – only demand-based?

Pre-patent marketing of inventions - technology briefs

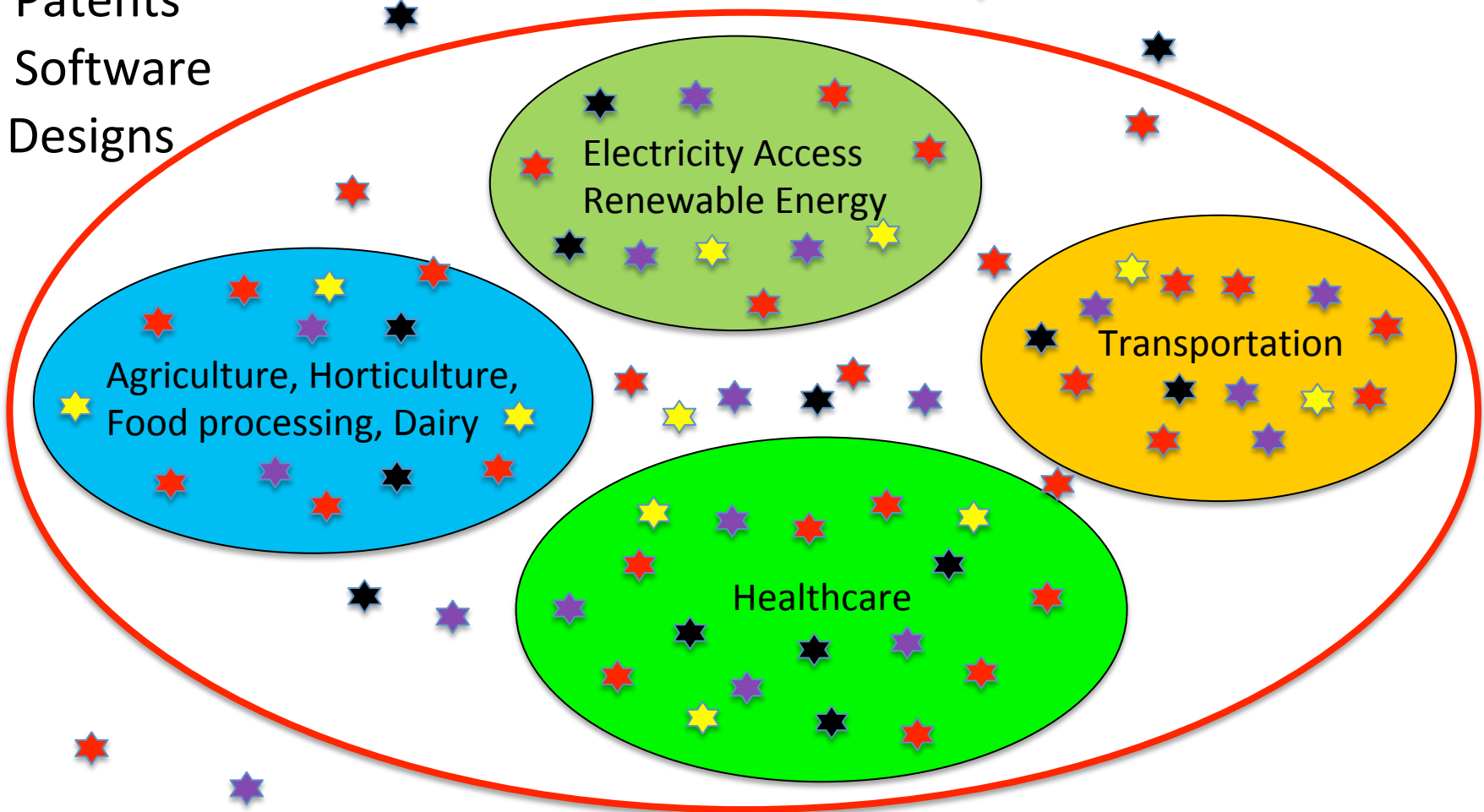
(Should you publish rest of the inventions so that others cannot patent? – this may help increase the University reputation and draw attention from Industry in the future)

Protect by copyrights (and other forms of IP??) – some challenges of copyrighting??

Managing the “un-groupables”

- ★ Patents
- ★ Software
- ★ Designs

★ Other IP



Maybe a high-value IP? Should we get a second opinion?

Moving up the Technology Level

Invest seed funding to advance the technology to a stage where it can be marketed – industry “needs solutions, not technologies”

Encourage start-ups from University – they can act as technology developers from external funding and be bought out by large companies down the road.

IP Donations

Solicit and manage IP donations

Companies get tax benefits by patent donation

Companies donate patents or do free-licensing

(Patent maintenance fees may also be donated)

IP Donation by Companies

Company	What was donated	Received by	Year
Dupont	257 Patents	DEDO	2007
Dupont	Patents for a new papermaking technology	University of Maine	2001
Dupont	\$64 Million worth of patents	Penn State U. of Iowa VPI	1999
Boeing	Patents for Medical applications	U. Penn	2001
Proctor and Gamble	196 patents	Vanderbilt	2000
Shell	> \$83.5 Million	U. Texas	

Donation by Free-Licensing

Company	What was licensed	Received by
Syngenta	technology to produce vitamin A enriched rice	Golden Rice Patent Pool
Boehringer Ingelheim	Granted free-licenses of patents covering a HIV drug for a period of 5 years to Aspen Pharmacare	Aspen (SA Company)
Novartis, Roche	Do not file or enforce patents in least developed countries	

Watch your own IP use

Universities should also be aware of IP use and infringement

Get permission whenever it is necessary – this establishes trust and good reputation and may prevent punitive damages!

