

Software  
and  
Digital Creatives and Copyright  
Law

Class 6

10 March 2020

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<https://itlawcourse.online>

## Review of Intellectual Property Points Discussed Last Week

- Copyright.
- Database Right.
- Patent.
- Trademark.
- Industrial Design.
- Trade Secret.



# COPYRIGHT



Copyright &  
Related Rights

# Copyright



- Copyright: exclusive right given to creator of a creative work to reproduce, issue to the public, perform or play in public, rent or lend, communicate to the public, create derivative works of, a work for a limited time.
  - Under the TRIPS Agreement, an exclusive right of rental also must be recognized in respect of computer programs.
- “Works” include the following “authorial” works:
  - Original literary works;
  - Original dramatic works;
  - Original musical works; and
  - Original artistic works.
- “Works” also include broadcasts, cable programs.
- Duration of copyright can vary depending on the kind of work and who is considered its “author.”
- Comes into existence automatically, without the need to register the work.



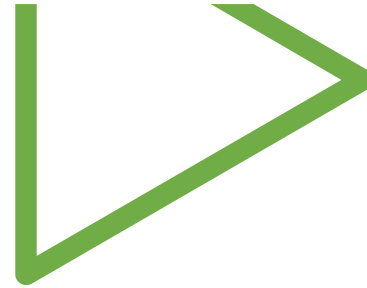


# Some EU Directives that Affect Copyright

- Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market.
- Directive on the harmonisation of certain aspects of copyright and related rights in the information society ("InfoSoc Directive"), 22 May 2001.
- Directive on rental right and lending right and on certain rights related to copyright in the field of intellectual property ("Rental and Lending Directive"), 12 December 2006.
- Directive on the resale right for the benefit of the author of an original work of art ("Resale Right Directive"), 27 September 2001.
- Directive on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission ("Satellite and Cable Directive"), 27 September 1993.
- Directive on the legal protection of computer programs ("Software Directive"), 23 April 2009.
- Directive on the enforcement of intellectual property right ("IPRED"), 29 April 2004.
- Directive on the legal protection of databases ("Database Directive"), 11 March 1996.

# Copyright Authority in Latvia

- The Ministry of Culture
  - Drafts legislation & resolutions in the field of copyright and related rights;
  - Submits proposals on establishing consultative and expert commissions, councils and working groups in order to resolve topical issues related to copyright and related rights;
  - Supervision of organizations that administer economic rights on a collective basis;
  - Educates society about copyright & related rights;
  - Gathers & analyzes information about copyright & related rights in Latvia;
  - Drafts proposals for implementation of European Union & international norms in the Republic of Latvia.
  - Does not have a registration function because copyright arises automatically, without the need for registration.



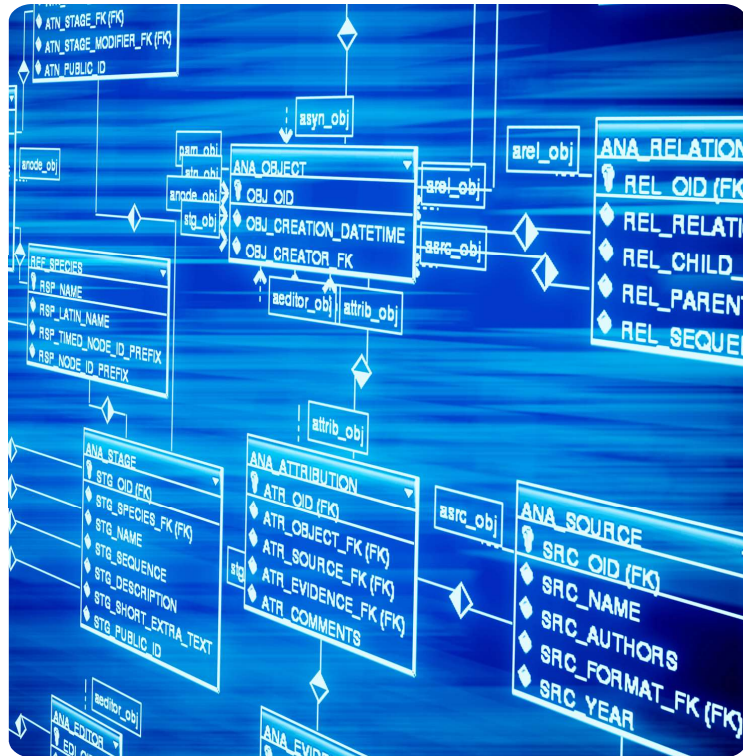
Kultūras ministrija



# Related Rights

- “Related Rights” include special protections for rights of performers, producers of phonograms and films, and broadcasting organizations.





# European Union Database Right

- Created by Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases.
- For purposes of the Directive, “‘database’ shall mean a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means.”
- Art. 7(1): “Member States shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database.”



