European IP Helpdesk

Stay ahead of the innovation game.

The European IP Helpdesk

European IP Helpdesk

- Service initiative of the European Commission
- Addressing **current and potential beneficiaries of EU-funded projects, researchers and EU SMEs**
- Free-of-charge first-line support on intellectual property (IP)
- Hands-on IP and innovation management support
- International pool of IP experts from various thematic fields
- Unique cooperation scheme with the Enterprise Europe Network: 44 ambassadors from 27 EU countries

Training
free online and on-site sessions

Website
frequent updates from the world of IP and innovation

Helpline
confidential treatment of individual IP questions

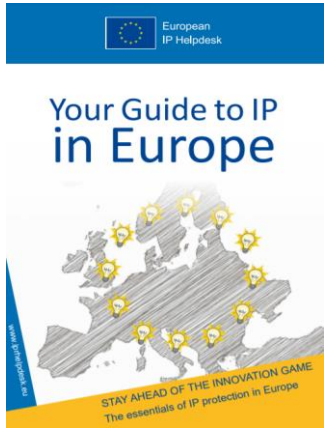
Publications
practical IP knowledge through high-level publications

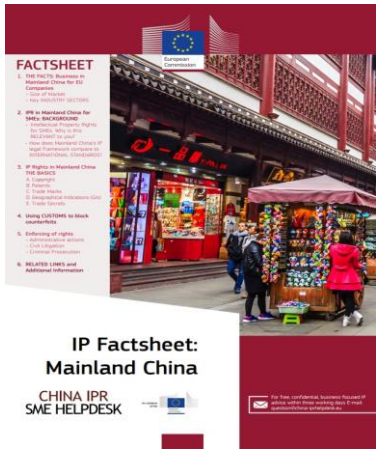
Ambassadors
local IP support throughout Europe

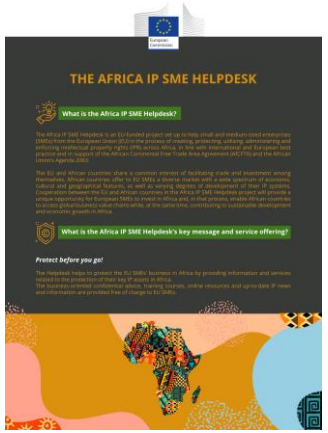
Events
info point at key networking events and conferences

The EC IP Helpdesks

EC IP (SME) Helpdesk Hub – Gateway to Information







- E-learning modules & more
- Guides / Topic, country, sector-specific factsheets / Infographics
- Case studies

Training cooperation with the Community Plant Variety Office and CIOPORA

CPVO
Community Plant Variety Office

CIOPORA

17 FEB 2022
TRAINING AND WORKSHOPS
EU - Webinar & CPVO coop: The essential role of Quality Auditing examination offices for EU Plant Variety Rights
Live streaming available

12 APR 2022
TRAINING AND WORKSHOPS
EU - Webinar CPVO Coop: Constraints and opportunities for edited varieties. Is the GMO legal framework impacting the creation of new plants?
Live streaming available

21 JUN 2022
TRAINING AND WORKSHOPS
EU Webinar - CPVO Coop Webinar: Introduction to Community plant variety rights: creation of new plants and their protection in the EU
Live streaming available

08 SEP 2022
TRAINING AND WORKSHOPS
EU - Webinar CPVO Coop: The interface between plant variety rights and patents
Live streaming available

28 SEP 2022
TRAINING AND WORKSHOPS
EU - Webinar & CIOPORA coop: Growers' Guide to Intellectual Property Protection for Plants
Live streaming available

10 OCT 2022
TRAINING AND WORKSHOPS
EU - Webinar CPVO Coop: What's in a name: plant variety denominations and their interface with trademarks and geographical indications
Live streaming available

02 NOV 2022
TRAINING AND WORKSHOPS
EU - Webinar CIOPORA coop: Enforcement practices for Plant Variety Rights in the EU
Live streaming available

06 DEC 2022
TRAINING AND WORKSHOPS
EU - Webinar CPVO Coop: The impact of protected new plant varieties in the European Union market.
Live streaming available

Patent Protection for EU funding Beneficiaires

19 JAN 2022

TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Medical Technologies

Live streaming available

16 MAR 2022

TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Artificial Intelligence

Live streaming available

14 JUN 2022

TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Green technologies

Live streaming available

20 OCT 2022

TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Digital communication

Live streaming available

17 NOV 2022

TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Biotechnology

Live streaming available

Patent protection for EU funding beneficiaries

An IP training series offered by the European Patent Office and the European IP Helpdesk

European
IP Helpdesk

Europäisches Patentamt
European Patent Office
Office européen des brevets

From Lab to Market – IP & successful TT Training series

07 JUN 2022
TRAINING AND WORKSHOPS
EU - From Lab to Market - Successful Technology Transfer Journeys - Case: OXEON
Live streaming available

12 JUL 2022
TRAINING AND WORKSHOPS
EU - From Lab to Market - Successful Technology Transfer Journeys - Case: Dermis Pharma
Live streaming available

18 OCT 2022
TRAINING AND WORKSHOPS
EU - From Lab to Market - Successful Technology Transfer Journeys - Case: Perceive3D
Live streaming available

08 DEC 2022
TRAINING AND WORKSHOPS
EU - From Lab to Market - Successful Technology Transfer Journeys - Case: Cubicure
Live streaming available