Managing Risks

What are the risks involved in IP management?

Premature disclosures

Licensing to the wrong company

Under-valuation of technology

Non-profitable and/or unworkable deals

Exclusive license deals with no returns - **should the TTO still license such IP??**

Summary

Some action items for TTO to **build and manage** IP portfolio

“Technology Mapping”

Greater Risk taking – get University approval for this – how do you share the risk with the company??

Develop seed-funds for further development of technology – helps broader claims in patents

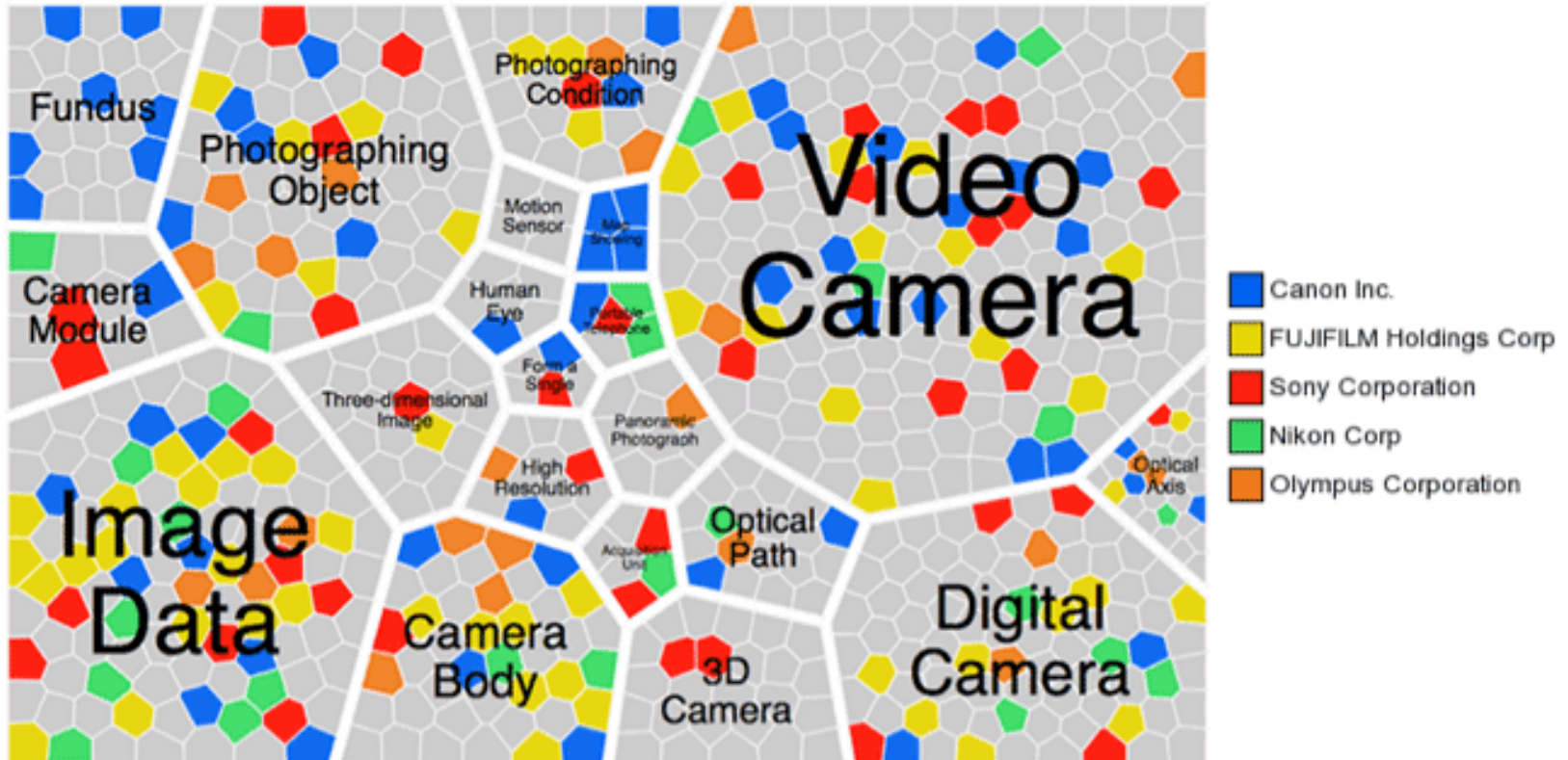
Encourage University Start-ups

Solicit and manage IP donations

Thank You!

Creating a “PatentScape”

(Innography.com)



<https://www.innography.com/>

“PatentScapes” or “TechScapes” for Health/Agricultural Sciences?

