



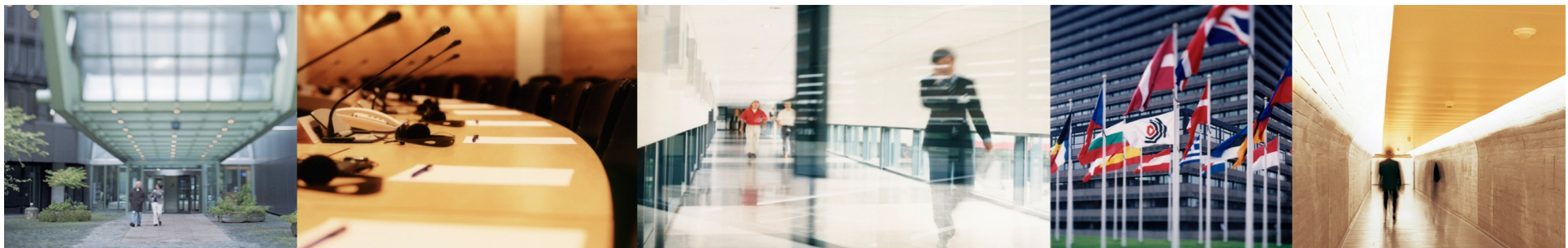
Europäisches
Patentamt
European
Patent Office
Office européen
des brevets

Open innovation versus proprietary knowledge

Nikolaus Thumm, EPO
Chief Economist

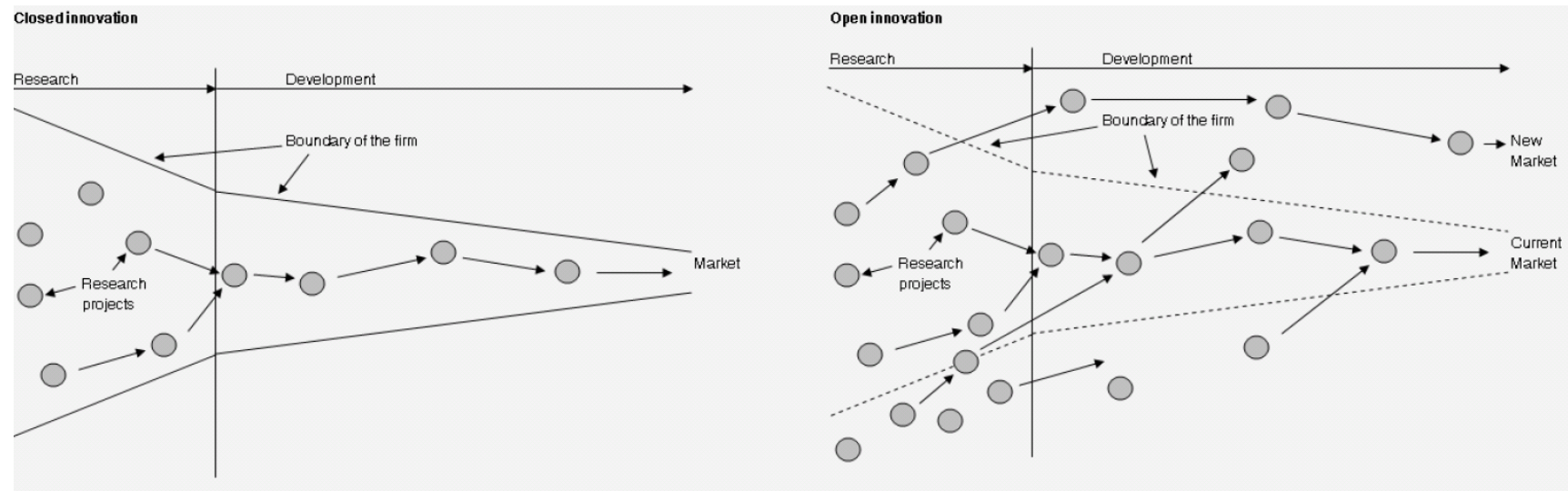
French-German round table on
intangibles, creation, dissemination
and valorisation