# Patent

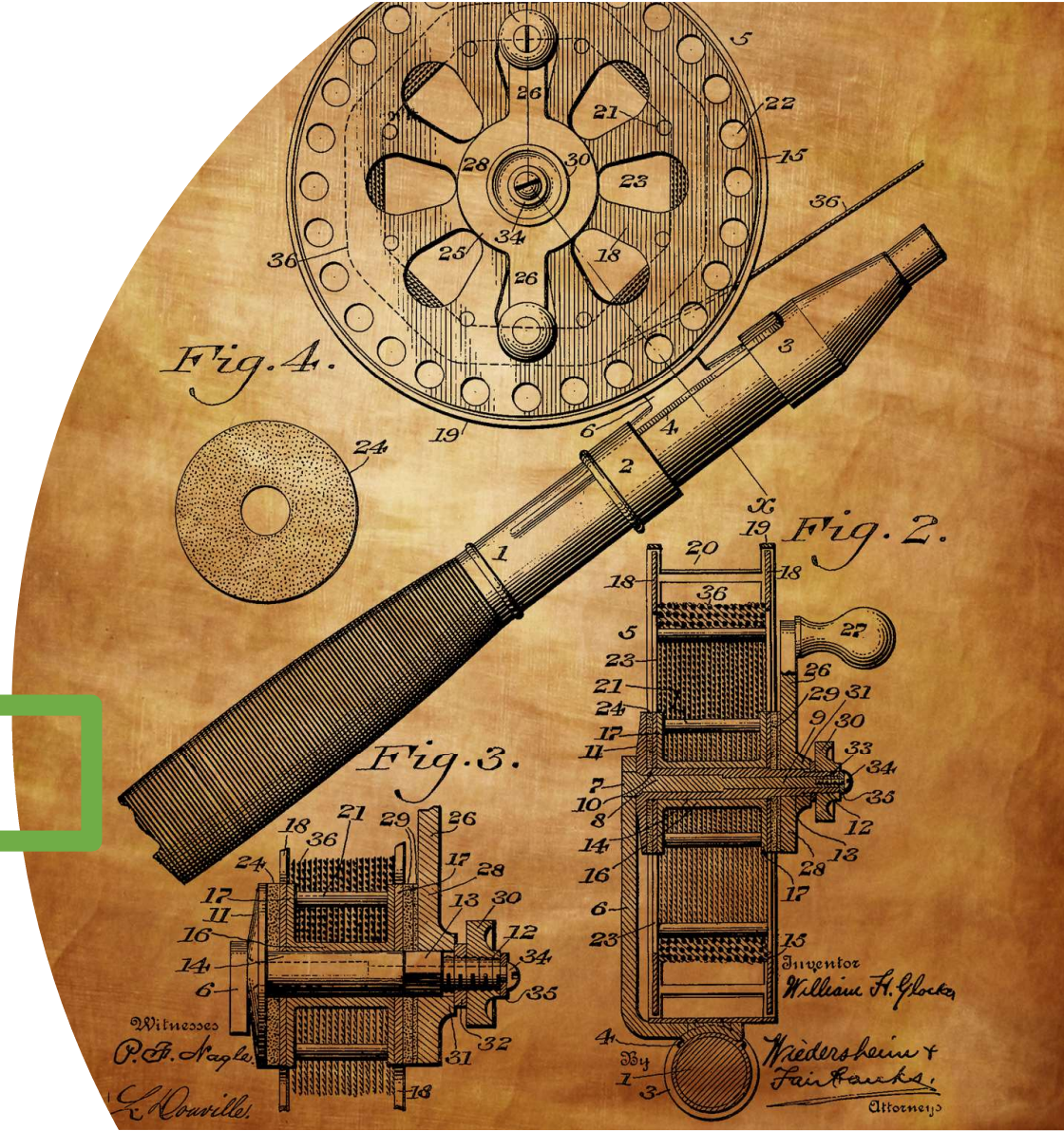


Fig. 4.

Fig. 2.

Fig. 3.

Witnesses  
P. F. Nagle  
L. D. Noville.

Inventor  
William H. Glocker  
Wiedersheim &  
Fairbanks,  
Attorneys

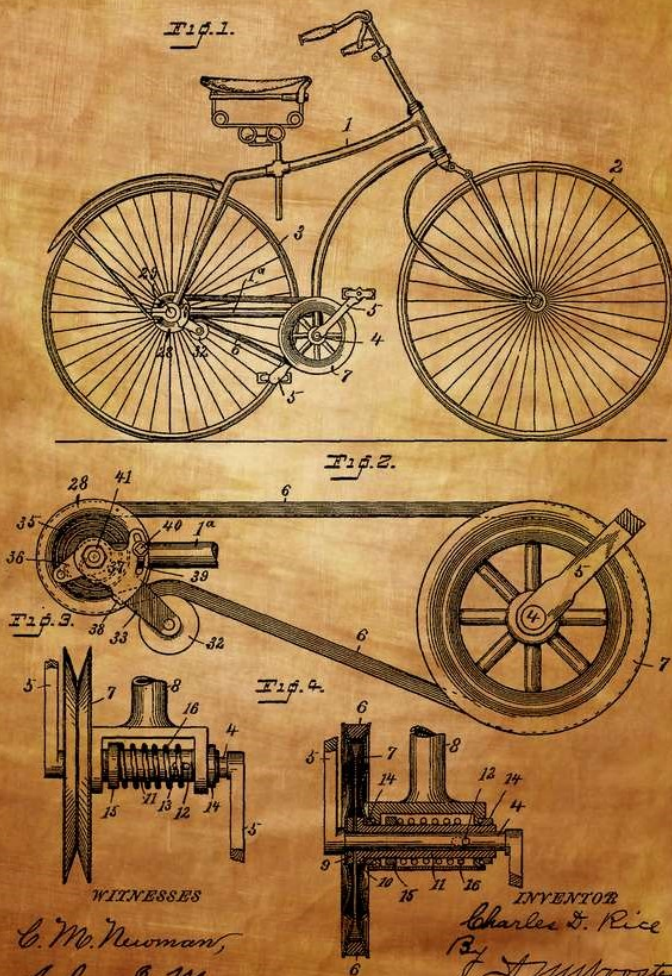
(No Model.)

