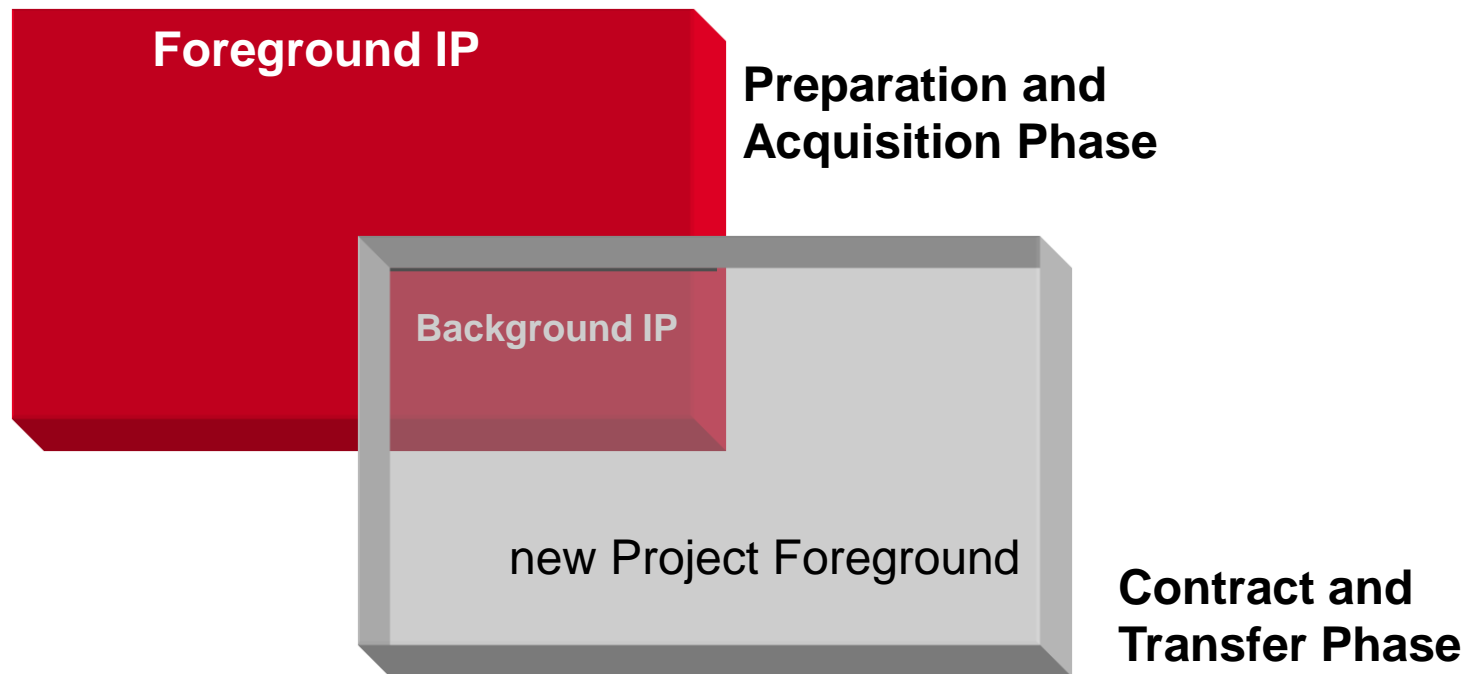

Management of IP in R&D Cooperations for successful commercialization

DIT 4th Strategic Forum
WAITRO 20th Biennial Congress & General
Assembly
Dubai, Emirates, October 11-14, 2010

Dr. Lorenz Kaiser
Division Director Legal Affairs and Contracts
Fraunhofer Headquarter Munich



The Foreground in the R&D Phase is the Background in the Commercialization Phase



Functions of IP in a Research Organization depending on the form of Cooperation

IP as asset for securing a position in technology

IP as patent manifesting market power

IP as acquisition instrument for business

IP as defending instrument against competitors

IP as basis for licence revenues

IP as incentive and motivation of staff

IP in the R&D Phase of R&D- Projects

Know-how Protection in the Preparation Phase

Naive trust in the confidentiality obligation of the partner

Missing factual control mechanisms of own Know-how

Unprotected exchange of Know-how in the preparation phase



The Use of Non Disclosure Agreements for Damage Compensation in Case of Breach of confidentiality??