29 JUN 2022
TRAINING AND WORKSHOPS
EU - From Lab to Market - Successful Technology Transfer Journeys - Case: Atlantic Therapeutics
Live streaming available

13 SEP 2022
TRAINING AND WORKSHOPS
EU - From Lab to Market - Successful Technology Transfer Journeys - Case: Blubrake
Live streaming available

03 NOV 2022
TRAINING AND WORKSHOPS
EU - From Lab to Market - Successful Technology Transfer Journeys - Case: fos4x
Live streaming available

Registration: www.ec.europa.eu/ip-helpdesk/lab_market

Ambassador Scheme

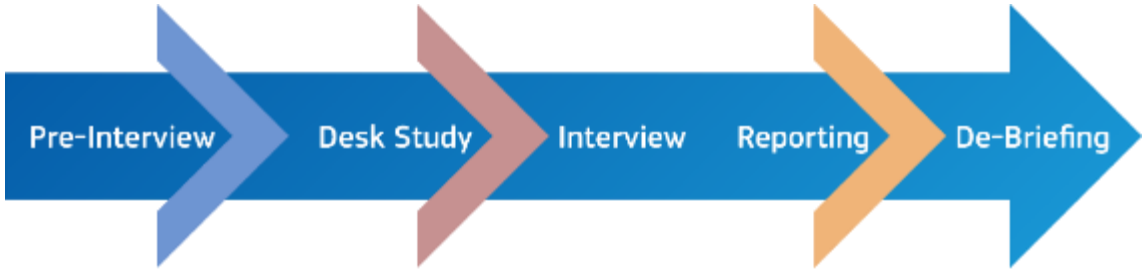
- **Cooperation scheme** with the Enterprise Europe Network (EEN): 44 ambassadors – 27 countries
- **Building IP capacities** among European SMEs
- **Overcoming language barriers**
- Making the topic **more accessible**
- Exchange and feedback from ambassadors on **needs of SMEs**
- Local **awareness** and **training events**

Further learning opportunities:

1. European IP Helpdesk Ambassadors and EEN
2. EUIPO learning portal
3. EUIPO – Ideas Powered for business website
4. WIPO Academy / Diagnostics
5. The Ideas Powered for business SME Fund
6. IPA4SME
7. Horizon IP Scan
8. (IP Booster)
9. Horizon Results Booster
10. LeadershIP4SMEs
11. EPO Academy
12. 4IPCouncil

Horizon IP Scan

IP Support Service for SMEs in Collaborative EU-funded Research Projects



14 JUL 2022	INFO DAYS Horizon IP Scan - Info Session Live streaming available	17 AUG 2022	INFO DAYS Horizon IP Scan - Info Session Live streaming available
14 SEP 2022	INFO DAYS Horizon IP Scan - Info Session Live streaming available	11 OCT 2022	INFO DAYS Horizon IP Scan - Info Session Live streaming available
14 NOV 2022	INFO DAYS Horizon IP Scan - Info Session Live streaming available	14 DEC 2022	INFO DAYS Horizon IP Scan - Info Session Live streaming available

www.horizon-ipscan.eu

Horizon IP Scan | European Commission

Thank you!

- www.ec.europa.eu/ip-helpdesk
- helpline@iprhelpdesk.eu
- training@iprhelpdesk.eu
- Twitter @iprhelpdesk
- LinkedIn /european-ipr-helpdesk

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European IP Helpdesk

Stay ahead of the innovation game.

IPR and Software

Dr Eugene Sweeney, CEO, Iambic Innovation Ltd
Senior IP Policy Advisor, European IP Helpdesk
es@iambicinnovation.com

19 October 2022

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Today's speaker

Dr. Eugene Sweeney

Director, Iambic Innovation Ltd; Senior Advisor, European IP Helpdesk
International (ISO) and European (CEN) Standards Committee Member for ***Innovation Management and IP Management***

- **> 40 years in the software industry**
- 1970's **Researcher** – computer modelling/simulation
- 1978 **First start-up**: microcomputer software applications for engineers
- 1980's **Computer & Network industry:** Developing, sourcing and taking new software and ICT technologies to market
- 1990's **Early-stage technology investment** and commercialisation(software & ICT)
- 2000 - **Consultant** in Innovation, IPR and research exploitation

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Roadmap

- What is special about software
- Why and how to protect software
- Software exploitation

3

WHAT'S SPECIAL ABOUT SOFTWARE?

4

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Software is everywhere

Chips ⇨ Devices ⇨ Apps ⇨ Comms

Software is the fuel and the glue

5

Software is…

Dependent	• Relies on other technologies, systems or data
Cumulative	• Based on pre-existing components, integration, derivatives • Can be combined in different ways to create new products and services
Convergent	• Takes advantage of merging/converging technologies; e.g. Cloud, sensors, IoT, etc.
IPR issues to address	• Rights for access and use

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Software can…

Software can operate **globally**	• Rapid scalability
Software can be **trans-border**	• Cloud, Internet, IoT, blockchain, AirBnB, etc.
Issues to address	• Language, cultural, regulatory, IPR, privacy and security

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Software has many facets

Different forms	**• source code, executable**
Can be delivered in many ways	**• product, service**
Any…	**• time, place, device**
More than technology	**• aesthetics, brands, marketing, etc**
Multiple IP Rights	**• Patent, copyright, design rights, etc**

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Dynamic and disruptive

- It moves and changes **fast**
- **short** life-cycles
- **New paradigms** and applications
- Highly **scalable** with high potential
- **Less capital** needed to get going

Windows for PC since 1985

26 Different versions (69 Editions)

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PROTECTING SOFTWARE (WHY AND HOW?)