Paris, September 26, 2011



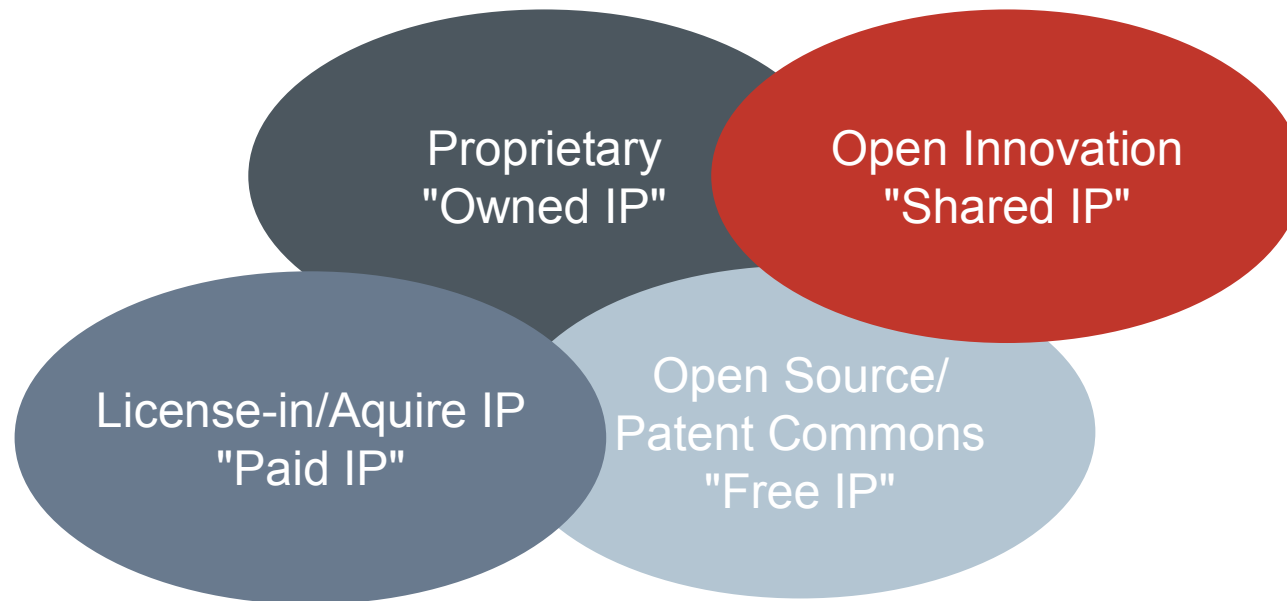
“Open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. [This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology.”

Henry Chesbrough, "Open Innovation: Researching a New Paradigm", 2006



Source: Chesbrough, 2003

New IP landscape



modified after Ruud Peters, Philips

Examples for "Open Innovation"

InnoCentive (Innovation-broker, connect solvers and seekers): IPR negotiated between solvers and seekers, secrecy to external parties



Eclipse foundation (software development platform): open source based on copyright



Open Invention Network (Linux development): patents as defence for Linux



More Examples for "Open Innovation"

LEGO Mindstorms (software/robotics):
open source based on copyright
strong reliance on trademark



BiOS initiative (Biotechnology Open Source): open source based on patents
and/or MTAs



P&G  **connect + develop**SM :IP remains with innovator (e.g. patents, designs)

BMW Customer Innovation Lab
(service ideas): all rights transferred to BMW

Customer
Innovation Lab



Freude am Fahren

Open Innovation and Intellectual Property

Misconceptions:

Open innovation = Open source

Open innovation = public domain

Open innovation = no Intellectual Property

Reality:

Open source is one mode of open innovation

Open innovation results can be protected or released into the public domain

Open innovation needs a functioning IP system and an effective market of IP rights

"The effective management of IP is crucial, not only in identifying useful external knowledge but especially to capture the value of a firm's own IP rights." (OECD Report 2008 "Open innovation in global networks")

"From Intellectual property to intellectual partnering" (Chesbrough, 2006)

Exploitation of Open Source Software

- Different ‚Exploitation Philosophy‘
- Ensure: no obligations to other partners!
- Legal framework not ascertained yet!
- Not legally binding, shift to proprietary version possible
- But: **Open Source does not exclude commercial use!**