- **Most Legal Systems do not compensate the real loss in case of breach of confidentiality.**
- **Disadvantage in competition cannot be figured out**
- **No legislation about this question available (at least not in Germany)**

Consequence

**Find additional effective technical protection of your IP
esp. protect electronic data against espionage**

Essential Measures for Know-how Protection

Technical:

Control **electronic data**, separate internal server recommended with **reduced access to sensitive data**

Remove Mobiles and **Memory Sticks** out of the meetings

Install a **person responsible for Know-how protection**

Legal:

Confidentiality Agreements with **satisfactory rules**

Check rules of **labour contracts** about confidentiality clauses, also **"for the time after"**

IP - Professionals for Contract-Negotiations

Check, observe and complete patent portfolio

JOSEPH VON FRAUNHOFER-AWARD 2009



Coining by blast with explosive agents to create holographic structures in steel as protection against counterfeiting expensive metal spare parts of machines and automobile parts

Impact of IP in Different Forms of Cooperation

Internal IP Management and Licensing

A specific Portfolio-Technique tries to help to identify patent utilization Opportunities of Fraunhofer institutes

Patent-Cluster

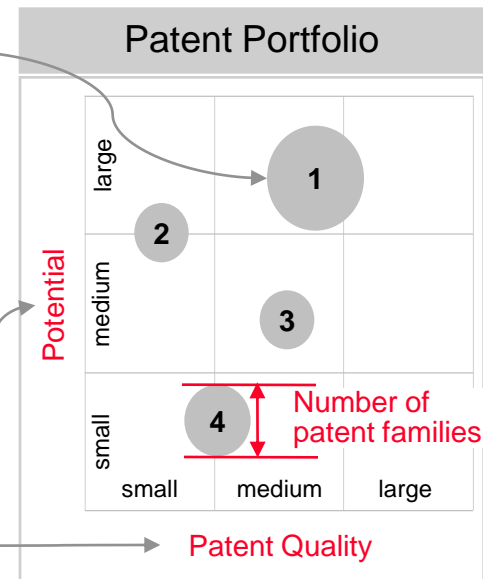
Cluster-Patents protect inventions

- targeting a common product spectrum
- based on the same technology / approach

Potential = market opportunities:

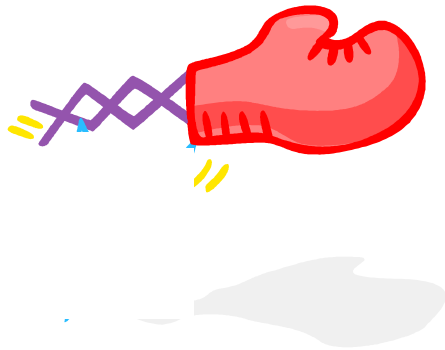
Cannot be influenced by the institute

Patent Quality: Can be influenced by the institute



Research/Market

Push



Pull



Unusual application of a process patent with a chance for a new and large market?

.....Sausage nonfat - you never know.....

Dipl.-Ing. Christian Zacherl, Dr.-Ing. Peter Eisner, Dr. Klaus Müller (v.l.n.r.)

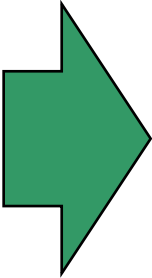


development of a process to introduce spices into meat without the flavour carrier ,fat‘

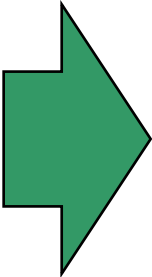
new company even introduces Omega 3 fat-acids - the sausage as medication

Licensing Problem: The Development Gap

In most sectors, companies will only license fully developed technologies this especially true in:

- 
- engineering
 - electronics
 - physical sciences

> patent protection phase is 20 years



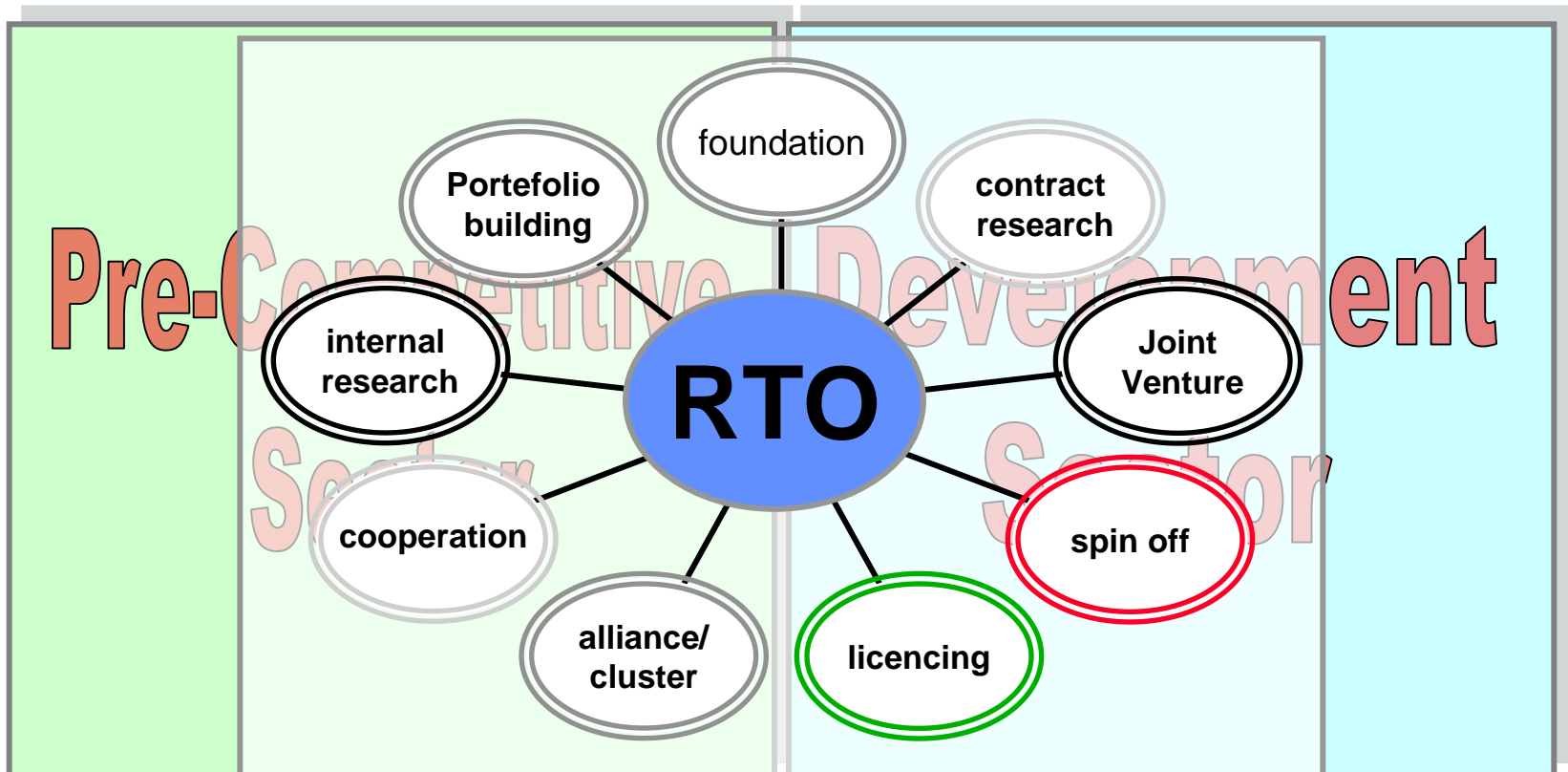
Life Science is an exception. Projects start later;
Less time for exploitation caused by longer development
and clinical test series

> patent protection phase can be prolonged to 25 years

Impact of IP in Different Forms of Cooperation

Contracting (vertical and horizontal cooperation)

Forms of Cooperation in a Reesearch and Technology Organization (RTO) as Knowledge Hub