2 Sheets—Sheet 1.

C. D. RICE.  
BICYCLE.

No. 425,390.

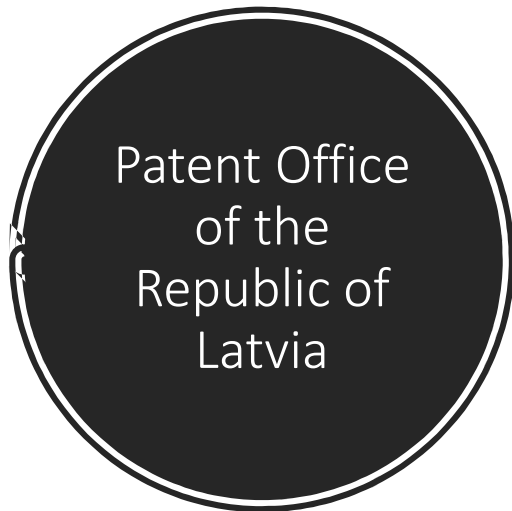
Patented Apr. 8, 1890.



# Patents

- Can be obtained for inventions that (i) are new, (ii) involve an inventive step, and (iii) are capable of industrial application.
- Patents may apply to products or to processes, i.e, methods for doing or obtaining something.
- Must be applied for.
- Grant exclusive rights to the owner to make, use, offer for sale, sell or import a product or a process based on the patented invention.
- Exclusive rights endure for 20 years from the “priority date” (typically 1st date of filing patent application).





## LATVIJAS REPUBLIKAS PATENTU VALDE

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- The central authority in the field of industrial property protection in Latvia is the Latvian Patent Office in Rīga.
- Accepts applications for patents, trademark registrations, industrial designs.
- Publishes an electronic Official Gazette, which gives notice to the public of patented inventions, trademarks, and industrial designs that are registered in the Republic of Latvia.



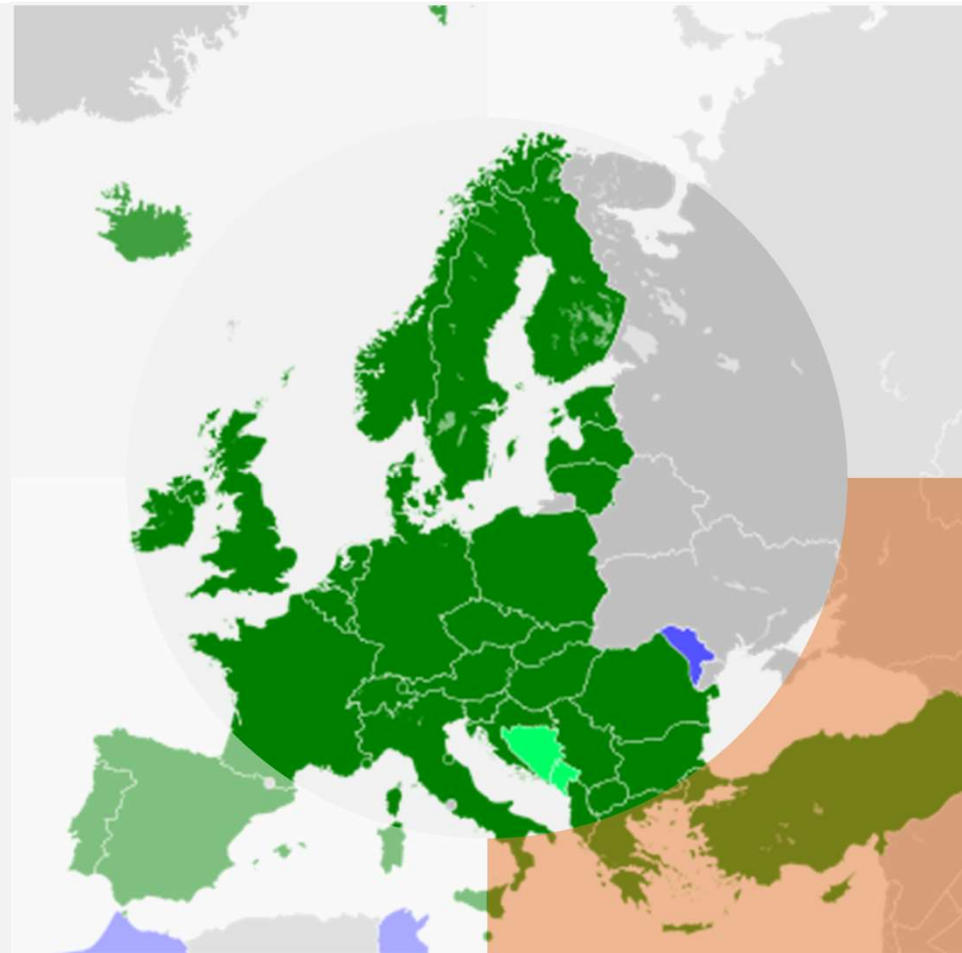
# European Patent Office



Issues “European patents,” which are actually bundles of national patents.  
Headquarters in Munich, Germany.