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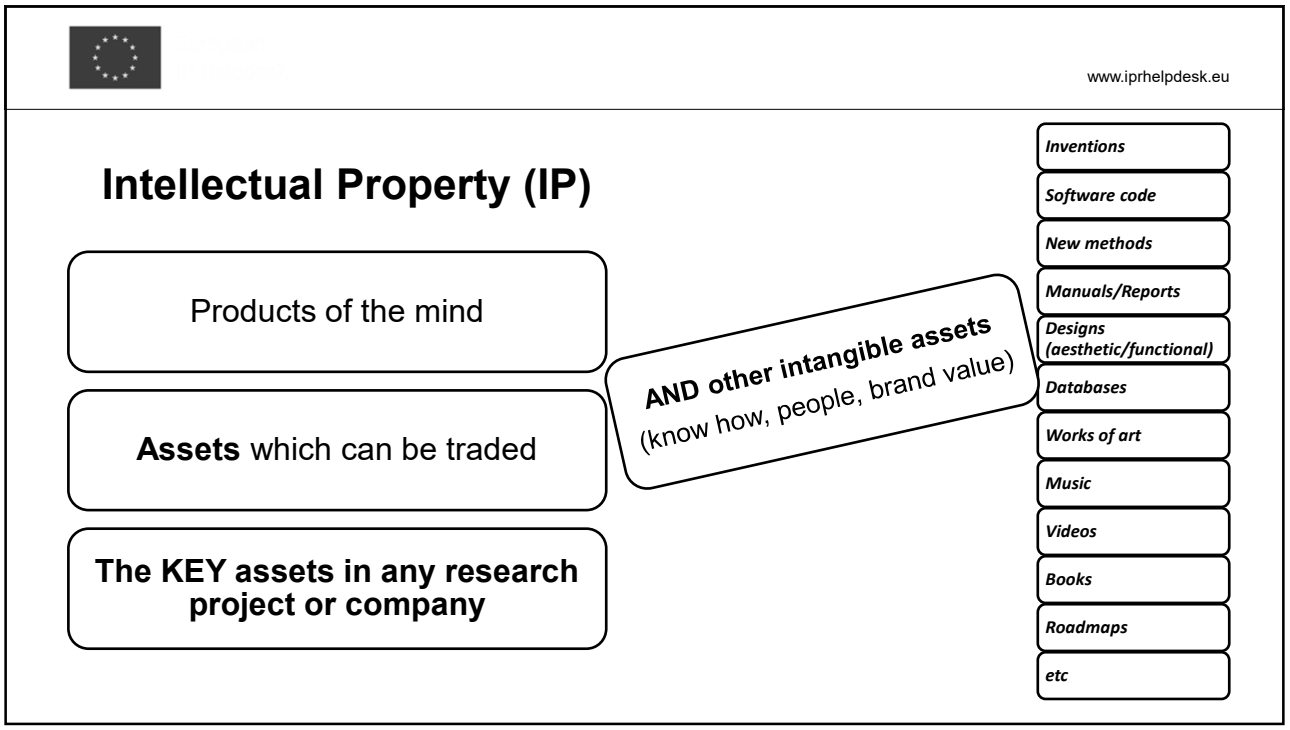

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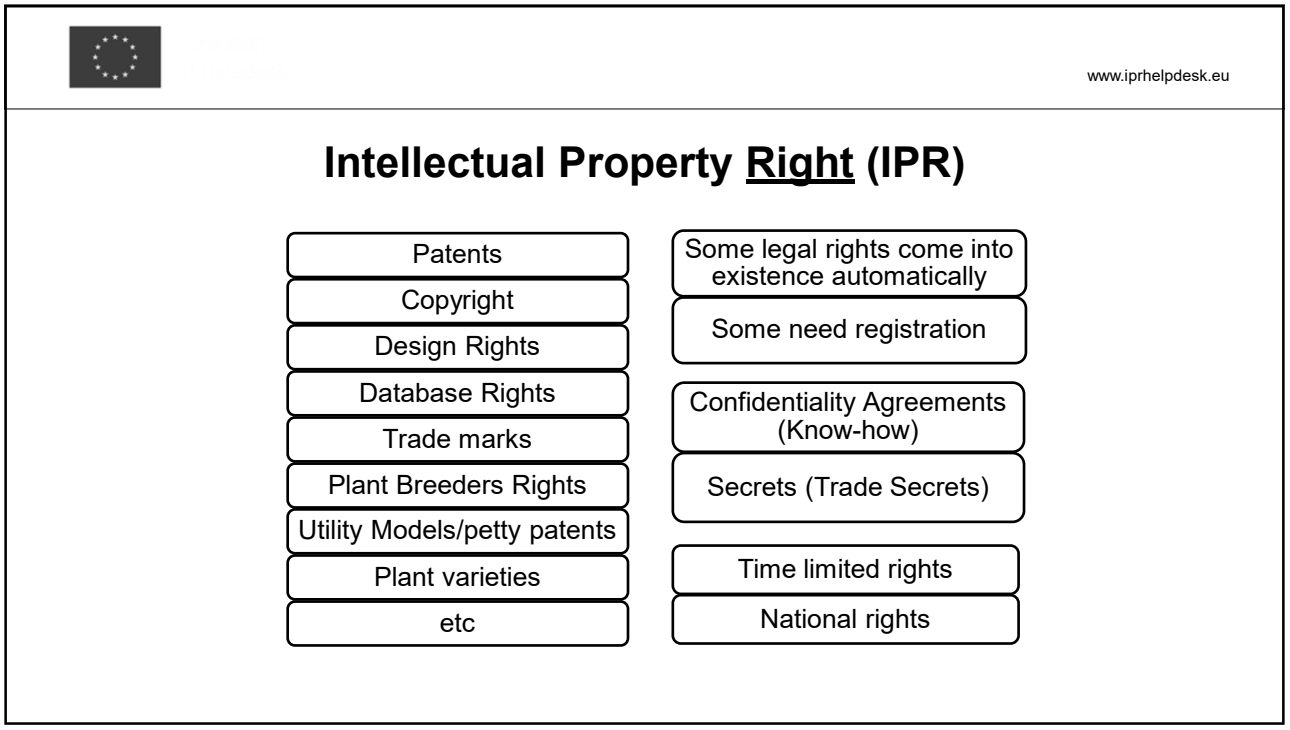