Success and Failure close together

The Different Applications of Service-Robots

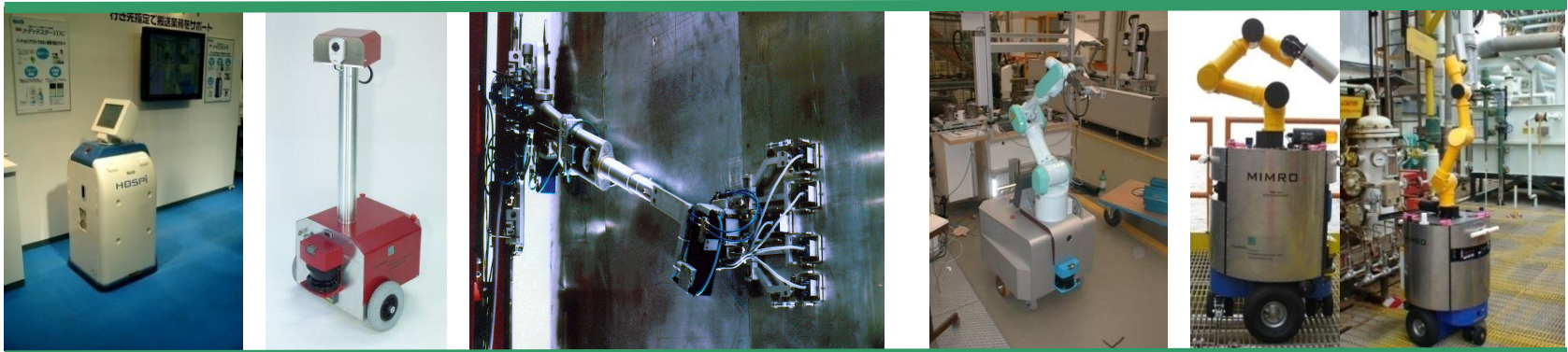


Entertainment / Info / Guidance

Housekeeping

Windowcleaning

Floorcleaning



Hospital

Guarding

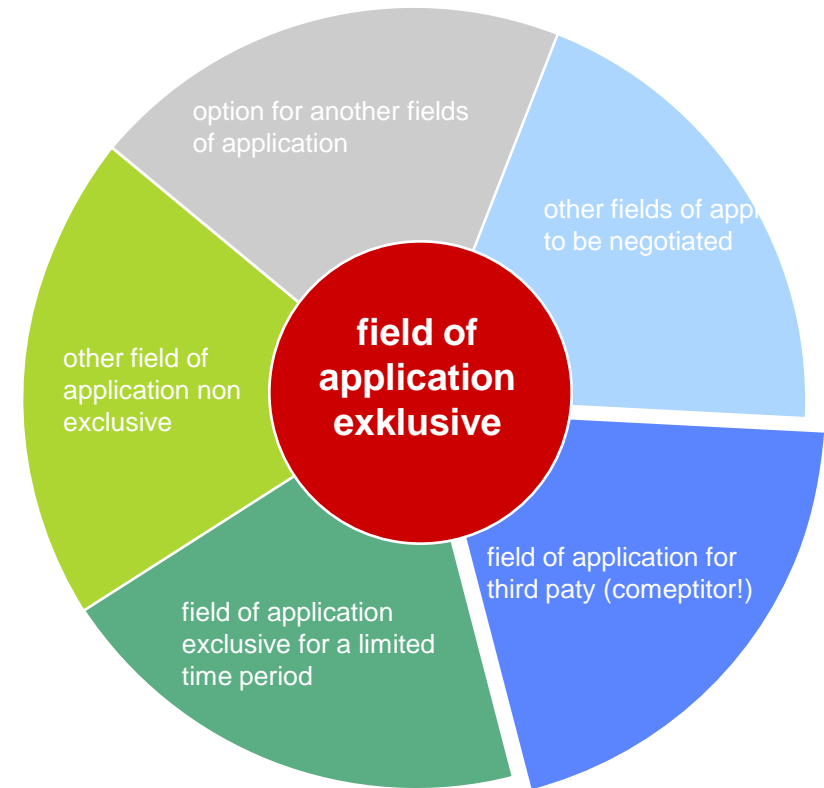
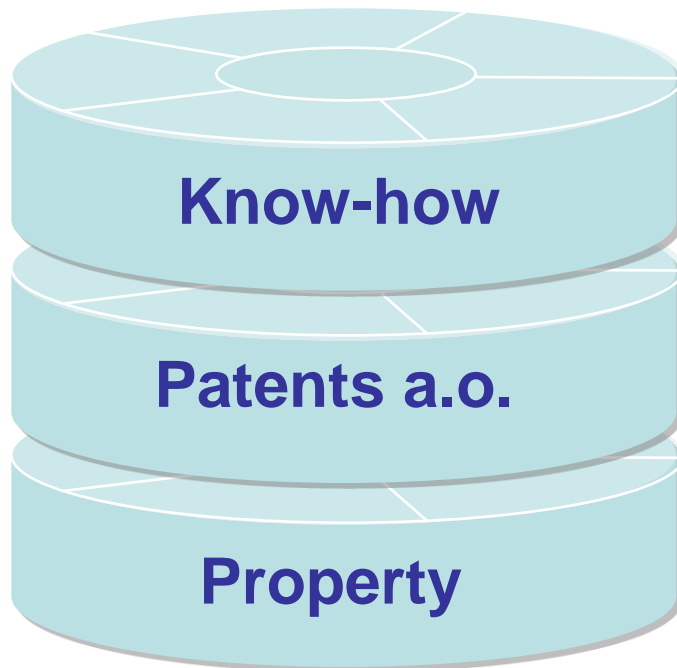
Maintenance and
Inspection