# European Patent Convention

- European Patent Office (“EPO”) has its own Boards of Appeal that issue written decisions on appeals from decisions of patent examiners.
- EPO Board decisions are of persuasive value in UK courts.
- Where the EPO Boards of Appeal have formed a settled view of European patent law, this will generally be followed by the UK courts







WORLD TRADE  
ORGANIZATION



**WIPO**

WORLD  
INTELLECTUAL PROPERTY  
ORGANIZATION

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# Important International Agreements re Patents

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- **Paris Convention on Protection of Industrial Property.**
- **Patent Cooperation Treaty.**
- **Patent Law Treaty.**
- **WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)**

Digital marketing is a marketing strategy that makes use of electronic devices (computers) such as personal computers, smartphones, cellphones, tablets TV and game consoles to engage with stakeholders. A component of Digital marketing is Digital Brand Engagement.

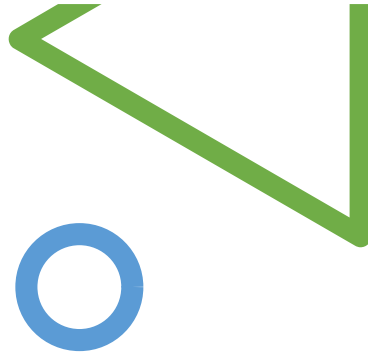


# TRADEMARK



VS

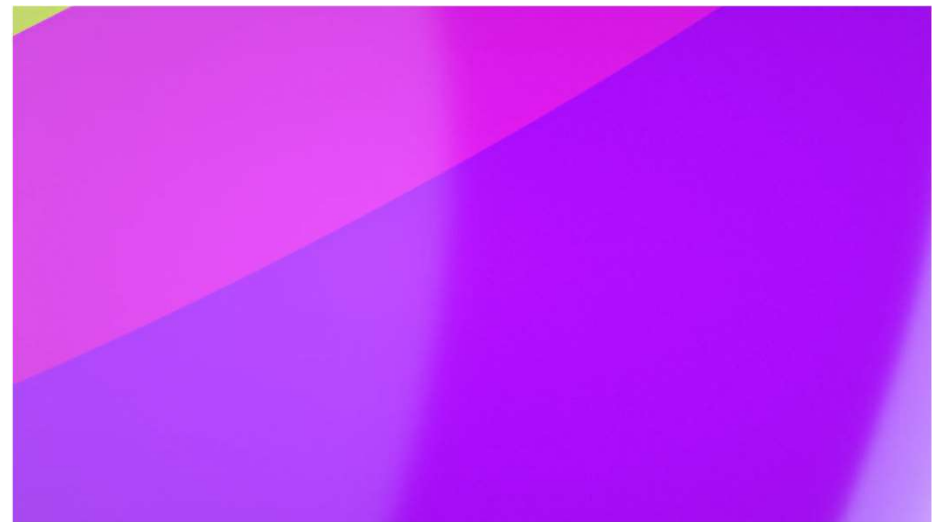




# Trademark Law

- A trademark is generally a word, phrase, or logo that identifies the source of goods or services.
  - Can also include non-traditional symbols such as sounds, motions, and 3-dimensional shapes (see next slides).
- Prohibits the use of a sign which creates a likelihood of confusion
- Trademarks can be registered
  - At the national level (Latvian Patent Office)
  - At the European Union level (EU Intellectual Property Office in Alicante, Spain), or
  - Through an international registration procedure (Madrid Agreement & Madrid Protocol).

Telia Company  
Motion Mark  
EU TM



Castrol  
Motion Mark  
EU TM







# Trade Secrets

# The Expression “Industrial” Property

- The exclusive rights that historically were used to protect investments in product development, a brand, or a design.
- The term “industrial property” is often used to refer to patents, trademarks, and industrial designs.
- The term “industrial property” does not include copyright and related rights.
- Paris Convention for the Protection of Industrial Property of 20 March 1883





# TRIPS Agreement

- Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is an international legal agreement among all the member nations of the World Trade Organization.
- Sets out minimum standards of protection to be provided by each Member for—
  - Copyright & Related rights
  - Trademarks
  - Geographical indications
  - Industrial designs
  - Patents
  - Integrated circuits
  - Undisclosed information
  - Anti-competitive licenses
- Requires each WTO Member State to make available in its domestic law certain procedures and remedies for the enforcement of intellectual property rights.

```
function updatePhotoDescription( cell ) {
    document.getElementById( bigImageDesc ).innerHTML =
}

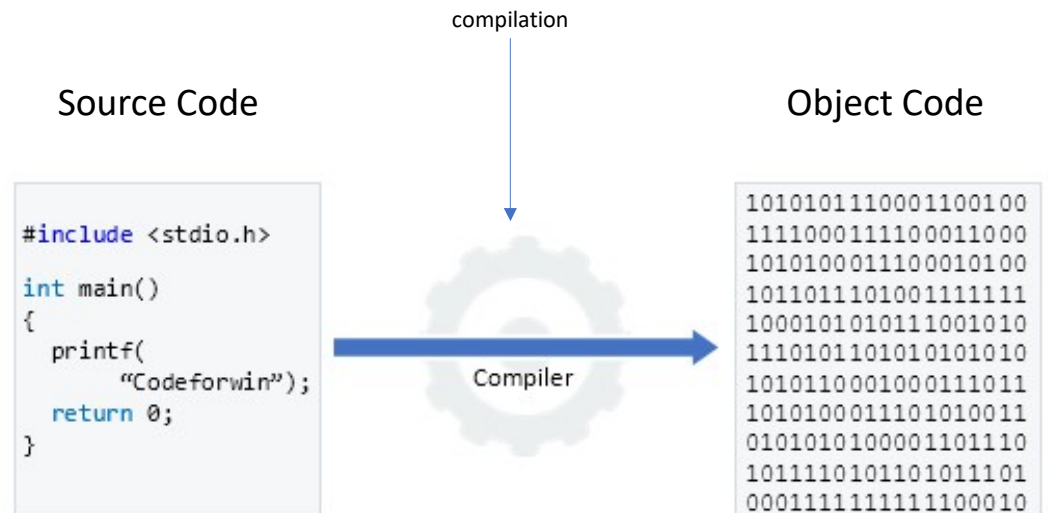
function updatePhotoDescription() {
    if ( descriptions.length > ( page * 9 ) + ( current
        document.getElementById( bigImageDesc ).innerHTML = descrip
}

function updateAllImages() {
    var i = 1;
    while ( i < 10 ) {
        var elementId = 'foto' + i;
        var elementIdBig = 'bigimage' + i;
        if ( page * 9 + i - 1 < photos.length ) {
            document.getElementById( elementId ).src =
            document.getElementById( elementIdBig ).src =
        } else {
            document.getElementById( elementId ).src =
        }
    }
}
```

