European Information Technology Law & Data Economy

Data Protection

- **Personal Data**
  - A set of rules granting individuals the "rights to control their personal data", the way in which their personal data are collected and used and, the right to **control their analogical and digital identities entirely**. **A fundamental/human right**.
  - Are the data that identify or are able to identify natural persons.
  - **Categories**
    - **Original**
      - **Identification Data**
      - **Sensitive Data**
      - **Judicial Data**
    - **New**
      - **Localization Data**
        - IP Address
        - Cookies
        - Email Address
      - **Biometric Data**
      - **Online Data**
- **General Data Protection Regulation (GDPR)**
  - **Technicalities**
    - **Persons**
      - **Data Subject**
      - **Data Processor**
      - **Data Controller**
    - **Processing**
      - Means any operation or set of operations which is performed on personal data by both automated and non-automated means.
  - **Main Rules**
    - **Lawfulness, Fairness** and **Transparency**
      - **Lawfulness** implies **Consent** of the **Data Subject**.
        - Consent is any **freely given, specific, informed and unambiguous indication** of the data subject's wishes by which he or she signifies agreement to the processing of personal data relating to him or her.
        - **Exceptions**
          - Performance of a Contract
          - Legal Obligation
          - Protect the Vital Interests of the Data Subject
          - Public Interest or Safety
    - **Purpose Limitation**
    - **Data Minimization**
    - **Accuracy**
    - **Time Limitation**
    - **Integrity and Confidentiality**
  - **Rights of the Data Subject**
    - **Right to Access**
    - **Right to Rectification and Erasure**
    - **Right to be Forgotten**
      - Garcia vs Google Spain
    - **Data Portability**
      - To move to another Data Controller
    - It applies either the Data Controller is located in the EU, or the Data Subjects are located in the EU.
  - **Data Transfer to non-EU countries**
    - **Standard Contractual Clauses (SCC)**
    - **Binding Corporate Rules (BCR)**
    - ***Ad Hoc Decisions***
    - **EU - US International Agreements for Data Transfer**
      - **Safe - Harbour (2000 - 2015)**
        - **Privacy Shield (2016 - 2020)**
      - **Schrems Case I (2013)** declares invalid Safe Harbour on decision of **CJEU**
        - **Schrems Case II (2020)** declares invalid Safe Harbour on decision of **CJEU**
  - **Sanctions**
    - Up to 20 millions euros or 4% yearly sales.

Trade Secrets Directive

- **Trade Secrets**
  - It gives value to knowledge that is kept secret.
  - **Undisclosed Know-How**
    - Technical knowledge useful or necessary for conducting a manufacturing process, resolving problems in industry.
  - **Business Information**
    - Knowledge or rules of conducts derived from experience in business management.
- **Protection Requirements**
  - **Objective Secrecy**
  - **Economic Value**
    - It has commercial value because it is a secret. By disclosing these secrets, the company would lose a competitive advantage.
  - **Reasonable Steps to maintain Secrecy**
- **Scope of Protection**
  - Trade Secret can be protected even if information is **theoretically accessible through reverse engineering**.
  - Member States shall ensure that trade secrets holders are entitled to apply for the measures, procedures and remedies to prevent the **unlawful acquisition**, **use** or **disclosure of their trade secret**.
  - The acquisition of the **Trade Secret** shall be considered **Lawful** when it is obtain by any of the following means:
    - Independent Discovery or Creation
    - **Reverse Engineering**
    - "Nothing shall be understood to offer any ground for restricting the mobility of employees".
  - It is often mixed with other form of protection:
    - **Alternative to Patent**
      - On Top of Patent
        - On Top of Copyright
      - Accessory to Patent

IPRs on Data

- **Copyright on Data**
  - Data as such is not eligible for Copyright Protection. Neither it is as the content of a Database.
- **Copyright on Databases**
  - Definition of Database
    - U.S.
    - EU
      - A work formed by the collection and assembling of prewisting material or of data.
      - A collection of independent works, data or other material arranged in a **systematic** or methodical way and **individually** accessible by electronic or other means.
  - Subject Matter
    - The **structure** of the Database in relation to a specific **selection** or **arrangements** of the content of the database.
  - Content
    - The protection shall not extend to their contents.
- **EU Database Directive - 96/9/EC**
  - **Two-Tier System**
    - **Copyright Protection**
    - **"Sui Generis" Database Right**
      - **Investment**
        - Substantial
          - Creation of Data is not eligible for Protection
          - Quantitative
          - Qualitative
        - In What
          - Obtaining Data
          - Verifying Data
          - Presenting Data
      - Rights
        - Prevent **extraction** and **reutilisation** of the whole or of a **substantial part** of the database.
      - Duration
        - **15 years** from the completion of the Database.