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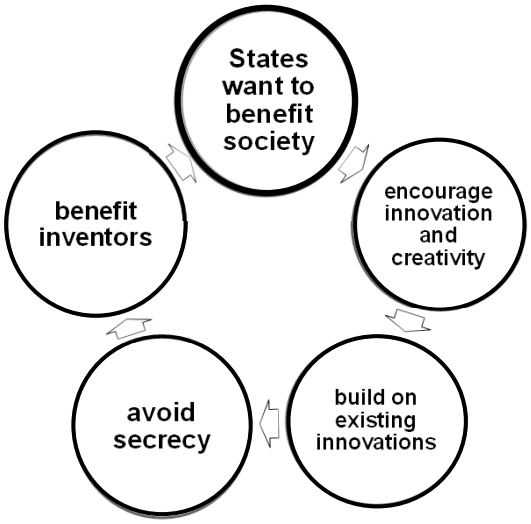
Why IP Rights?



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What is the deal?

legal right to prevent others using their creation (without agreement)

commercial purposes (only)

for a **limited period**

disclosing details

so others can develop new innovations

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Who benefits?

The state by avoiding secrecy	• **Improves innovation capacity, stimulates innovation, enriches society**
The creator by being able to prevent unauthorised commercial use	• **Unless they come to an agreement (which may be financial)**
Investors (time, money, facilities, etc) from the limited monopoly	• **To get a return on investment**

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Don’t confuse IP and IPR

Intellectual **Property**
key **assets**

IP Protection is a strategic commercial decision

Intellectual Property **Rights**
legal tools to support commercial exploitation

Don’t forget other **intangible assets**
(know how, people, brand value, goodwill)

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Strategic decisions

YES! There are commercial opportunities? → Would IP protection support exploitation? → Benefits greater than costs? → If so, **invest!**

Assessment, protection and exploitation must be considered together

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IPR AND SOFTWARE

- **Patents**
- **Copyright**
- **Design Rights**
- **Database Rights**
- **Trade marks**
- Plant Breeders Rights
- Utility Models/petty patents
- Plant varieties
- etc

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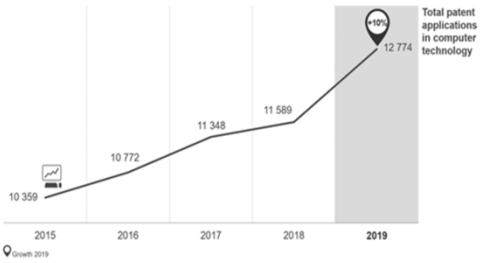
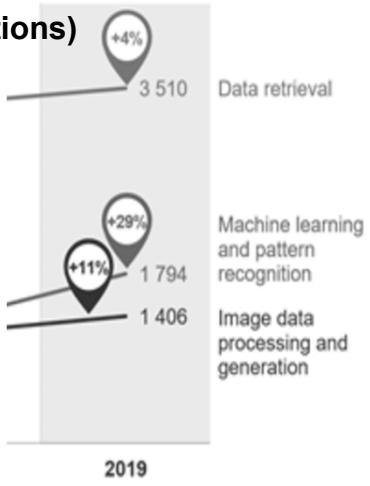
Software Patents
(Computer Implemented Inventions)

Sharp rise – Total European patent applications[2] in computer technology





33% of patent applications filed at the EPO in 2010 were intended to protect a computer-implemented invention (**software patents**)

(Fraunhofer/4iP, 2015)

From 2007-2011 nearly **50% of US lawsuits involved software-related patents**

(GAO, 2013)

Source: EPO 2020

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What can you patent?

Almost anything of **technical character** that is not a mere discovery and is:

- **New/Novel** (not previously disclosed publicly)
- **Inventive** (not obvious to "one skilled in the art")
- **Industrially applicable/has a technical effect**
- **Sufficiently described**

What can't you Patent?

- **Computer programs**
- Scientific theories
- **Mathematical methods/algorithms**
- Aesthetic creations
- Schemes, rules and methods for performing mental acts
- Playing games or doing business
- Presentations of information

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Software Patents in Europe..