Manufacturing

Inspection of chemical
facilities

The "Rights-to-the-Results-Problem of Contract Research

Rights to the Results



usual industry position: overall property of IP in contract research

The Enforcement Problem in R&D Contracts

Client: guarantee for no conflicting rights in the commercialisation phase

R&D Performer: No guarantee, but hold harmless against third party claims



A smart way to charge up



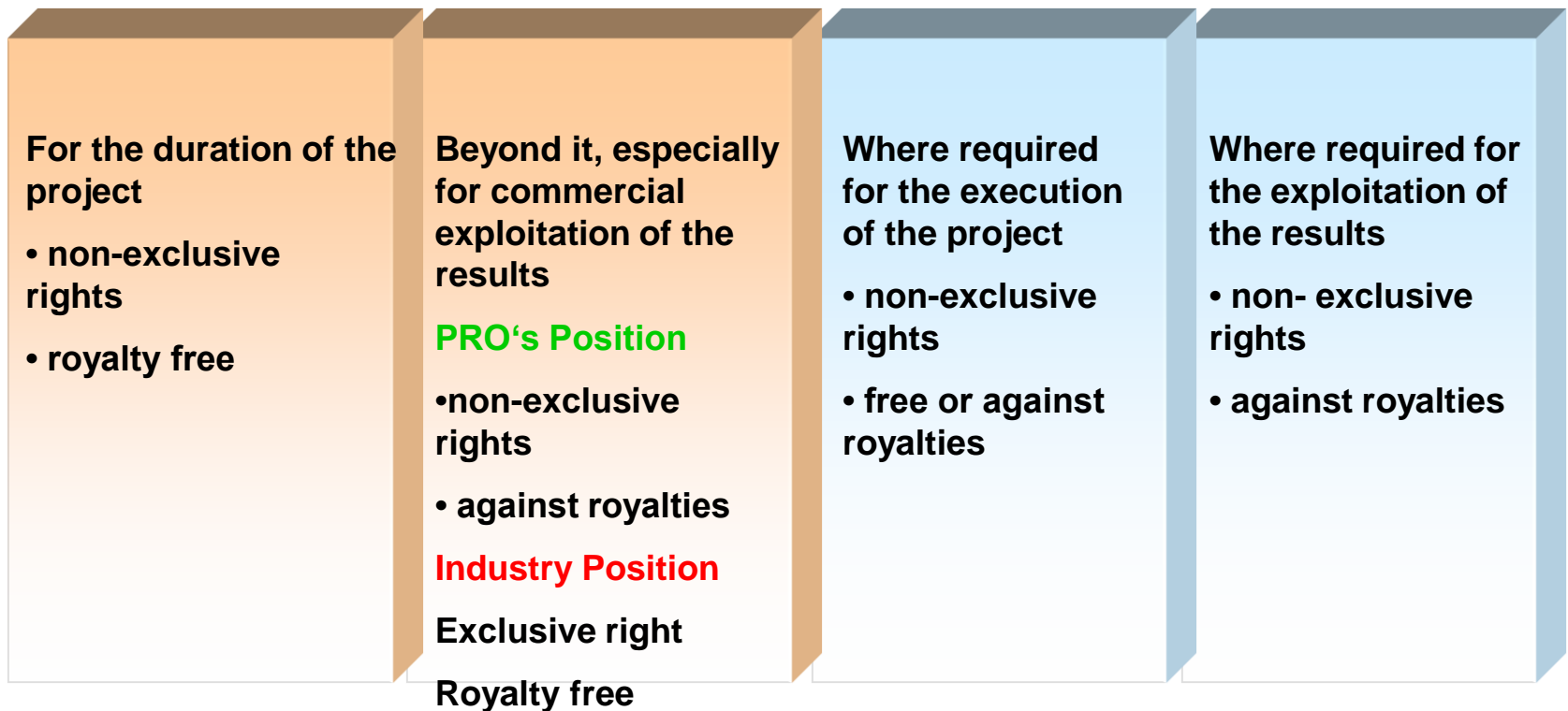
Electromobility makes sense only if car batteries are charged using electricity from renewable energy sources. But the supply of green electricity is not always adequate. An intelligent charging station can help, by adapting the recharging times to suit energy supply and network capacity.