Market Power & Definition

- Firms affect Consumer Welfare when they hold **Market Power**.
- **3 Pillars "Revisited"**
  - **Monopolistic Conduct**
    - It entails a **significant amount** of market power.
  - **Anticompetitive Agreements**
    - It entails the **aggregation** of market power.
  - **Mergers**
    - It entails the **aggregation** of market power.
- **Market Power**
  - A firm holds market power when it is able to increase its prices above the market prices in a **profitable way over a period of time**.
  - **Relevant Market** — Strictly connected to **Market Shares**
    - **Product Market**
      - It comprises all those products and/or services that can be regarded as substitutable.
    - **Geographical Market**
      - It comprises the area where the firms in question act under sufficiently homogeneous conditions.
  - **Barriers to Entry**
    - **Natural**
      - Barriers inherent to the structure of the market.
    - **Legal - Administrative**
      - Barriers coming from the public order.
    - **Strategical**
      - Barriers coming fro previous firms' behaviours, such as advertising campaign creating reputation.
      - Antitrust Law can intervene only if **Strategical Barriers** to entry harm the well-functioning of the market.

Antitrust and Data Economy

- **Framing the Data Economy in the EU Dimension**
  - **4 Vs**
    - **Big Data**
      - Tracking, Collecting, Storing and Analysis of large quantities of different types of data, produced at high speed from multiple sources, whose handling and analysis require new and more powerful processors and algorithms.
      - **Volume**
      - **Velocity**
      - **Variety**
      - **Veracity**
        - The quality of captured data
      - **Relevance**
        - Source of High Economic and Social Value
        - **Data - Driven Innovation**
          - Optimisation of Processes and Products
          - Production of Information
    - **Data Economy**
      - It is a **global digital ecosystem** in which data is gathered, organised, and exchanged by a network of **stakeholders** for the purpose of deriving **value** from the accumulated information.
      - **Digital Single Market (DSM)**
        - **Access**
          - Need of ensuring "better access for consumers and business to online goods".
        - **Environment**
          - Need to create the "right environment for digital networks and services".
        - **Economy and Society**
          - Need to take "full advantages of the digital economy in terms of growth and societal development".
  - **European Data Economy**
    - To build the data economy, the EU needs a policy framework that enables data to be used throughout the value chain for scientific, societal and industrial purposes.
    - **Framework**
      - **Flow of Data**
        - **New Regulation 2018/1807**
          - Free movement of Non-Personal Data
        - **GDPR**
          - Bans restrictions to the free flow of personal data justified on the abuse of the protection of personal data, with some exceptions (Public Safety):
      - **Data Access and Transfer**
      - **Data Interoperability**
- **Data and Market Power**
  - Availability of Data
  - Volume and Variety of Data
    - Data usually reinforce dominant positions, they may work as **barriers to entry** the market of a product/service and these barriers should be considered to assess dominance.
  - **A case-by-case** analysis is needed as there is no automatic relation between possessing huge amounts of data and holding a dominant position in the market. However, we should consider it in assessing the dominant position as a **barrier to entry** in its relevant market.
- **Anticompetitive Behaviours**
  - **Big Data & Abuse of Dominance**
    - Cegedim Case, 2014
  - **Big Data & Mergers**
    - Google & DoubleClick
      - **Authorised** because the two companies weren't operating in the same relevant market.
    - Facebook & WhatsApp
      - **Authorised** because, although operating in the same relevant market, the merged market share of the two companies it is still not large enough to reduce competition in the market.
    - Microsoft & Linkedin
      - **Authorised** because, although they operate in different relevant markets, they still have an overlapping relevant market. But the market shares combined of the two companies in the overlapping relevant market are not wide enough to affect Competition.
  - **Big data & Collusion (Cartels)**
    - **Classic**
      - **Illegal**
      - Humans agree to collude and use algorithms to assist in implementing, monitoring and policing the cartel.
    - **Digital**
      - **Illegal**
      - Companies consciously code and train autonomously learning algorithms to adjust to competitors prices and strategies.
    - **Tacit Algorithm Collusion**
      - **Legal**
      - Competitors adopt algorithms that act autonomously and through self' learning and experimentation sustain tacit collusion. No agreement, so
      - Toplins Case
- **Data Access**
  - **Google Shopping Case**
    - It was reducing CW, by reducing competition in the market for comparison-shopping as it was favouring its Google Shopping service over its rivals by applying the Panda ranking algorithm only to the competing companies.
    - In **Europe**, Google was accused of infringing **Article 102**, because of its **exclusionary behaviour** in a **dominant position**.
    - **Google won the case**, because the FTC found that these new **design** of the Google Search **product** was beneficial for the consumer and hence it could not question procompetitive product design decisions from Google. Although it may have harmed some competing comparison-shopping services. However, it had to assure that it would demote its own content to a less prominent location in case of higher ranking competing services.
    - In **US**, Google was accused of **Monopolization.**
  - **Data Value Chain**
    - To enable firms to hold and exploit data we need to:
      - **Make Data Access easier**
      - **Incentivise Data Production**
      - **Support Data Trade**