Software  
--What is  
it?

# What is Software?

- A collection of data or computer instructions that tell the computer how to work.
- Applications, scripts and programs that run on a device.
- Source code:
  - A text listing of commands to be compiled or assembled into an executable computer program.
  - Written in human-readable language.
- Object code:
  - Binary encoded computer instructions that are “compiled” from source code.
- Machine code is a set of computer instructions written or translated in machine language. It is the final executable file generated by compiling, assembling or linking several object files together.



The compiled object code is a “derivative work” of the source code.



*Various phases of a computer program*



# Software is Protected by Copyright Law as a “Literary Work”

- Copyright: exclusive right given to creator of a creative work to reproduce, distribute, create derivative works of, the work for a limited time.
  - Under the TRIPS Agreement, an exclusive right of rental also must be recognized in respect of computer programs.
- “Works” include the following “authorial” works:
  - Original literary works;
  - Original dramatic works;
  - Original musical works; and
  - Original artistic works.
- Computer databases, computer programs, and preparatory design material for a computer program are considered to be “literary works” to the extent they reflect the programmer's expression of original ideas.
- Art. 1(1) EU Software Directive (2009/24/EC).



## Software Directive

- **Art. 1(3):** “A computer program shall be protected if it is original in the sense that it is the author's own intellectual creation. No other criteria shall be applied to determine its eligibility for protection.”



Copyright doesn't protect ideas.



Idea

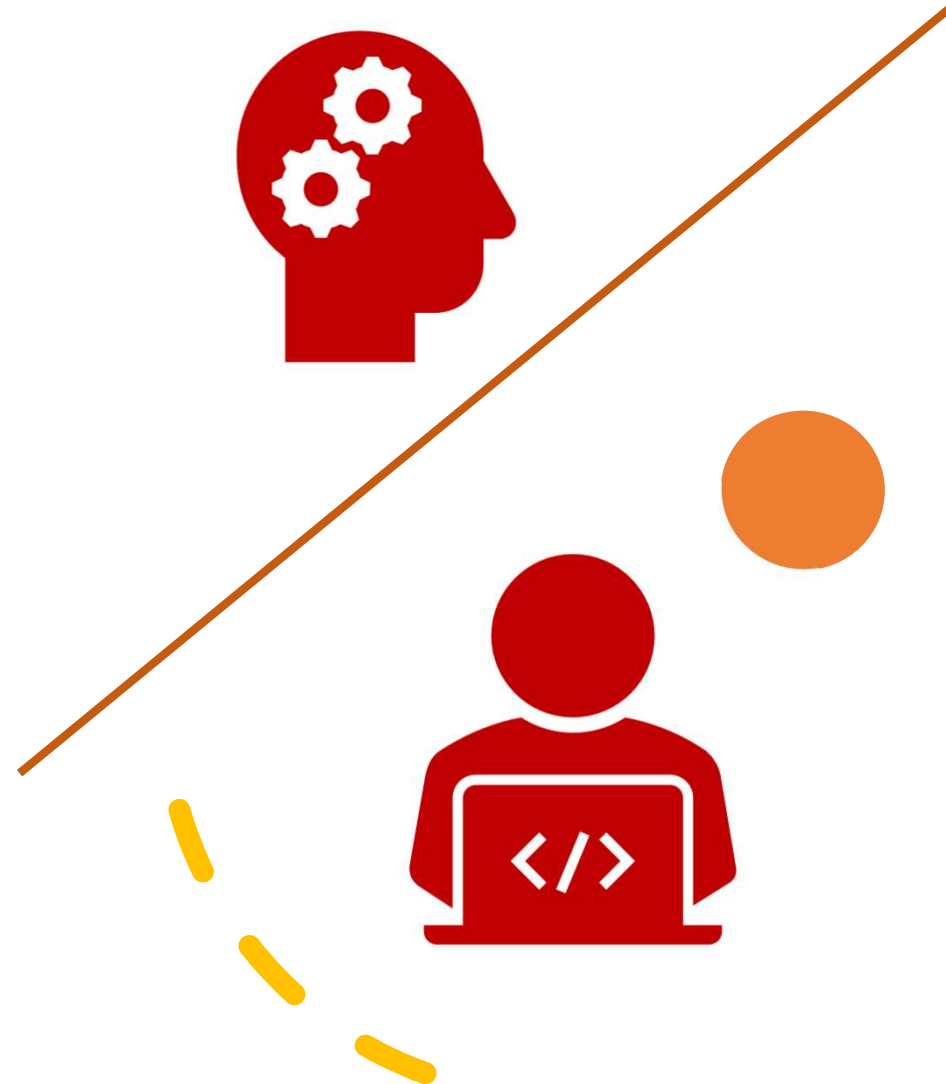
Copyright protects the expression of ideas.