© Fraunhofer ISE

Rights of Use in Collaborative (and funded) Research

Foreground

Background



In brief

**Challenges of Strategic Alliances
and Joint Ventures in R&D**

Strategic Alliances

Negotiations about

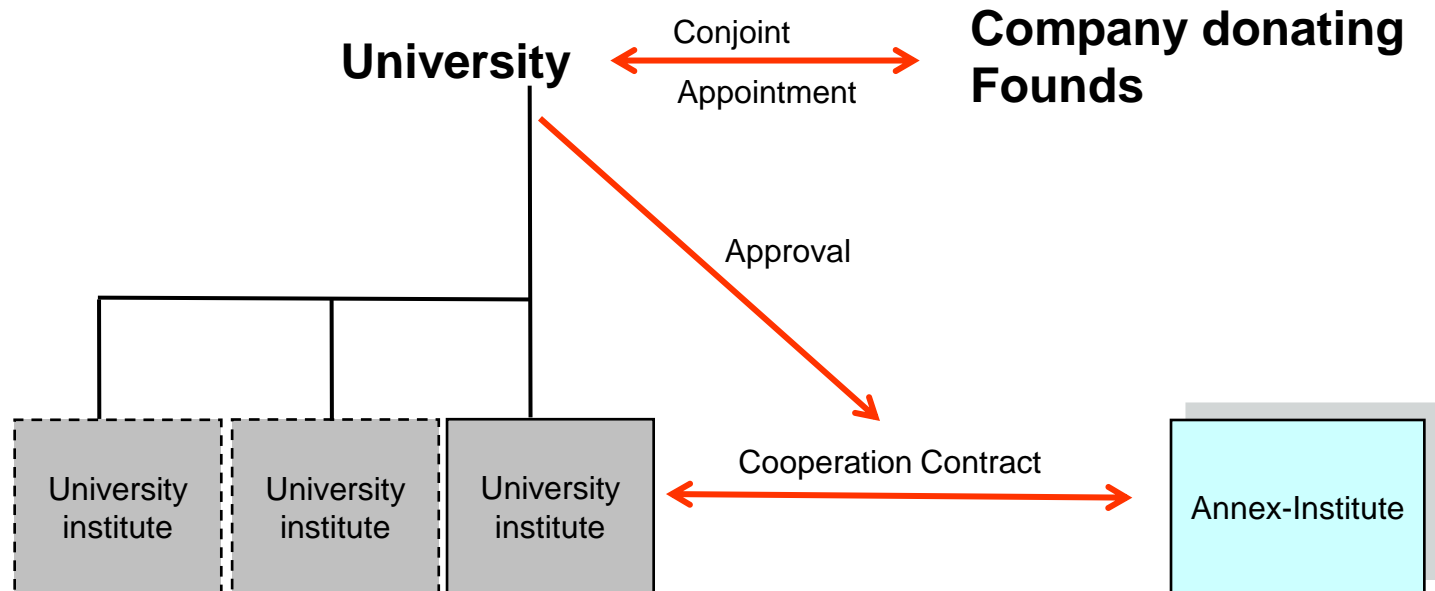
- IP Pools - question of costs
- joint ownership - how to exploit
- industry exploitation - sharing the revenues
- joint development and/or exploitation company

Legal problems

- EU - Competition law "cross subzidation"
- Non for profit - Status of PRO's
- New long binding models : NoE, JTI, with different exploitation schemes
- Balancing the interests of stakeholders is often extremely difficult

University Cooperation Model:

"Annex"-Institut (Research Institute associated with a University)



IP-Scheme "Annex-Institute"

excellent basis for creating joint IP competence, Research and industry cooperation under the roof of the university