Open Data & Data Sharing

- **Open Data Directive - PSI (2019/1024)**
  - It focuses on share and re-use of public sector information, providing a common legal framework for a European market for **government-held data**. It encourages the Member States to make as much information available for re-use as possible.
  - **Transparency**
  - **Fair Competition**
- **French Solution**
  - It put in place provisions that oblige commercial companies to open up, under certain conditions, data they hold for re-use. Data considered of **Public Interest**:
    - **Commercial Procurement** (for Official Statistics).
    - **Electricity & Gas Production** and **Consumption**.
    - Changes in **Real Estate Ownership**.
- **PSD2 (2015/2366)**
  - **European Payment Service Directive**, It requires banks to provide access to their customers' accounts in order to enable third parties to build financial services on top of banks' data and infrastructure.
- **B2B Sharing**
  - **Key Principles**
    - **Making available** Data
      - The process by which a company makes data available to another company that is interested in these data for its own business purposes.
    - **Access to Data** by another company.
    - **Re-use of Data** by the second company.
    - **Transparency**
      - Who have access + Type of Data & level of Detail + Purposes to use Data.
    - **Shared Value Creation**
      - Recognition of the several parties that have concurred in the creation of the Data.
    - **Respect for Each Other's Commercial Interests**
      - Need to protect commercial interests, secrets of data holders and data users.
    - **Ensure Undistorted Competition when Exchanging Commercially Sensitive Data**
    - **Minimised Data Lock-In**
      - Allow Data Portability as much as possible.
  - **Models**
    - **Open Data Approach**
      - The Data is made available to an open range of re-users with **few restrictions** and **very limited remuneration**.
    - **Data Monetisation Approach**
      - Takes place through a **marketplace** on the basis of a bilateral contract against **remuneration**.
    - **Data Exchange Approach in Closed Platforms**
      - The Data is supplied against **monetary remuneration** or **added-value services**.
  - **Data Licensing Contracts**
    - **What Data Shall Be Made Available**
      - Accurate + Reliable + Up-To-Date
    - **Who Can Access and (re-)use the Data**
      - Specify in a transparent way who has the right to access the Data.
    - **What Can the re-user Do with Data**
      - The re-user must specify in an open and clear way the exact usage of the Data.
  - **Technical Aspects of Data Sharing**
    - **Application Programming Interface (API)**
      - TomTom
    - **Data Marketplace**
      - Dawex
    - **Data Space or Platforms**
      - Nallian

Text and Data Mining (TDM)

- Text and Data Mining is the process of deriving information from machine-read material. It works by **copying** large quantities of material, extracting the data, and recombining it to identify patterns.
- **Phases**
  - **Input Selection (DataSet Creation)**
  - **Pre-Processing**
  - **Applying the Mining Tools**
  - **Output Presentation**
- **Unclear regulations**, it is not clear whether TDM infringes Copyright.
  - **In EU**, we have a very narrow exception for **Research organizations** and **cultural heritage institutions**, in order to carry out, for the **purposes of scientific research**, text and data mining of works or other subject matter to which **they have lawful access**.