Expression

# Idea/Expression Dichotomy in Software Directive (Copyright)

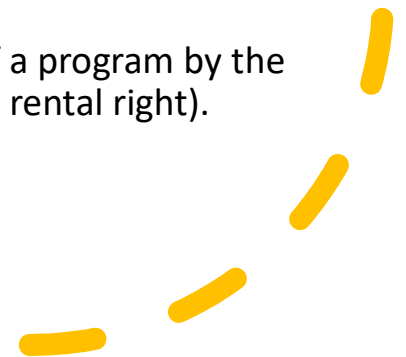
- Recital 11:
- *[O]nly the expression of a computer program is protected and that ideas and principles which underlie any element of a program, including those which underlie its interfaces, are not protected by copyright under this Directive. In accordance with this principle of copyright, to the extent that logic, algorithms and programming languages comprise ideas and principles, those ideas and principles are not protected under this Directive. In accordance with the legislation and case-law of the Member States and the international copyright conventions, the expression of those ideas and principles is to be protected by copyright.*
- Art. 1(2):
  - *Protection in accordance with this Directive shall apply to the expression in any form of a computer program. Ideas and principles which underlie any element of a computer program, including those which underlie its interfaces, are not protected by copyright under this Directive.*
- SAS Institute, Inc. v World Programming Ltd, Case C-406/10 (CJEU 2012)
  - Copyright protection does not extend to software functionality, the programming language used and the format of the data files used by the program.
- Compare U.S. Copyright Act – 17 U.S.C. § 102(b):
  - *In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.*





# Restricted Acts under Software Directive (Copyright)

- Art. 4(1) Restricted Acts include:
  - permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole; in so far as loading, displaying, running, transmission or storage of the computer program necessitate such reproduction, such acts shall be subject to authorisation by the rightholder;
  - the translation, adaptation, arrangement and any other alteration of a computer program and the reproduction of the results thereof, without prejudice to the rights of the person who alters the program;
  - any form of distribution to the public, including the rental, of the original computer program or of copies thereof.
- Art. 4(2) Exhaustion of Distribution Right:
  - Upon first sale in the Community of a copy of a program by the rightholder or with his consent (not including rental right).





# Exceptions to Distribution Right Under Copyright Law

- Loading, temporary reproduction, adaptation, modification of program where necessary for use of program by lawful acquirer in accordance with intended purpose. Art. 5(1) Software Directive.
- Back-up copy by person with right to use the program. Art. 5(2) Software Directive.
- Observation, study or testing, by person with right to use program, of functioning of the program in order to determine the ideas and principles which underlie any of its elements. Art. 5(3) Software Directive.



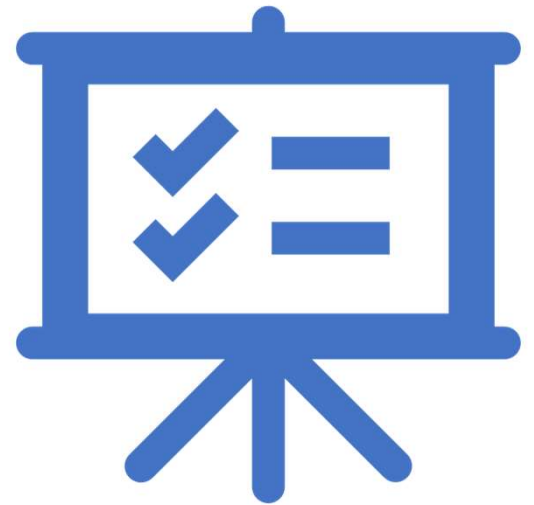
# Information Society Directive

- Information Society Directive Art. 7
  - No effect on the protection of computer programs.
  - But CJEU has decided some aspects of software products, e.g., graphical user interfaces (GUIs), are not considered an expression of computer programs & are governed under the Information Society Directive rather than the Software Directive.



# Decompilation Right (for Reverse Engineering of Computer Programs)

- Decompilation refers to the translation of binary executable files into assembly code or program source code.
- If a person decompiles a computer program without permission of the copyright holder, and no exception to copyright applies, the person who decompiles the code infringes copyright by making an unauthorized derivative work or adaptation.
- EU Software Directive Art. 6.
  - Decompilation is permitted where “indispensable to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs.”
  - But only if the following conditions are met:
    - Acts are performed by licensee or by another person having a right to use;
    - Interoperability information is not otherwise readily available; and
    - Decompilation is confined to parts of original program which are necessary in order to achieve interoperability.





## Patenting of Software-Related Inventions



The  
United  
States  
of  
America



The Commissioner of  
Patents and Trademarks

*Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.*

Therefore, this 5,860,492

United States Patent

*Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.*

*If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.*

*If this application was filed on or after June 8, 1995, the term of this patent is twenty years from the U.S. filing date, subject to any statutory extension. If the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121 or 365(c), the term of the patent is twenty years from the date on which the earliest application was filed, subject to any statutory extension.*

*J. Todd Johnson*

Acting Commissioner of Patents and Trademarks

*Marjorie V. Turner*

Attest

# Requirements to Obtain a Patent

- To be patentable, an invention must satisfy three affirmative requirements:
  1. The invention must be novel.
  2. It must involve an inventive step (in USA, the criterion is that the invention must not be “obvious”).
  3. It must be susceptible of industrial application (in the USA, the criterion is that the invention must be “useful”).
- In addition, (4) the invention must fit within “patentable subject matter.”





