

REGIONAL BUREAU FOR AFRICA SERIES OF WEBINARS FOR UNIVERSITIES AND R&D INSTITUTIONS - SESSION 1

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BASICS OF INTELLECTUAL PROPERTY (IP)

- Basics of Intellectual Property (IP)
 - What Is IP
 - History of IP Rights
 - Types of IP
 - Patents
 - Criteria's for patentability
 - Registration Systems for patents
 - Copyrights
- Q&A session (30 minute)



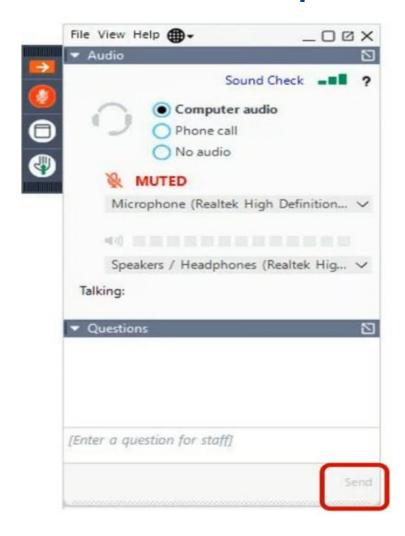
How to ask questions?





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How to ask questions?







Professor Barthelemy Nyasse



- Secretary General of the African Academy of Sciences (AAS)
- Director of the Chemical Engineering and Mineral Industries School (EGCIM) of the University of Ngaoundéré in Cameroon since June 2017.
- Former Deputy Vice-chancellor in charge of Teaching, Professionalization and Development of ICT at the University of Bamenda, Cameroon from October 2015 to June 2017
- Former Deputy Vice-chancellor in charge of Research and Relations with the Business World at the University of Bamenda from June 2014 to October 2015.
- Former Chair of the STAC (Scientific & Technical Advisory Committee) of ANDI (African Network for Drug & Diagnostics Innovation) since 2014
- Former Coordinator of the Research and Innovation Programmes of the Ministry of Higher Education of Cameroon, from 2012 to June2014
- Since 2003, he has been involved with IP issues and has participated as consultant in many WIPO, ARIPO and OAPI projects related to IP National strategies; IP institutional policies, IP training and conferences/symposia.

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Q&A



- Do not worry if we can't address all your questions in today's session
- You can always reach us at the following email address for further questions or information:

rba@wipo.int



Next sessions

- Session 2:
 - Introduction to Patent & Copyright
 - Overview of IP management
 - Date: July 29 from 10.00 12.00 CET
 - Register here: https://www.wipo.int/meetings/en/details.jsp?meeting_id=58052
- Session 3:
 - Developing and Implementing Institutional IP Policy
 - Designing, Establishing, and Managing a Technology Transfer Office
 - Date: August 5 from 10.00 12.00 CET
 - Register here: https://www.wipo.int/meetings/en/details.jsp?meeting_id=58054
- Session 4:
 - Practical examples of IP commercialization
 - Date: August 6 from 10.00 12.00 CET
 - Register here: https://www.wipo.int/meetings/en/details.jsp?meeting_id=58068





WIPO/RBA - VIRTUAL CAPACITY BUILDING

PROGRAMS FOR UNIVERSITIES & RESEARCH INSTITUTIONS

SESSIONS 1- BASICS OF IP BARTHELEMY NYASSE, PROFESSOR

Geneva July 2020

Basics of IP (Getting used to IP issues)

- Intellectual property reaches into everyone's daily lives.
- A basic awareness and understanding of IP is therefore essential for today's university/research institutions stakeholders (students, lecturers, engineers, researchers, lawyers, politicians and managers)
- This session is designed as a basic introduction to a range of different IP rights to those with little or no prior knowledge of IP. It covers the conceptual aspects of IP, definition, types or IP with a special attention to patent and copyrights.