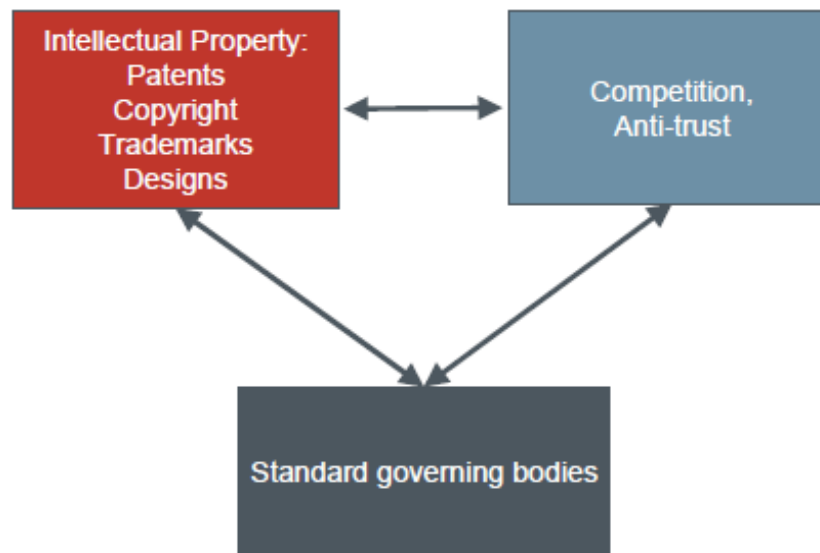


10 Commandments of Open Source

1. Free Redistribution
2. Source Code
3. Derived Works
4. Author's Source Code Integrity
5. No Discrimination Against Persons or Groups
6. No Discrimination Against Fields of Endeavor
7. Distribution of License
8. License Must not be Specific to a Product
9. License Must Not Restrict Other Software
10. License Must be Technology-Neutral

www.opensource.org

Open standards and intellectual property rights



SECTION 3

**WHAT MIGHT OPEN INNOVATION
AND IP DEALS LOOK LIKE IN
EACH SCENARIO?**



IP world in 2025

Market Rules

Rationalised in the
face of ever-increasing
numbers

Trees of Knowledge

Societal pressures shrink
patent system

Whose Game?

IP becomes a pawn as
geopolitical stresses rise

Blue Skies

Patent system split as
technology requirements
diverge

Drivers for Open Innovation in the Scenarios

Market Rules

- increased competition
- globalisation
- new business models
- (financial-economic crisis?)

Whose Game?

- rising powers challenge IP paradigm
- diversity of innovation cultures

Trees of Knowledge

- "free lunch" internet generation
- social networks
- climate change, health, food, water

Blue Skies

- speed to market
- complexity
- interdisciplinarity
- interconnectedness

Drivers against Open Innovation in the Scenarios

Market Rules

- over-stretched IP system (quality of patents, pendency times)
- conflicts with competition law (patent pools)
- (financial-economic crisis?)

Whose Game?

- danger of IP theft across regional blocks
- protectionism, techno-nationalism
- standards wars
- increased secrecy

Trees of Knowledge

- lack of IP protection
- financing gap for R&D
- increased secrecy

Blue Skies

- boundary problems
- complex legal framework
- difficulties to negotiate license terms

OPEN INNOVATION AND IP DEALS ACROSS THE SCENARIOS

Market Rules

Strong IP

- "opt-in/opt-out" collaboration
- "open access" if you sign the deal

Trees of Knowledge

No IP

- collaboration becomes "rule of the game"
- open for all

Whose Game?

Fragmented IP

- "ad hoc" collaboration per industry or region
- "open innovation" defined by government in strategic fields

Blue Skies

Open IP

- interdisciplinary, task oriented collaboration
- "open innovation" if you pay the license fee (FRAND)

Challenges for the patent system?

- open, collaborative innovation asks for
 - easy access to patent system
 - timely, simple procedures
 - high presumption of validity of granted patents
- new business models focus on
 - branding
 - customer relation
 - first-mover-advantage
 - lock-in
 - combinations of open and proprietary models
- new technologies/innovation processes might demand
 - alternative forms of protection (license of right, shorter/longer patent terms, *sui generis* systems)
 - enlarged public domain: e.g. for basic research tools, interoperability standards

What could regulators and public institutions do?

- Ensuring quality/validity of granted patents
- Improving efficiency
- Steering applicant's behaviour (quality of applications, timely procedures)
- Patent insight and knowledge
- Reducing complexity and costs, increasing legal certainty

Thank you for your attention!

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