European Patent Convention

Computer programs are not patentable	**software code**
Computer-implemented inventions are patentable	*"inventions whose implementation involves **the use of** a computer, a computer network or other programmable apparatus, **realised by means of a computer program** (i.e. software)"*
Needs to have a technical effect	not **business** or **financial**
BUT… in USA	**"technical effect" requirement is not so rigid (and USA is a large market!)**

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Software Copyright ©

Copyrights protects the **expression** of the method **not the method** itself; for example:	• The code as such (source and binary) • Design material • User guides • Graphical elements such as icons
Comes into existence **automatically** once published	• so **keep good records** to prove date of creation.
Lasts **at least 50 years**	• national variations

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Use a copyright notice	• the copyright symbol ©, and/or the words "Copyright"; the publication year; the copyright owner. • For example: **© 2020 Iambic Innovation Ltd.**
On every component	• **package or box** the software comes in, if any • **manual** and other written documentation • computer **disks or other media** containing the software (if any), and • appropriate **computer screens** (e.g. the opening screen, status bar, at activation, on the about or credit screen).
In the software code (if made available)	• As a minimum on the **first and last page** • Preferably **on every page**, or liberally throughout the code.

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Software patent *OR/AND* Software copyright

Patent

What it <u>does</u> (regardless of how expressed)

(19) Europäisches Patentamt / European Patent Office / Office européen des brevets

(11) EP 2 097 841 B1

(12) EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention of the grant of the patent: 25.06.2014 Bulletin 2014/26

(51) Int Cl.: G06F 17/50 (2006.01)

(21) Application number: 07824443.1

(86) International application number: PCT/GB2007/004206

(22) Date of filing: 05.11.2007

(87) International publication number: WO 2008/053239 (08.05.2008 Gazette 2008/19)

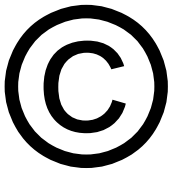
(54) POLYNOMIAL SYNTHESIS
POLYNOM-SYNTHESE
SYNTHÈSE POLYNOMIALE

(84) Designated Contracting States: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

• JABIR A M ET AL: "MODD: a new decision diagram and representation for multiple output binary functions" DESIGN, AUTOMATION AND TEST IN EUROPE CONFERENCE AND

Copyright

What it <u>is</u> (its expression)



Research	Develop	Program	Test	Take to Market

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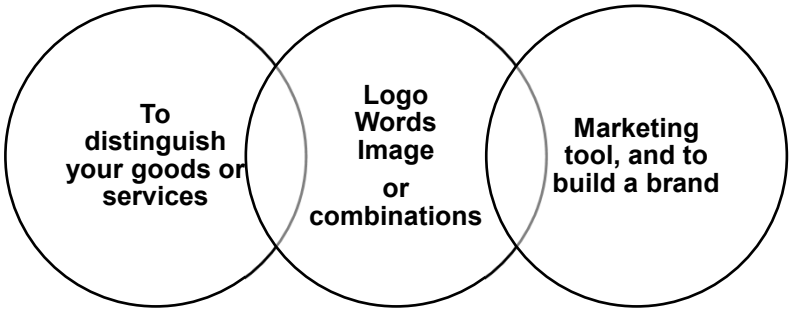
Database Rights

- **Copyright** protects the **contents**
- **Database right** protects the **collection** if there has been a "substantial investment" in obtaining, verifying or presenting the contents of the database.

Trademarks



"Patents dominate in Telecommunication and Hardware, but **trademarks and copyright dominate in software"**

JRC Report, "IP and Innovation in ICT", 2015

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Technological Protection Measures (TPMs)

To protect software copyrighted works	• for example, through **encryption**
Any technology (software or hardware) which restricts access	• a **password** to gain access to a website containing scientific papers • to a **chip** in a games console, which only allows games to run in a given location • Security **dongle** • Authorisation/Activation **code** • Etc
Stand alone in law	• it is an offence to infringe, in addition to any copyright infringement that occurs though by-passing the TPM

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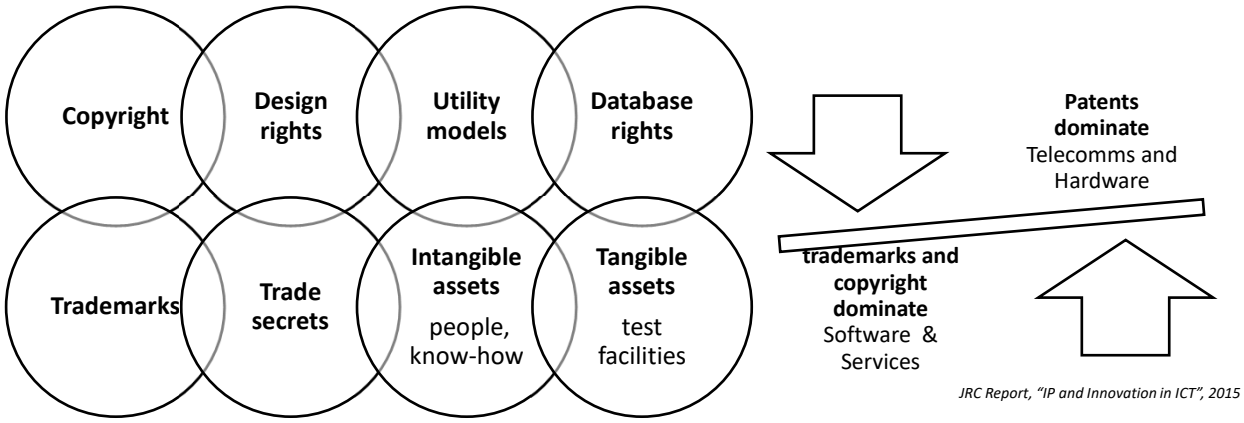
Many ways to protect software!