DAY 1

WHAT IS IP

Intellectual property is

- 1. a set of principles and rules that regulate
- 2. the acquisition, the use, the enforcement and the loss
- 3. of rights and interests
- 4. in differentiating tangible & intangible assets
- 5. that are susceptible of being used (in commerce).



Intellectual property does not cover all intangible assets, but only those that serve as elements of differentiation between competitors.

Because IP covers those differentiating elements, aspects such as novelty, inventiveness, creativity, originality and distinctiveness are so crucial for intellectual property.



Because its subject matter is differences and uniqueness in trade, IP protects society against free riding in all its forms (parasitism, counterfeiting, unfair competition) in order to ensure a more efficient use of scarce resources.

For example:

- 1.to encourage investment in R&D on products that are on demand [the dynamic dimension of patents];
- 2.to avoid redundancy and waste of resources in R&D on products already invented [the disclosure function of patents];
- 3.to avoid redundancy in consumers' search [the dynamic dimension of marks, names, geographical indications]



Because it preserves and promotes differences, IP is an intrinsically pro-competitive legal mechanism,

Because its core function is one of differentiating merchants, IP has emerged as a legal institution in every society where, consumers have been given the possibility of a choice and merchants have had something to gain from appropriating those differences

IP has emerged as a primarily social tool to prohibit <u>parasitism</u> and free riding - IP rights is about <u>honesty and respect</u>



IP is, indeed, a very old legal institution:

Code of Hammurabi, c. 1750 b.C.

Law No. 188: "If an artisan has undertaken to rear a child and teaches him his craft, he cannot be demanded back."



Law No. 189: "If he has not





On fairness in trade as an ethical value, see... ...the Holy Bible



Proverbs 11 (King Solomon, 8th century b.C.)

1 The Lord abhors dishonest scales, but accurate weights are his delight

Proverbs 20

- 9 Who can say, "I have kept my heart pure; I am clean and without sin"?
- 10 <u>Differing weights and differing measures the Lord detests them both.</u>

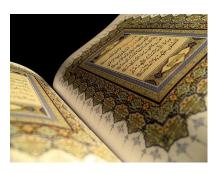
... and the Holy Koran (7th. Century)

The Elevated Places

"[7.85] And to Madyan (We sent) their brother Shu'aib. He said: O my people! serve Allah, you have no god other than Him; clear proof indeed has come to you from your Lord, therefore give full measure and weight and do not diminish to men their things, and do not make mischief in the land after its reform; this is better for you if you are believers."



"[11.85] And, O my people! give full measure and weight fairly, and defraud not men their things, and do not act corruptly in the land, making mischief."



First 'formal' IP rights

- privileges established around 1440, e.g. privileges for book printers
- first patents in England in 1331
- first patent law in Venice in 1474
- first trade marks in Italy and England



- The importance of protecting intellectual property was then formally recognized in:
- 1. The Paris Convention for the Protection of Industrial Property in 1883 and the Berne
- 2. The Convention for the Protection of Literary and Artistic Works in 1886.
- Both treaties are administered by the World Intellectual Property Organization (WIPO, 1967).

Later:

- TRIPS 1994
- Registration Agreements



The IP System

Innovators

make significant investments in developing new products

Heavy pressure

may drive the innovator out of business



Competitors

benefit from their efforts



Can offer similar or identical products at a cheaper price



Get a free ride on the back of the innovator's creativity and inventiveness



Rights over the use of inventions, designs, brands, literary and artistic works





TYPES OF IP

Different types of IP (I)

Legal right

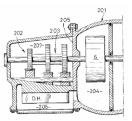
What for?

How?

Patents

New inventions

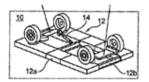
Application and examination



Utility models

New inventions

Application and registration



Copyright

Original creative or artistic forms

Exists automatically



Different types of IP (II)

Legal right

What for?

How?