Software Protection

- **Copyright**
  - **Rights**
    - Run.
    - Study Source Code
    - Modify Source Code
    - Distribute and Release Improved Versions
  - **"All Rights Reserved" Regime**
    - **Proprietary Distribution**
    - All Rights Reserved
  - **New Licensing Regime**
    - **Open - Source**
      - **Copyleft**
        - The practice of using copyright to remove restrictions on distributing copies and modified versions of a work for others and requiring that the same freedoms are preserved in modified versions.
      - Some Rights Reserved
      - Source Code is provided
    - **Creative Common License (CC)**
      - It is a copyright license that authors can associate to their creative works, stating that "Some Rights are Reserved".
      - It clarifies which rights are reserved.
- **Patents**
  - Computer Programs as such are not patentable, however we have **Computer Implemented Inventions (CIIs)**.
  - **CIIs Patents** can be granted if there is an incentive technical contribution to the prior art.
  - It satisfies also all the usual requirements of a Patent.
- **EU Software Directive**
  - No Legal Definition of Software.
  - Protection of software as **Literary Works**. Protection shall apply to the expression **in any form of a computer program**.
    - **Source Code** and **Object Code** are protected.
    - **Functionalities**, **Programming Language** and **Format of Data Files** are not protected.
    - **GUIs** are not protected under EU Software Directive, but they can be protected under Copyright.
    - **Preparatory Design Materials** are protected if they are sufficiently complete in terms of organisation and communication of the information they provide for the subsequent creation of the computer program.
    - It's protected if it is **Original**, following an **Intellectual Creation** of the author.
  - **Exclusive Rights**
    - **Reproduction**
    - **Alteration**
    - **Distribution**
- **US, Software Copyright Act**
  - A computer program is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.

Antitrust Law

- Antitrust law is a set of legal rules aimed at preventing some firms' practices that may worse market well-functioning, as it results from consumer welfare variations.
  - It protects the well-functioning of the market.
  - A market performs well if it awards market power to the firms that are performing the best.
    - **Best Firms**
      - Increase their **Efficiency**, so to reduce their **cost** and **prices** and increase their **outputs**.
      - Increase the **Quality** and **Variety** of their products/services.
      - Are more **Innovative**.
  - **Short-Run Effects**
    - Increase in Market Prices
    - Reduction of Market Output.
  - **Long-Run Effects**
    - Worsen product Quality.
    - Worse Product Variety.
    - Lower Innovation Rate.
- **Regulated Markets**
  - Firms are not liable for antitrust violations when their infringing practices strictly result from authorities/governments impositions.
  - Antitrust Authorities may act to avoid anticompetitive laws.
    - **Advocacy**
    - **Infringing Procedure**
    - **Disapplication**
- **US Approach, Sherman Act, 1890**
  - **Anticompetitive Agreements** are illegal.
    - Fines up to 10 mln and 3 yrs in jail.
  - **Monopolization Conduct** is illegal.
    - Fines up to 10 mln and 3 yrs in jail.
  - **Mergers** are not covered in the Sherman Act.
    - **Clayton Act, 1914**
      - It extends antitrust law to cover mergers that are reducing competition or which have the intent of creating a monopoly.
  - 95% **Class-Actions**. Rules inferred from **Case Law**, **Criminal Sanctions** to Individuals.
- **EU Approach, The Treaty of Functioning of EU, 1958**
  - **Article 101**, **Anticompetitive Agreements** are prohibited.
    - Unless they improve production or distribution of goods or promote technical or economic progress, while allowing consumers a fair share of the resulting benefit.
  - **Article 102, Monopolization or Abuse of Dominance** are prohibited.
    - Unfair prices.
    - Disamilar conditions to equivalent transactions.
  - **Mergers** weren't covered initially.
    - **Reg. 4064/1989**
      - **Reg. 139/2004**
        - Mergers are prohibited if impede effective competition in the market.
  - 30% **Authority-Cases**. Rules stated in **Written Law**, **No Criminal Sanctions** to Individuals.
  - Issued also to pursue the creation of the **Single Common Market**.
  - **Competent Authorities**
    - **European Commission** for Cross Borders Markets.
    - **National Competition Authority (NCA)** for infringements occurring in a single Member State.
    - **Powers**
      - How they get involved
        - Complaint
        - Whistleblower
        - Lenency
          - Ex Officio
      - **Investigative Powers**
      - **Fines**
        - Monetary fines up to 10% of the worldwide turnover of the whole group.
- **3 Pillars**
  - **Anticompetitive Agreements**
    - Any meeting of minds or concurrence of wills between two or more firms.
  - **Monopolization or Abuse of Dominance**
    - Forbidden when strengthen dominance by excluding rivals.
  - **Mergers**
    - Forbidden when they change the market structure to produce a Monopoly/Oligopoly.
    - Exceptions for Efficiency that must be
      - Verifiable
      - Merger Specific.
      - Passed-on to Consumers.