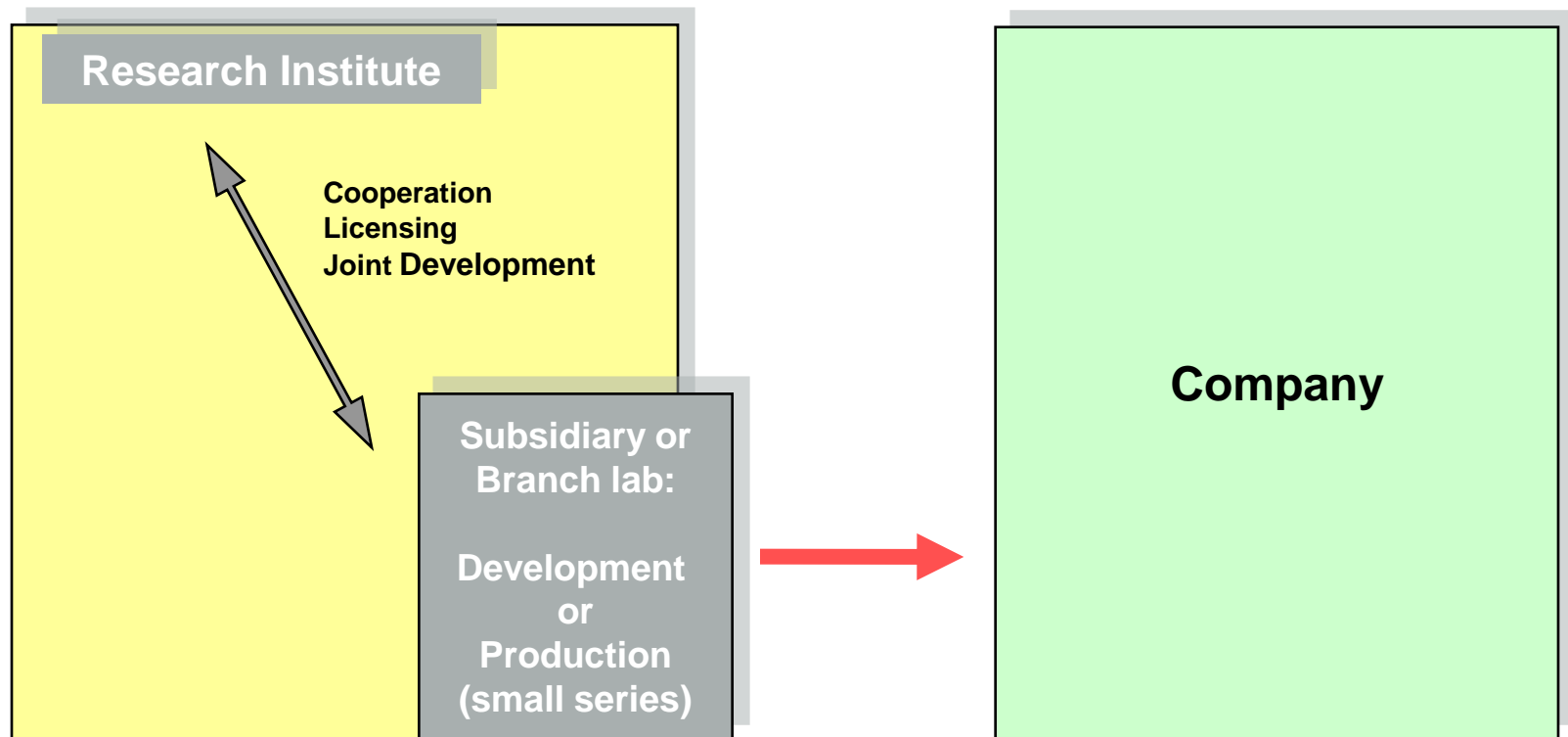
IP-schemes enable direct transfer

Annex-Institute is directly involved in creating and exploiting IP

Transfer of IP through brains, university staff may be hired by company

Neighbour institutes have chance to increase knowledge base

Cooperation Model "Spin In"