Trade marks

Distinctive identification of products or services

Use and/or registration



Registered designs

External appearance

Registration



Trade secrets

Valuable information not known to the public

Reasonable efforts to keep secret



Different types of IP (III)

❖ Trade Mark

- Who made it
- How is it named

"functional" features of works of authorship

Design

 How does it looks like (touch, taste, and smell)

Patent

How is it made

❖ Trade Secret

• ???????

Copyright

- Sight
- Song

Visual "aesthetic" form of works of authorship



Overview of IP: a mobile phone

***Trade Mark**

- Made by « Apple » (Logo)
- Product «iPhone»
- Software «iOS», Copyright
 - Software code
 - Instruction manual
 - Ringtones
 - User manuals
 - Start-up tone
 - Images

* Trade Secrets

• ???????

❖ Design

- Form of overall phone
- Placement of buttons & Speakers
- Colour pattern of trim
- Surface finish

*Patent & Utility model

- Semiconductor circuits
- Touch Screen
- Battery/power Control
- Antenna
- Speaker
- Data-processing methods
- Operating system







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Q&A



Patent

Litterae patentes

The purpose of this part is to introduce anyone to the world of patents and to provide a basic outline of the key procedures involved. It provides a brief overview of patents, including patent application, patent information and the ongoing protection of patents

Senate of Venice, 1474



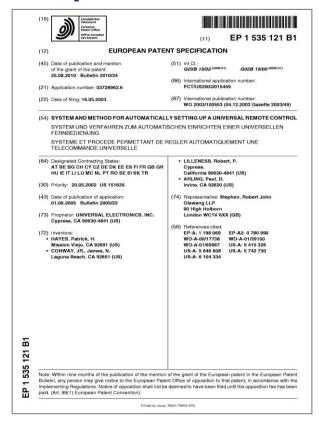
"Any person in this city who makes any new and ingenious contrivance, not made heretofore in our dominion, shall, as soon as it is perfected so that it can be used and exercised, give notice of the same to our State Judicial Office, it being forbidden up to 10 years for any other person in any territory of ours to make a contrivance in the form and resemblance thereof".

Today:

- Up to 20 years of protection
- Publication
- Incentive to innovate and to share knowledge



What is a patent?

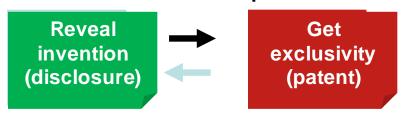


Patents are granted in nearly every country in the world!

A legal title which grants the holder

- the exclusive right to prevent others from making, using or offering for sale, selling or importing a product that infringes his patent without his authorisation
- in countries for which the patent was granted
- for a limited time (up to 20 years).

In return for this protection, the holder has to disclose the invention to the public.



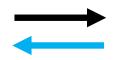
Patent applicant

Public



What is a patent?

Reveal invention (disclosure)



Get exclusivity (patent)

Patent applicant

Public

Interested in benefiting personally

Interested in:

- encouraging innovation so that better products can be made and better production methods can be used for the benefit of all,
- protecting new innovative companies so that they can compete with large established companies, in order to maintain a competitive economy,
- ➤ learning the details of new inventions so that other engineers and scientists can further improve them, promoting technology transfer, for example from universities to business world



What exactly can be patented?

Patents protect inventions which solve technical problems:

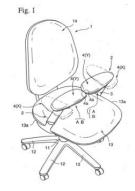
chemical substances,pharmaceuticals



processes, methods, uses



products, devices, systems



For an invention to be patented, it must usually be:

- ✓ new to the world (i.e. not available to the public anywhere in the world)
- ✓ inventive (i.e. not an "obvious" solution), and
- ✓ susceptible of industrial application/Useful

In most countries, patents are not granted for business methods or rules of games as such, or for methods of treatment, diagnostics and surgery on the human or animal body.



How a patent granted/obtained?