IP Law

- IP Law is the law concerning rights (IPRs) associated with creative effort, innovation, commercial reputation and goodwill.
  - Why is IP Protected?
    - IPRs as **"Natural Rights"**.
    - **Person-hood Right Approach**.
    - **Labour Theory**, reward someone's own labor.
    - IPRs as **Contractual Right**, work as a mean to achieve progress of society. **Utilitarian Approach** and **Welfare Theory**.
    - The most established theory is that of **IPRs as an incentive and as tools to avoid free riding**.
- **Public Domain**
  - It is out of the realm of IP Law and includes:
    - Aspects of protected inventions, marks and creations that IP Law does not protect. (Limitations, Exceptions and Fair Use).
    - Non-Protectable Material (Ideas, Facts and Similia.
    - Inventions, Marks and Creations for which IP Law protection has expired.
- **Source of IP Law**
  - **National** (Italy, U.S., Germany, ...).
  - **Regional** (EU Law).
  - **International** (International Treaties).
  - **Special for Patents**
    - **European Patent Convention (EPC)**
      - 38 - 42 Members.
    - **European Patent Office (EPO)**
    - **Patent Cooperation Treaty (PCT)**
      - 154 Members.
    - **European "Unitary Package"**
      - **Unified Patent Court**
        - 26 Members.
- **Subject Matter**
  - **Trademarks**
  - **Patents**
    - It is a document issued by an administrative authority, conferring the exclusive right of commercial exploitation of an **innovation** for a limited period of time. Generally, 20 years starting from the filing of the application. The rights are conferred after substantially and formal examination and evaluation of the patent requirements.
    - **Why Granting a Patent?**
      - Patents as a **Social Contract**.
      - To Encourage Technological Innovation.
      - To Promote **Competition** and **Investment**.
      - To Provide Information on the latest Technical Development.
      - To promote **Technology Transfer** (Uni -> Industries).
    - **What is an Invention?**
      - New and original solution to a technical problem, that is suitable for industrial application.
      - **Main Types**
        - **Product Invention**, old way of producing something new.
        - **Process Invention**, new way of producing something old.
        - **Invention of Use**, new use of an old product or process.
    - **Requirements**
      - **Patentability Subject Matter**
        - **Exclusions**
          - The subject matter of **different IPRs**.
          - Creations that must be left in the **Public Domain**.
      - **Novelty**
        - An invention shall be considered to be new if it does not form part of the **State of the Art** (Prior Art). Anything can be Prior Art, indeed, Novelty requirement entails **absolute** novelty, that is, the invention must be non-anticipated anywhere and anyway.
      - **Inventiveness/Non-Obviousness**
        - Invention must not only be "new" with respect to the state of the art, but must **make a step forward** from the prior art. It shall be considered as involving an inventive step if it is not obvious to **a person skilled in the art**.
          - **Problem-Solution Approach** to assess **Inventiveness**.
      - **Industrial Applicability/Usefulness**
        - **EU**
          - Something which can be made industrially or related to an industrial process.
        - **US**
          - It has to be useful (some identifiable benefit and is **capable of use**), that is, it must produce tangible and physical effect.
      - **Sufficient Disclosure**
        - The invention must be **entirely disclosed** in all detail.
        - It must enable others to carry it out.
    - **Ownership**
      - Any **natural** or **legal** person is entitled to apply for both **individually** and **jointly**.
    - **Terms of Protection**
      - International harmonisation of patent set the term of protection to **20 years** counted from the **filing date**.
  - **Copyright**
    - It is a "Bunch of Rights" granted to the author of an original work for a period of time starting from the creation in order to avoid free-riding.
    - **Traditional Rationale**
      - **Civil Law**, as Natural Right, work as expression of author's personality.
      - **Common Law**, as Incentives to increase progress and culture.
    - **Legislative Sources**
      - **National Copyright Laws**
      - **International Conventions**
        - 1886, **Berne Convention**
          - Most Important.
            - Protection on **"Literary and Artistic Works"**
        - **1994, TRIPs**
          - Annex developing Countries to Berne Convention.
      - **Regional Directives**
        - **1996, WIPO Treaties**
          - Extends copyright protection to the web.
            - **Computer Programs**
            - **Databases**
        - EU Directives.
      - **International Set of Minimum Rights**
        - Are the set of rules aimed at ensuring a minimum level of protection worldwide.
        - **Principle of Material Reciprocity**.