JRC Report, "IP and Innovation in ICT", 2015

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SOFTWARE EXPLOITATION

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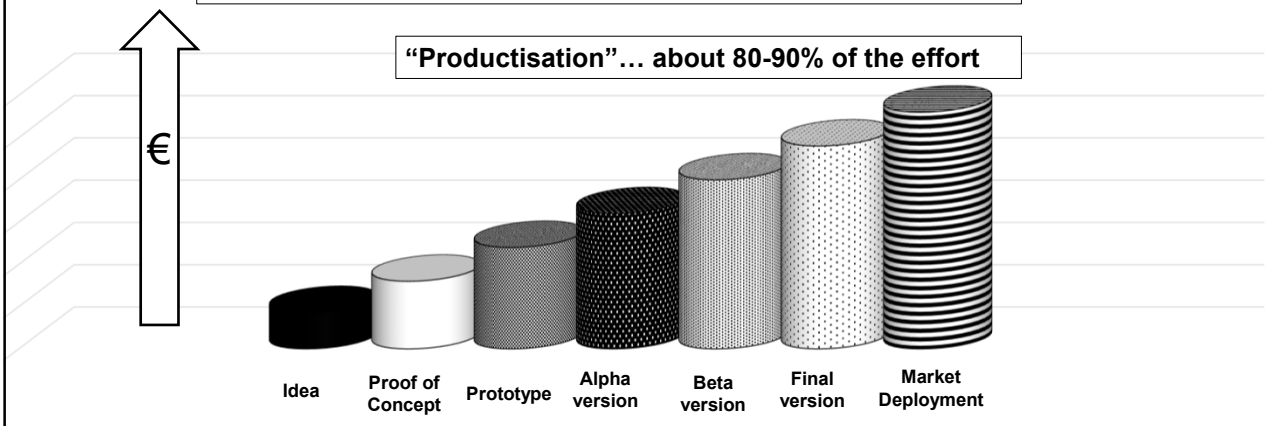
Software value creation

Research | Develop | Program | Test | Take to Market

"Productisation"… about 80-90% of the effort



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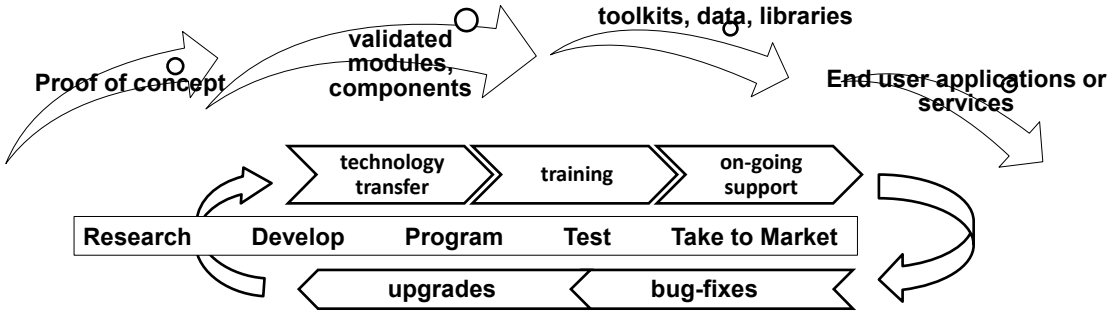
Who is your customer??



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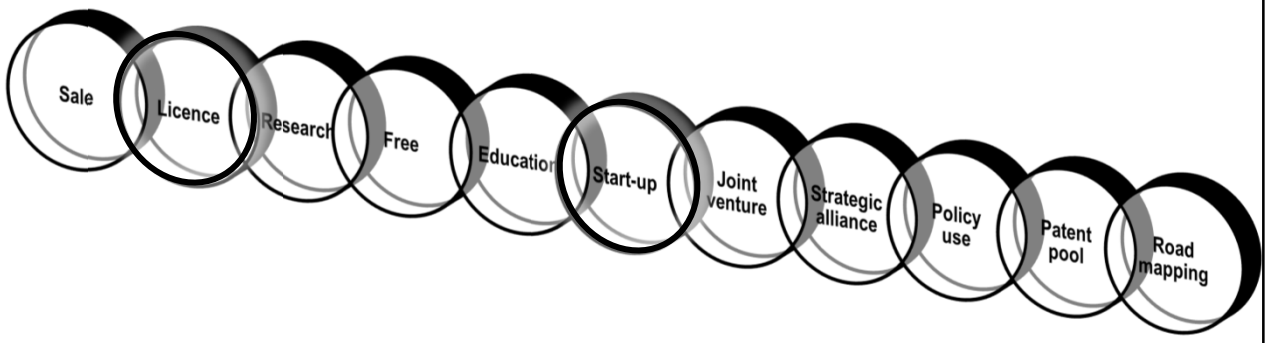
Exploitation Strategies depend on objectives (commercial or other)



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Licence or New Company?