- Step 1. Identify inventions –Ownership
- Step 4. file an application -Submission for examination by patent office
- Step 5. Review/Prosecution of patent application
- Step 6. Issuance, Appeal or Abandonment

 Step 2. Invention eligible for patent protection

- Prior art
- Problem to be solved
- Solution
- Advantage of the invention

- Step 3. Prepare an application –
 Written description requirement
 - 1. Title of the Invention
 - 2. Related Applications
 - 3. <u>Background of the</u> Invention
 - 4. Brief Summary
 - 5. <u>Brief description of the drawings</u>
 - 6. <u>Detailed Description</u>
 - 7. Claims
 - 8. Abstract

Where to register or submit a patent application?

- National applications for national patents with the national Patent Offices
- International Patent application through WIPO
 (148 countries, directly through WIPO, no basic patent, 18 months)
- Application through a regional patent office:
 - African Intellectual Property Organization (OAPI) _ Yaoundé
 _Cameroon
 - African Regional Intellectual Property Organization (ARIPO)_ Harare_Zimbabwe
 - Eurasian Patent Organization (EAPO)
 - European Patent Office (EPO)
 - Patent Office of the Cooperation Council for the Arab States of the Gulf (GCC Patent Office)



Where to register or submit a patent application?

- Application when a patent application is filed
- Publication publication normally happens 18 months after application.
 This stage is referred to as 'A' publication
- Grant those that pass the criteria for grant stated above. This stage is referred to as 'B' publication
- In force patents that have been granted and remain protected through the payment of annual renewal fees



Who owns the patent?

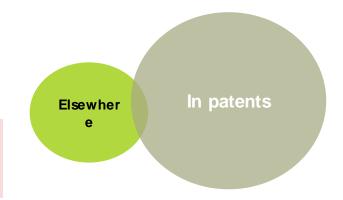
- How should ownership of a commissioned invention be determined?
- How is ownership of inventions by employees determined?
- How is ownership of inventions from collaborative researches?

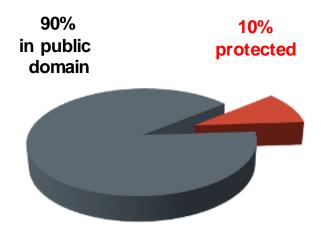


What Solutions are found in patent documents?

Approximately 80% of the information which can be found in patents is not available anywhere else in comparable detail.

- Don't start your R&D until you have done a search!
- 15-25% of all R&D efforts are wasted each year on inventions that have already been invented.





One can find many great solutions for free!

Reasons

- Applications rejected/withdrawn or patent invalidated
- Payment of renewal fees discontinued
- Patents have lapsed



Information contained in IP documents can be very useful to:

- avoid duplication of R&D work,
- identify specific new ideas and technical solutions, products or processes,
- identify the state-of-the-art in a specific technological field in order to be aware of the latest development,
- assess and evaluate specific technology and identify possible licensors,
- identify alternative technology and its sources,
- locate sources of know-how in a specific field of technology or in a given country,
- improve an existing product or process,
- develop new technical solutions, products or world processes



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Q&A



This part seeks to provide a broad overview of copyright issues applicable to University/R&D institutions by approaching questions such as:

- What is copyright?
- Why is copyright relevant to Universities/Research institutions?
- What type of material does copyright protect?
- Who owns copyright?
- How long does copyright last?

What is copyright?

Copyright protects any production of the human mind, such as literary and artistic works.

- This production must be an expression and not a mere idea.
- The expression must be original.
- does not have to be registered

Copyright creates a special legal relationship between authors and their work.

It confers legal protection for a limited period of time.



Copyright

What is originality in copyright?

To be protected and considered original, works must also display some degree of creativity

Originality requires independent creation, which basically means the work cannot be copied from another work. This does not mean that the work has to be particularly novel or unique.

How long is the term of protection of a work?

Copyright is protected for the life of the author plus 50 years - Berne Convention and the TRIPS Agreement

How is the ownership of copyright determined?