    - **Protection**
      - **Idea - Expression Dychotomy**, the idea itself is not protected, what is protected is the realisation that expresses the underlying idea is protected.
      - **Requirements**
        - **Originality**
        - **Creativity**
          - **Civil Law (EU)**
            - The creation has to express the personality of the author, through a certain degree of **intellectual contribution**.
          - **Common Law (US - UK)**
            - **Sweat of the Brow**
        - **Novelty**
    - **Economic Rights**
      - The entity who is authorised to enforce the rights is called the "Rightsholder", which initially is the author, but these rights can be sold.
      - **EU**
        - **Rights of Reproduction**
          - Literal Reproduction
          - Non-Literal Reproduction
          - Digital Reproduction
        - **Rights of Distribution**
          - It relates to tangible copies
        - **Rights of Communication to the Public**
          - It relates to intangible uses of the work. It encompasses the "making available right".
      - **US**
        - **Right of Reproduction**
        - **Right to Perform**
        - **Fair Use**
          - It permits limited use of copyrighted material without having to first acquire permission from the copyright holder.
    - **Moral Rights**
      - **Purposes**
        - Protection of Author's personality.
        - Protection of Author's work.
      - **Rights**
        - **Right of Paternity (Attribution - Identification)**
          - Right to have the name on the work
          - Right to impede false attribution of the work
        - **Right of Integrity**
          - Right to impede an exploitation of the work derogatory to the author's artistic reputation and honour.
          - Right to prevent the destruction of the work
            - Very different across countries.
        - **Right of Divulgation**
        - **Right of Withdrawal (Retraction)**
    - **Terms of Protection**
      - **70 years post author's mortem**
      - **50 years for related rights**
- **AI**
  - Systems that display intelligent behaviour by analysing their environment and taking actions - with some degree of autonomy - to achieve specific goals.
  - **3 Forms**
    - **Assisted**
      - Machines execute certain specific tasks, but decisions rights remain solely with human beings.
    - **Augmented**
      - Human and machines share decision rights and learn from each other.
    - **Autonomous**
      - Machines ultimately take over all decision rights, because decisions have to be taken so quickly or require so many data that humans are simply unable to decide.
  - **AI and Creativity**
    - **Authorship**
      - **Designation**
        - To qualify as a work of authorship, the author must be a **Human**.
          - The User of the Device
          - The Programmer
          - The Device (AI)
          - Joint Authorship.
      - **Originality**
        - Author's own Intellectual Creation, reflecting his personality.
          - No definition of "creation"
    - Practical problems in registering copyright lead to low incentives for creative creations in the AI field.
      - Making the creation fall in the **Public Domain**.
    - **Potential Solutions**: **Sui Generis Right** based on **Investment** or **Short Term Copyright Protection** with No Moral Rights.
  - **AI and Innovation**
    - **AI-Inventor vs AI-Invention**
      - Invention developed by/through an AI System vs Invention having an AI system as subject matter.
    - **AI-generated Prior Art**
      - **Cloem:** AIPriorArt.com and AICiaims.com
    - **AI as a Tool** in the Invention Process
      - **AI** can be a **sophisticated tool** used by the inventors to reach the invention.
      - The fact that the invention was made with an **AI system** as a **tool** does not exclude its patentability. The way an invention has been realised is irrelevant to patentability.
      - This implies that the assessment will have to be carried out by a **person skilled in the art**, which will probably have to level up to meet the bar set by new AI inventions.
    - **AI as an Inventor**
      - **Still under Discussion**
        - **As of now, due to very anthropocentric laws, it is not possible to claim an AI as the inventor.**
        - There is the concern that conferring patents over computer-generated inventions would negatively impact future human innovation as supplanting human invention with autonomous algorithms could result in the atrophy of human intelligence and the obsolescence of the scientific method. However, not incentivising those inventions, would make the discoveries in that field slow and probably lose much of its enormous potential.
      - **Possible Scenarios**
        - **AI as Employed to Invent**
        - **No patent protection for AI Inventions**
        - **AI as "member of a team", human-neutral interpretation** of patent concepts
        - **Amendment to encompass AI as the Inventor**