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## 4. “Patentable Subject Matter”

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- TRIPS Agreement Art. 27.1: Subject to certain exceptions, “patents shall be available for any inventions, whether products or processes, in **all fields of technology**, provided that they are new, involve an inventive step and are capable of industrial application.”
- Exceptions to patentability listed in:
  - TRIPS Arts. 27.2 & 27.3.
  - European Patent Convention Arts. 52 (certain innovations not considered to be “inventions”) & 53.

## Public policy

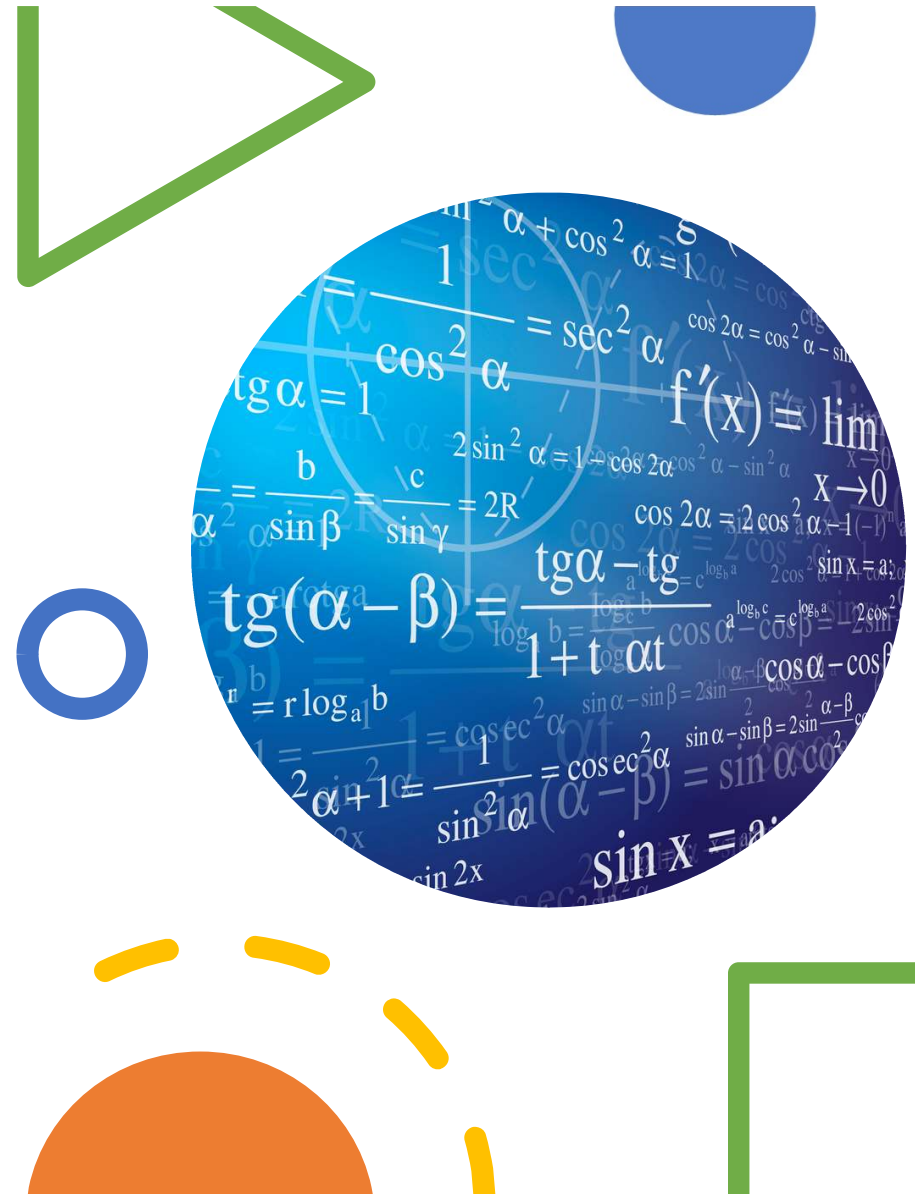
**Public policy** as government action is generally the principled guide to action taken by the administrative or executive branches of the state with regard to a class of issues in a manner consistent with law and institutional customs. In general, the foundation is the pertinent national and subnational constitutions, implementing legislation, and

## 4. “Patentable Subject Matter”

- Inventions that are not patentable
  - Inventions, the commercial exploitation of which would be contrary to public policy or morality.
  - Plant or animal varieties and essentially biological process for the production of animals or plants other than microbiological processes or products
  - Methods of treatment or diagnosis of the human or animal body.

# 4. “Patentable Subject Matter”

- Excluded categories that are not inventions:
  - a discovery, scientific theory or mathematical method;
  - a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever
  - a scheme, rule or method for performing a mental act, playing a game or doing business, **or a programme for a computer**
  - the presentation of information.