Licensee has expertise and resource	New Company must acquire expertise and resource
Can address different fields of use and geographical areas	Needs a critical mass of expertise and a committed and enthusiastic team
Established markets & suppliers	New markets for new suppliers
Evolutionary/incremental technology	Revolutionary or platform technology
The IP fits a gap in someone else's portfolio	Delivers a unique business advantage
Low financial commitment – less risk	Needs capital - more risk
Early returns – may grow over time	Returns take longer – but could be large

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Licensing (in general)

Granting right to use Granting the right to use the **protected IP** under agreed terms and conditions

- Field of use
- Geographic territory
- To validate not sell
- Subject to conditions

European IP Helpdesk Bulletin No.1 - IP Licensing

http://www.iprhelpdesk.eu/sites/default/files/newsdocuments/bulletin/01/IP-H_b01_content-3.html

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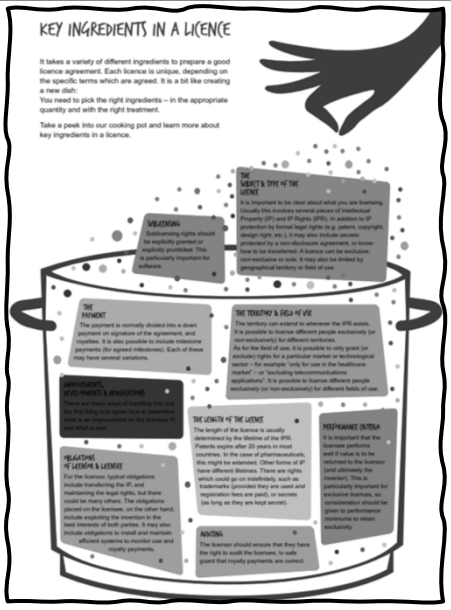
Every clause in a licence agreement is a negotiating point

wherever you are in the value chain

e.g. licence to end users

- **For a fee or free**
- **Individual user** (end user licence)..
- **Multiple users** may install the product under licence, but only one is allowed to use the software at a given time.
- For **specific hardware** (node licence)
- **Multiple licenses** for multiple computers (or multiple users)
- **Site licence**: geographical, or organisational
- **Floating (network) licence**. Can be installed on many computers, but number of licenses purchased determines the number of concurrent users.
- **etc**



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Updates and improvements

Software is never finished!	• **Bug** fixes • **Upgrades**: Improvements, operating system, new add-on products, etc • Ongoing or limited **support**
Depends on revenue models	• **Free or Fee** • **Subscription**, **one-off** payment, **as needed** etc… • Options for first refusal • **Ads or Ad-free** options
Many and varied options in a software licence agreement	• **Choice depends on position in value chain, sector, application and business model**

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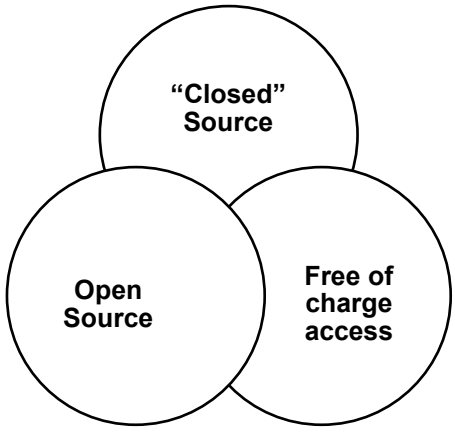
Licensing Source Code



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Licensing software - “closed” source

- For commercial reasons
  - Need to generate revenue stream and restrict copying
  - Need to control improvement and evolution
- Supplied as
  - Binary **(No access to source code)**
  - Service
- Terms
  - Rights to install and use (for certain uses)
  - **No modifications**
  - **Restricted (or prohibited) transfer**
- Usually Fee based
  - licensing fees
  - Service fees

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Licensing software – free of charge access to source

- To make market ready
  - Protected by other IPRs
  - **Need to control distribution for commercial reasons**
- Supplied as
  - Software code only
  - Maybe licence to access other IPR
  - With support
- Terms
  - Rights to install
  - Modifications permitted
  - restricted licensee (no transfer)
- Free of charge
  - Commercial use may require licence to other IP Rights

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Licensing software - Open Source

Fundamental concept

- Access to **source code**
- **Freedom** to use, install, copy, modify **and redistribute (but not unconditionally!)**

Just another type of licence!

- Many different versions (~70) and variations (~1500)
  So check and choose carefully
- Beware clauses which affect commercial use

Good for

- building community of developers and users
- **Needs management**
  how will it be funded?
- How will it be **sustainable?**

Choose **only if appropriate** and can be **justified** ⇨ **not "policy" or "ideology" decision**

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Two main types of Open Source licence

Permissive Licences
(e.g. MIT, Apache, BSD…)

- Do not control how modified code is licensed
- Modifications can be released under any licence, open source or not
- Must include attribution, permission and copyright notices

Copyleft Licences
(e.g. GPL, MPL, EUPL…)

- Additional conditions about derivative works
- Same rights included in derivative works (**Strong**) - GPL
- No restrictions on derivative works, but original code must have same rights (**Weak**) – EUPL, LGPL, MPL

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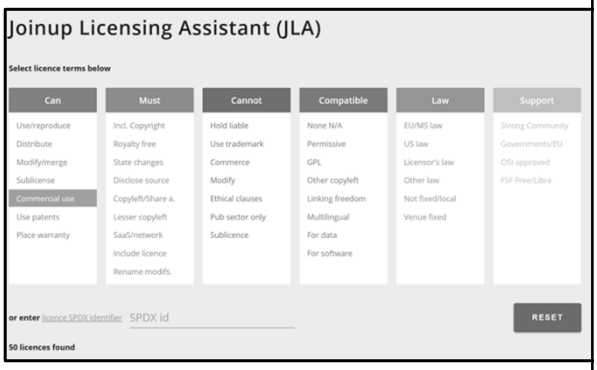
European Union Public Licence