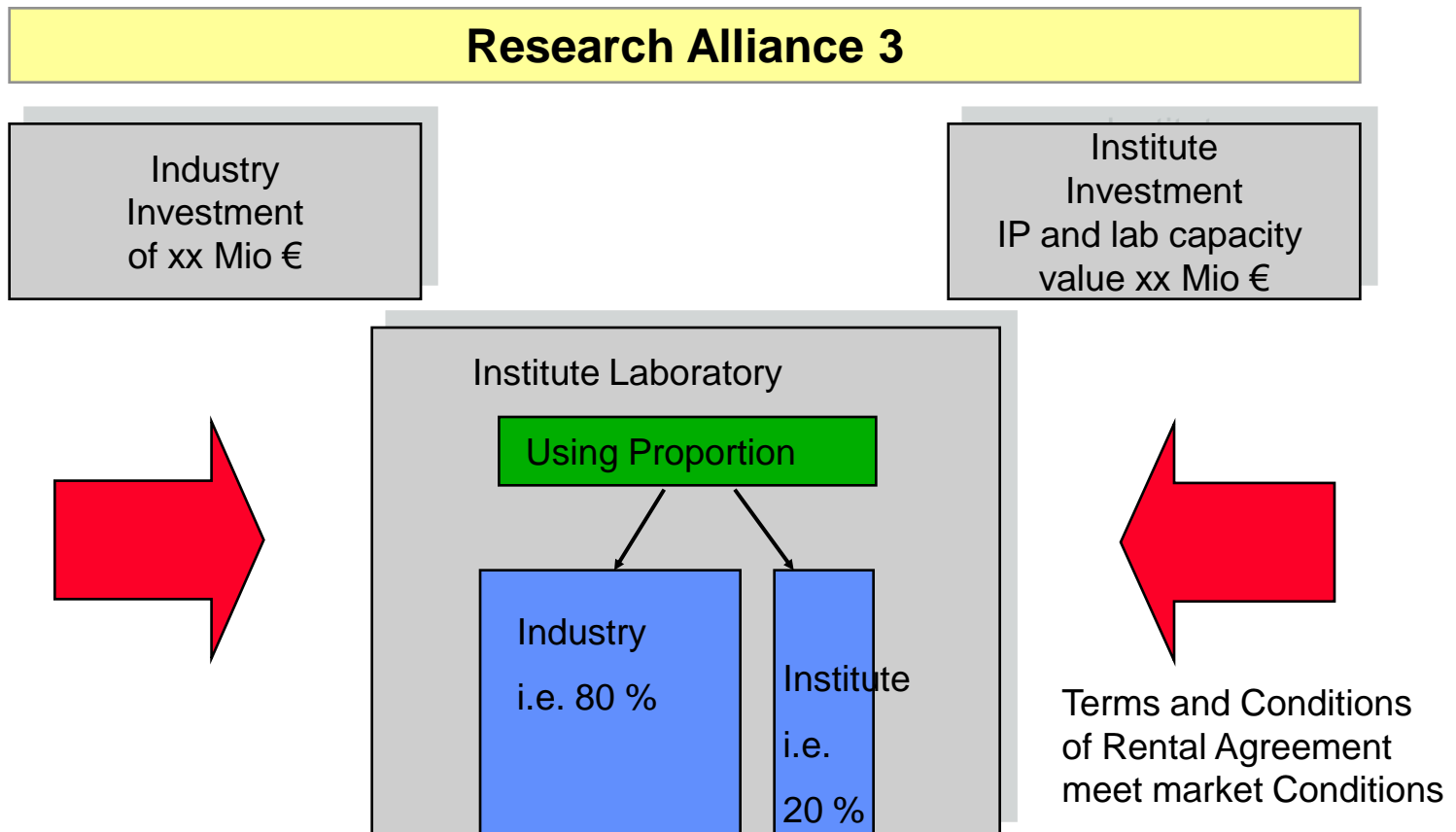


IP-Scheme "Spin In"

Rental-models do not influence the IP-rules directly
Additional cooperation schemes determine the IP-rules

IP-access on preferential conditions
discussions about IP-Property

Cooperation Model: Joint Platform Science / Industry (compare JTI -system of the EU)



IP-Schemes Sharing the Resources

Joint use of resources and mutual "learning by doing":
no exclusive transfer of institute's competence!

Strong impact of competition law

Management of IP in R&D Cooperations for successful commercialization

Dubai 2010

Dr. Lorenz Kaiser
Division Director Legal Affairs and Contracts
Fraunhofer Headquarter Munich

GAME OVER