## 4. “Patentable Subject Matter”

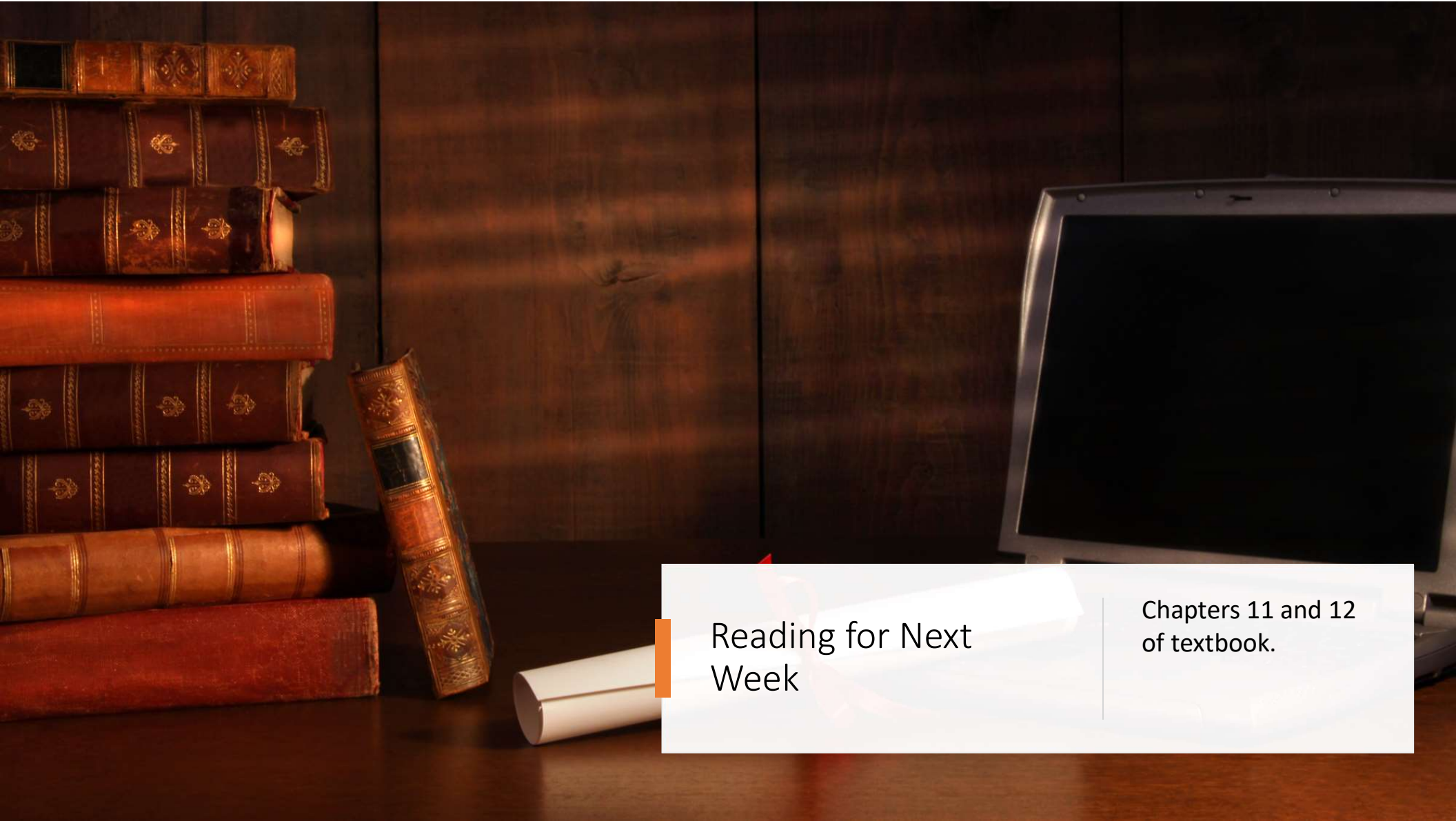
- Patentability of computer-implemented inventions:
  - European Patent Office Board Decisions – *T641/00 Two identities/Comvik* – Any hardware.
  - *Aerotel Ltd. v Telco Holdings Ltd* [2006] EWCA Civ 1371. (the “Aerotel/Macrossan” case) – Technical character.
  - *Symbian Ltd’s Application* [2009] RPC 1.
  - Invention must have a “technical character”
  - “Any hardware” approach.
- UK courts have found the EPO Board decisions to be inconsistent.
- In the USA, there is no express exclusion from patentability for computer programs.
- But the US courts recognize that “abstract ideas” cannot be patented.



# Subjects for Mid-Term Exam on 31 March 2020

- **Basic understanding of how the Internet works.**
  - Packet switching.
- **Concept of rivalrous vs. non-rivalrous goods.**
- **General understanding of net neutrality & how European Union & United States currently approach the subject.**
- **Basic ideas about regulation of the Internet.**
  - Cyberlibertarianism.
  - Cyberpaternalism.
  - Intermediary & platform regulation.
  - Behavioral regulation (nudges).
- **How conflicts arise over online regulation of expression.**
  - Borderless Internet.
  - Different views of freedom of speech.
  - Especially hate speech & distribution of racially offensive items on Internet.
- **Online defamation.**
  - General elements of defamation.
  - Challenges presented by cross-border defamation.
  - Jurisdiction of Courts of EU Member States over Cross-Border Defamation Claims (see Class 5 PowerPoint slides).
- **General understanding of intellectual property.**
  - Copyright.
  - Patent.
  - Trademark.
- **Special intellectual property issues for software.**
- **Copyright issues in the digital environment.**
- **Special intellectual property protection for databases.**
- **Trademark issues on the Internet (only if we cover this in class before the exam).**





Reading for Next  
Week

Chapters 11 and 12  
of textbook.