- **Weak copyleft**
- Originally developed by/for the EC – now available for anyone
- Open source licence in **all EU official languages (**OSI certified 2009)
- Compliant with EU law
- Interoperable and compatible with other licences

Joinup Licensing Assistant
(Select and compare open licences)

https://joinup.ec.europa.eu/collection/eupl



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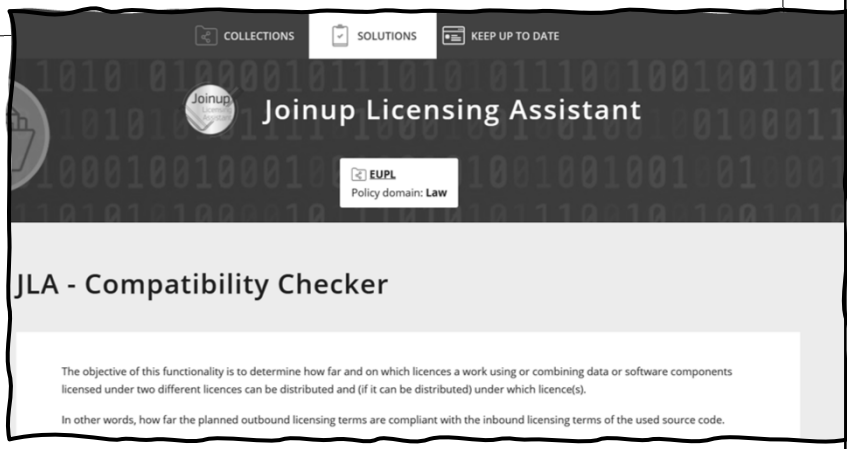
JLA - Compatibility Checker

How compatible are:

the (planned) outbound licensing terms

with the

inbound licensing terms



https://joinup.ec.europa.eu/collection/eupl/solution/joinup-licensing-assistant/jla-compatibility-checker

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Managing Open Source Projects

Someone must **manage and sustain**	• Quality and validation • New releases into community • Build and sustain the community
Beware **too many "forks"**	• Detrimental to building critical mass in the community, and "brand" identity and commercial success
Must provide **source for free**	• Can charge for executable, added value services or products (e.g. training or toolkits)
Added value **services and products** may be supplied	• Software freely available under OSS licence • Support contract or consultancy services may be purchased from owner or **third parties**

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Open Source Sustainability

How to meet ongoing costs

Initial costs usually covered by funder or project → **You need to plan for sustainability**

What are the ongoing costs?
- Infrastructure & hosting
- Support & training
- Maintaining and updating the codebase
- Management costs
- Marketing and promotion

Not just about
- revenue generation
- releasing code and hope it will survive!

Must also
- Build the **community**
- Keep **interest** alive
- Encourage **use** and code **improvement**

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Key sustainability issues

Attracting third party interest	• More than just awareness, must also **encourage engagement** to build a community
Managing community	• Managing project **contributions** • Having clear contributor guidelines and agreements
Release management	• **Coordinating** contributor activity • Addressing the **IPR and licensing** issues

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Company types using Open Source software?

hardware companies	• To increase the market for their hardware (e.g. printers, phones, white “smart” goods, etc
software companies	• In their own products
services companies	• To build a market for their services (e.g. support, training, customisation, etc.)

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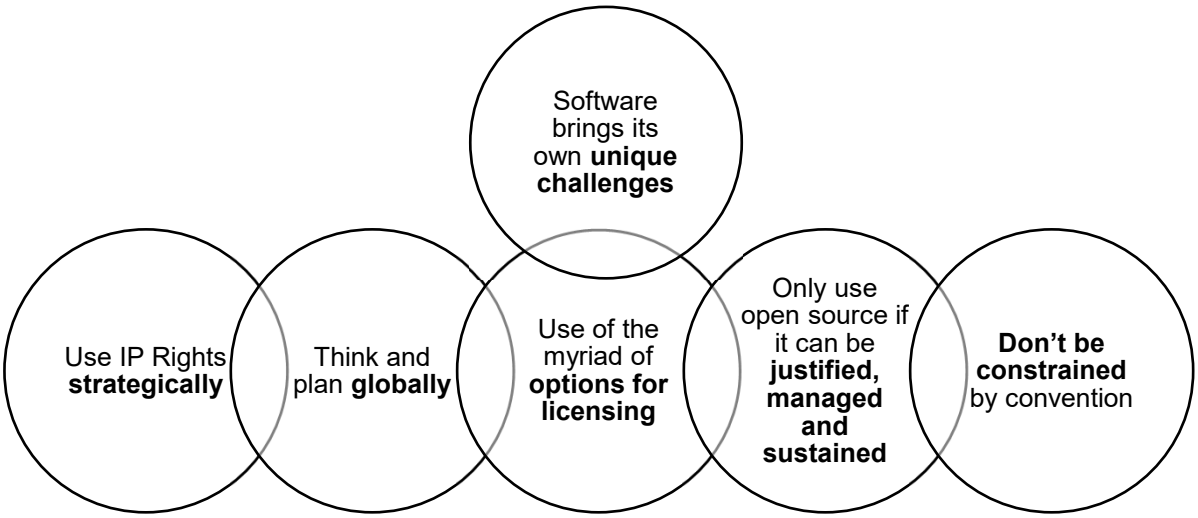
Summary



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