Basic principle - Copyright naturally belongs to the author of a work, in the interest of protecting human creations. Most national copyright systems provide that only human beings can be authors, although in some systems legal persons such as corporations may be authors or creators, and in even more systems legal persons may acquire copyright ownership.



What type of material does copyright protect?

Literary works

The term "literary work" is taken to cover a broad category of materials which are expressed in printed or written form, regardless of literary style or merit. Examples of are books, articles, transcripts, tables, databases, computer program code and lyrics.

Dramatic works

The "dramatic works" category covers works which are intended to be performed or presented, such as a play, a choreographic show

Musical works

The term "musical work" is not defined, however, it is taken to extend to any composition of sound or noises provided they are fixed in some form.

Artistic works

The term "artistic work" is defined to include paintings, sculptures, drawings (for example diagrams, maps, charts or plans), engravings, photographs, buildings or models of buildings, regardless of artistic quality or merit, or any other work of artistic craftsmanship.



What type of material does copyright protect?

Sound recordings

The term "sound recording" is defined to include the aggregate of sounds embodied in a record, including a compact disc, record, audiotape, digital file or any other technology.

Cinematograph films

A "cinematograph film" extends to the protection of moving pictures and any associated sounds, in any form. Therefore, films, videos, television programs, commercials and multimedia works will all be protected by copyright

Sound and Television broadcasts

The "sound and television broadcast" category provides protection for both sound and television broadcasts based on underlying copyright material



Who owns copyright?

Generally, the person who has creates or makes the material will own the copyright in it.

The person who makes or creates a work is generally called the author, for example the writer of text or the maker of a film or sound recording.

Copyright ownership can be transferred, for example by assignment or by being bequeathed in a will.

It is possible for copyright to be transferred to one or more individuals or companies. For example, often a publisher of a book or journal in which a chapter or article is published will have the author assign copyright in the material to the publisher



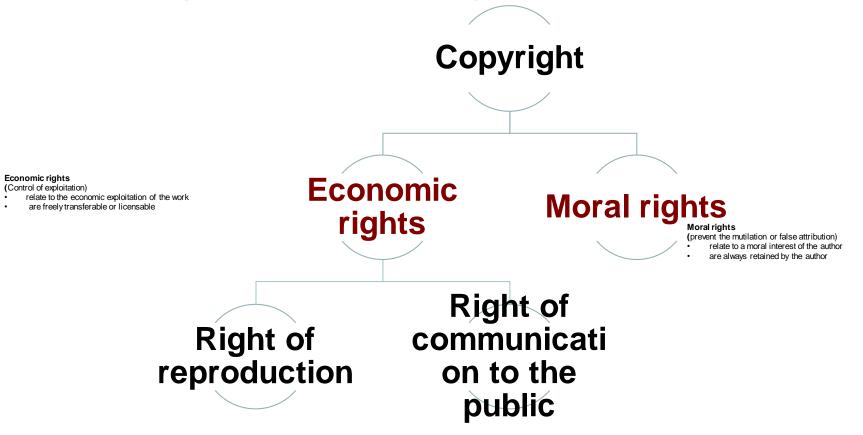
Are there any exceptions to copyright?

There are a number of circumstances in which certain dealings with material protected by copyright will be permitted, without the permission of the copyright owner. When considering the exceptions to copyright, one should take the following steps:

- 1. Where one is including third party material in a thesis, does the part one is including constitute a substantial part of the third party copyright material? If no, one is free to include it in a thesis.
 - If yes, one will need to obtain the permission of the copyright owner, or consider whether any of the fair dealing provisions or other exceptions apply.
- 2. Does the use of the material one is including in a thesis fall within any of the fair dealing provisions or other exceptions?
 - If yes, one is free to include it in a thesis, even if it constitutes a substantial part.
 - If no, one will need to obtain the permission of the copyright owner before including the third party material in a thesis.



What rights does copyright confer?







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Thank for your attention!

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